Circular Polarized Horn Antenna

Circular Polarized Horn Antenna –Conical Horn Type

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Working Bandwidth	Gain Range X(dB)	Axis Ratio (dB)	VSWR	Connector
SH-70CPHAXN	WR137	5-8	≤5%	10-20	≤0.5	≤1.5	N Female
			≤10%		≤1	≤1.8	N Female
			≤20%		≤2.5	≤1.8	N Female
			≤40%		≤3.5	≤2	N Female
			≤87%		≤4	≤2.5	N Female
SH-84CPHAXN	WR112	7-10	≤5%	10-20	≤0.5	≤1.5	N Female
			≤15%		≤2	≤1.8	N Female
SH-100CPHAXN	WR90	8-12.4	≤5%	10-20	≤0.5	≤1.5	N Female
			≤15%		≤2	≤1.5	N Female
SH-120CPHAXN	WR75	10-15	≤5%	10-20	≤0.5	≤1.8	N Female
			≤15%		≤2	≤1.5	N Female
SH-140CPHAXS	WR62	12.4-18	≤5%	10-20	≤0.5	≤1.8	SMA Female
			≤15%		≤2	≤1.8	SMA Female
SH-180CPHAXS	WR51	15-22	≤5%	10-25	≤0.5	≤1.8	SMA Female
			≤15%		≤2	≤1.8	SMA Female
SH-220CPHAXK	WR42	15-22	≤5%	10-25	≤0.5	≤1.8	2.92 Female
			≤15%		≤2	≤1.8	2.92 Female
			≤15%		≤2	≤1.8	2.92 Female
SH-260CPHAXK	WR34	22-33	≤5%	10-25	≤0.5	≤1.8	2.92 Female
			≤15%		≤2	≤1.8	2.92 Female
SH-320CPHAXK	WR28	26.5-40	≤5%	10-25	≤0.5	≤1.8	2.92 Female
			≤15%		≤2	≤1.8	2.92 Female
			≤15%		≤3	≤1.8	2.92 Female
SH-400CPHAX	WR22	33-50	≤5%	10-25	≤0.5	≤1.5	FUGP400
			≤15%		≤2	≤1.5	FUGP400
SH-500CPHAX	WR19	40-60	≤5%	10-25	≤0.5	≤1.5	FUGP500
			≤15%		≤2	≤1.5	FUGP500
SH-620CPHAX	WR15	50-75	≤5%	10-25	≤0.5	≤1.5	FUGP620
			≤15%		≤2	≤1.5	FUGP620
SH-740CPHAX	WR12	60-90	≤5%	10-25	≤0.5	≤1.5	FUGP740
			≤15%		≤2	≤1.5	FUGP740
SH-900CPHAX	WR10	75-110	≤5%	10-25	≤0.5	≤1.8	FUGP900
			≤15%		≤2	≤1.8	FUGP900

Dual Circular Polarized Horn Antenna–Conical Horn Type

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Working Bandwidth	Gain Range X(dB)	Axis Ratio (dB)	VSWR	Dimensions (mm)	Connector
SH–70DCPHA15N	WR137	5–8	≤5%	≤5%	≤0.5	≤1.5	Φ145x420	N Female
	WR137	5–8	≤15%	≤15%	≤2	≤1.5	Φ145x420	N Female
	WR137	5–8	≤40%	≤40%	≤3	≤1.8	Φ145x450	N Female
SH–84DCPHA15N	WR112	7–10	≤5%	≤5%	≤0.5	≤1.5	Φ125x400	N Female
	WR112	7–10	≤15%	≤15%	≤2	≤1.5	Φ125x400	N Female
	WR112	7–10	≤40%	≤40%	≤3	≤1.8	Φ125x420	N Female
SH–100DCPHA15N	WR90	8–12.4	≤5%	≤5%	≤0.5	≤1.5	Φ95x350	N Female
	WR90	8–12.4	≤15%	≤15%	≤2	≤1.5	Φ95x350	N Female
	WR90	8–12.4	≤40%	≤40%	≤3	≤1.8	Φ95x370	N Female
SH–120DCPHA15N	WR75	10–15	≤5%	≤5%	≤0.5	≤1.5	Φ80x280	N Female
	WR75	10–15	≤15%	≤15%	≤2	≤1.5	Φ80x280	N Female
	WR75	10–15	≤40%	≤40%	≤3	≤1.8	Φ80x300	N Female
SH–140DCPHA15S	WR62	12.4–18	≤5%	≤5%	≤0.5	≤1.5	Φ68x250	SMA Female
	WR62	12.4–18	≤15%	≤15%	≤2	≤1.5	Φ68x250	SMA Female
	WR62	12.4–18	≤40%	≤40%	≤3	≤1.8	Φ68x260	SMA Female
SH–180DCPHA15S	WR51	15–22	≤5%	≤5%	≤0.5	≤1.5	Φ58x220	SMA Female
	WR51	15–22	≤15%	≤15%	≤2	≤1.5	Φ58x220	SMA Female
	WR51	15–22	≤40%	≤40%	≤3	≤1.8	Φ58x240	SMA Female
SH–220DCPHA15K	WR42	18–26	≤5%	≤5%	≤0.5	≤1.5	Φ50x180	2.92 Female
	WR42	18–26	≤15%	≤15%	≤2	≤1.5	Φ50x180	2.92 Female
	WR42	18–26	≤40%	≤40%	≤3	≤1.8	Φ50x200	2.92 Female
SH–260DCPHA15K	WR34	22–33	≤5%	≤5%	≤0.5	≤1.5	Φ38x150	2.92 Female
	WR34	22–33	≤15%	≤15%	≤2	≤1.5	Φ38x150	2.92 Female
	WR34	22–33	≤40%	≤40%	≤3	≤1.8	Φ38x180	2.92 Female
SH–320DCPHA15K	WR28	26.5–40	≤5%	≤5%	≤0.5	≤1.5	Φ32x130	2.92 Female
	WR28	26.5–40	≤15%	≤15%	≤2	≤1.5	Φ32x130	2.92 Female
	WR28	26.5–40	≤40%	≤40%	≤3	≤1.8	Φ32x150	2.92 Female
SH–400DCPHA15	WR22	33–50	≤5%	≤5%	≤0.5	≤1.5	Φ26x120	FUGP
	WR22	33–50	≤15%	≤15%	≤2	≤1.5	Φ26x120	FUGP
	WR22	33–50	≤40%	≤40%	≤3	≤1.8	Φ26x140	FUGP

Dual Circular Polarized Horn Antenna–Step DiaphragmSquare Horn Type

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Working Bandwidth	Gain Range X(dB)	Axis Ratio (dB)	VSWR	Polarization Isolation (dB)	Dimensions(mm)			Connector
								W	H	L	
SH-32DCPSHA10N	WR284	2.8-4	≤10%	10-20	≤1.5	≤1.5	28	170	170	400	N Female
	WR284	2.6-4	≤20%	10-20	≤2.5	≤1.5	25	170	170	400	N Female
SH-40DCPSHA10N	WR229	3.5-5	≤10%	10-20	≤1.5	≤1.5	28	140	140	350	N Female
	WR229	3.5-5	≤20%	10-20	≤2.5	≤1.5	25	140	140	350	N Female
SH-48DCPSHA10N	WR187	4.0-6	≤10%	10-20	≤1.5	≤1.5	28	110	110	300	N Female
	WR187	4.0-6	≤20%	10-20	≤2.5	≤1.5	25	110	110	300	N Female
SH-58DCPSHA10N	WR159	4.5-7	≤10%	10-20	≤1.5	≤1.5	28	100	100	280	N Female
	WR159	4.5-7	≤20%	10-20	≤2.5	≤1.5	25	100	100	280	N Female
SH-70DCPSHA10N	WR137	5-8	≤10%	10-20	≤1.5	≤1.5	28	90	90	260	N Female
	WR137	5-8	≤20%	10-20	≤2.5	≤1.5	25	90	90	260	N Female

Circular Polarized Horn Antenna

Dual Circular Polarized Horn Antenna–StepDiaphragm Conical Horn Type

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Working Bandwidth	Gain Range X(dB)	Axis Ratio (dB)	VSWR	Polarization Isolation(dB)	Dimensions(mm)	Connector
SH-32DCPTCHA10N	WR284	2.6-4	≤10%	10-20	≤1.5	≤1.5	28	Φ170x380	N Female
	WR284	2.6-4	≤20%	10-20	≤2.5	≤1.5	25	Φ170x380	N Female
SH-40DCPTCHA10N	WR229	3.5-5	≤10%	10-20	≤1.5	≤1.5	28	Φ130x320	N Female
	WR229	3.5-5	≤20%	10-20	≤2.5	≤1.5	25	Φ130x320	N Female
SH-48DCPTCHA10N	WR187	4.0-6	≤10%	10-20	≤1.5	≤1.5	28	Φ110x280	N Female
	WR187	4.0-6	≤20%	10-20	≤2.5	≤1.5	25	Φ110x280	N Female
SH-58DCPTCHA10N	WR159	4.5-7	≤10%	10-20	≤1.5	≤1.5	28	Φ100x260	N Female
	WR159	4.5-7	≤20%	10-20	≤2.5	≤1.5	25	Φ100x260	N Female
SH-70DCPTCHA10N	WR137	5-8	≤10%	10-20	≤1.5	≤1.5	28	Φ90x240	N Female
	WR137	5-8	≤20%	10-20	≤2.5	≤1.5	25	Φ90x240	N Female

Broadband Circular Polarized Horn Antenna–Dual LinearPolarization Synthesized

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	Gain (dB)	VSWR	Axis Ratio (dB)	Dimensions(mm)	Connector
SH–0510CPHA7N	0.5–1	7–10	≤2.5	≤3	510x510x550	N Female
SH–1020CPHA10N	1–2	10–15	≤2.5	≤3	250x250x460	N Female
SH–1040CPHA7N	1–4	7–15	≤2.5	≤5	280x280x430	N Female
SH–2040CPHA10N	2–4	10–15	≤2.0	≤3	250x250x430	N Female
SH–4080CPHA10N	4–8	10–15	≤2.0	≤3	Φ140x470	N Female
SH–80180CPHA10S	8–18	10–18	≤2.5	≤5	Φ78x165	SMA Female
SH–180400CPHA10K	18–40	10–18	≤3.0	≤5	Φ40x80	2.92 Female

Broadband Dual Circular Polarized Horn Antenna–Dual LinearPolarization Synthesized

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	Gain (dB)	VSWR	Axis Ratio (dB)	Polarization Isolation(dB)	Dimensions(mm)	Connector
SH–1020DCPHA10N	1–2	10–15	≤2.5	≤3	15	510x510x550	N Female
SH–2040DCPHA10N	2–4	10–15	≤2.5	≤3	15	250x250x430	N Female
SH–4080DCPHA10N	4–8	10–15	≤2.5	≤3	15	Φ140x620	N Female
SH–80180DCPHA10S	8–18	10–18	≤2.5	≤3	15	Φ78x165	SMA Female
SH–180400DCPHA10K	18–40	10–18	≤3.0	≤3	15	Φ40x80	2.92 Female

Lens Antenna

Conical Horn Lens Antenna

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Gain (dB)	Sidelobe E plane	Level(dB) H plane	Beam Width(°)	VSWR	Interface	Antenna Diameter (Φmm)	Length (mm)
SH –100LHA250	WR90	8.2–12.4	25	≤–15	≤–26	7–10	≤2.5	FBP–100	250	270
SH–120LHA250	WR75	10.0–15.0	26	≤–15	≤–26	7–10	≤2.5	FBP–120	250	270
SH –140LHA150	WR62	12.5–18.0	23	≤–15	≤–26	7–10	≤2.5	FBP–140	150	170
SH –140LHA200	WR62	12.5–18.0	26	≤–15	≤–26	5–8	≤2.5	FBP–140	200	220
SH –140LHA250	WR62	12.4–18.0	28	≤–15	≤–26	3–6	≤2.5	FBP–140	250	270
SH –180LHA100	WR51	14.5–22.0	22	≤–15	≤–26	9–12	≤2.5	FBP–180	100	120
SH – 180LHA150	WR51	14.5–22.0	25	≤–15	≤–26	6–9	≤2.5	FBP–180	150	170
SH –180LHA200	WR51	14.5–22.0	28	≤–15	≤–26	4–7	≤2.5	FBP–180	200	220
SH–220LHA80	WR42	18.0–26.5	21	≤–15	≤–26	9–12	≤2.5	FBP–220	80	100
SH – 220LHA100	WR42	18.0–26.5	23	≤–15	≤–26	7–10	≤2.5	FBP–220	100	120
SH – 220LHA150	WR42	18.0–26.5	27	≤–15	≤–26	4–7	≤2.5	FBP–220	150	170
SH – 220LHA200	WR42	18.0–26.5	29	≤–15	≤–26	3–6	≤2.5	FBP–220	200	220
SH – 260LHA50	WR34	22.0–33.0	19	≤–15	≤–26	12–16	≤2.5	FBP–260	50	80
SH – 260LHA80	WR34	22.0–33.0	23	≤–15	≤–26	7–10	≤2.5	FBP–260	80	100
SH– 260LHA100	WR34	22.0–33.0	25	≤–15	≤–26	6–9	≤2.5	FBP–260	100	120
SH – 260LHA150	WR34	22.0–33.0	29	≤–15	≤–26	3–6	≤2.5	FBP–260	150	170
SH – 260LHA200	WR34	22.0–33.0	31	≤–15	≤–26	2–4	≤2.5	FBP–260	20	220
SH –320LHA50	WR28	26.5–40.0	21	≤–15	≤–26	10–13	≤2.5	FBP–320	50	80
SH –320LHA80	WR28	26.5–40.0	25	≤–15	≤–26	6–9	≤2.5	FBP–320	80	100
SH – 320LHA100	WR28	26.5–40.0	27	≤–15	≤–26	4–7	≤2.5	FBP–320	100	120
SH – 320LHA150	WR28	26.5–40.0	31	≤–15	≤–26	3–5	≤2.5	FBP–320	150	170
SH –320LHA200	WR28	26.5–40.0	33	≤–15	≤–26	2–4	≤2.5	FBP–320	200	220

Lens Antenna

Pyramid Horn Lens Antenna

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Gain (dB)	Sidelobe E plane	Level(dB) H plane	VSWR	Interface	Antenna Diameter (Φmm)	Length (mm)
SH－140LHA20A	WR62	11.9–18.0	20	≤–15	≤–26	≤2.5	FBP–140	120 x 90	205
SH－260LHA25A	WR34	21.7–33.0	25	≤–15	≤–26	≤2.5	FBP–260	89 x 89	175

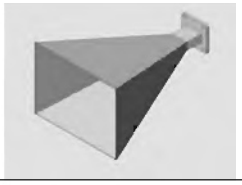
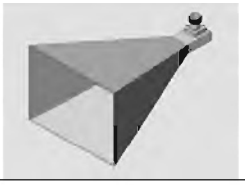
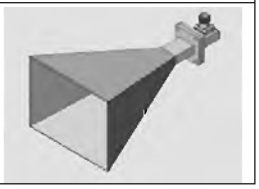
Point Focusing Horn Lens Antenna

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Antenna Diameter (Φmm)	Focal Length (mm)	Focal Spot Diameter (mm)	VSWR	Interface
SH–32PLHA300F500	WR284	2.6–4	300	500	≤200	≤2.5	FDP–32
SH–40PLHA300F500	WR229	3.3–4.9	300	500	≤200	≤2.5	FDP–40
SH–48PLHA300F500	WR187	4–6	300	500	≤120	≤2.5	FDP–48
SH–58PLHA250F500	WR159	4.9–7.0	250	500	≤80	≤2.5	FDP–58
SH–70PLHA250F500	WR137	5.38–8.17	250	500	≤80	≤2.5	FDP–70
SH–84PLHA250F500	WR112	6.57–9.99	250	500	≤60	≤2.5	FBP–84
SH–100PLHA200F300	WR90	8.2–12.4	200	300	≤60	≤2.5	FBP–100
SH–120PLHA200F300	WR75	9.84–15.0	200	300	≤60	≤2.5	FBP–120
SH–140PLHA200F300	WR62	11.9–18.0	200	300	≤50	≤2.5	FBP–140
SH–180PLHA100F200	WR51	14.5–22.0	100	200	≤40	≤2.5	FBP–180
SH–220PLHA100F200	WR42	17.6–26.7	100	200	≤35	≤2.5	FBP–220
SH–260PLHA100F100	WR34	21.7–33.0	100	100	≤30	≤2.5	FBP–260
SH–320PLHA100F100	WR28	26.5–40.0	100	100	≤25	≤2.5	FBP–320

Linear Polarization Horn Antenna

Pyramid Horn Antenna

Type	With Waveguide Input Style	With Built-in Coaxial Input Style	With Coaxial Connector Style
Model No.	HAA° x B°	HAA° x B° N	HAA° x B° +N
Outline Drawing			

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range	Optional Beam Width Range(A° XB°)	VSWR	Connector	Material
SH-3HAA° XB° N	WR2300	0.32-0.49	30° - 60°	≤1.5	N Female	Al
SH-4HAA° XB° N	WR2100	0.35-0.53	30° - 60°	≤1.5	N Female	Al
SH-5HAA° XB° N	WR1800	0.41-0.62	30° - 60°	≤1.5	N Female	Al
SH-6HAA° XB° N	WR1500	0.49-0.75	30° - 60°	≤1.5	N Female	Al
SH-8HAA° XB° N	WR1150	0.64-0.98	20° - 60°	≤1.5	N Female	Al
SH-9HAA° XB° N	WR975	0.75-1.15	20° - 60°	≤1.5	N Female	Al
SH-12HAA° XB° N	WR770	0.96-1.46	20° - 60°	≤1.5	N Female	Al
SH-4HAA° XB° N	WR650	1.13-1.73	20° - 60°	≤1.5	N Female	Al
SH-18HAA° XB° N	WR510	1.45-2.20	20° - 60°	≤1.5	N Female	Al
SH-22HAA° XB° N	WR430	1.72-2.61	20° - 60°	≤1.5	N Female	Al
SH-26HAA° XB° N	WR340	2.17-3.30	20° - 60°	≤1.5	N Female	Al
SH-32HAA° XB° N	WR284	2.60-3.95	20° - 60°	≤1.5	N Female	Al
SH-40HAA° XB° N	WR229	3.22-4.90	20° - 60°	≤1.5	N Female	Al
SH-48HAA° XB° N	WR187	3.94-5.99	20° - 60°	≤1.5	N Female	Al
SH-58HAA° XB° N	WR159	4.64-7.05	20° - 60°	≤1.5	N Female	Al
SH-70HAA° XB° N	WR137	5.38-8.17	20° - 60°	≤1.5	N Female	Al
SH-84HAA° XB° N	WR112	6.57-9.99	20° - 60°	≤1.5	N Female	Al
SH-100HAA° XB° N	WR90	8.20-12.40	20° - 60°	≤1.5	N Female	Al
SH-120HAA° XB° N	WR75	9.84-15.0	20° - 60°	≤1.5	N Female	Al
SH-140HAA° XB° S	WR62	11.9-18.0	20° - 60°	≤1.5	SMA Female	Al
SH-180HAA° XB° S	WR51	14.5-22.0	20° - 60°	≤1.5	SMA Female	Cu
SH-220HAA° XB° K	WR42	17.6-26.7	20° - 60°	≤1.5	2.92 Female	Cu
SH-260HAA° XB° K	WR34	21.7-33.0	20° - 60°	≤1.5	2.92 Female	Cu
SH-320HAA° XB° K	WR28	26.5-40.0	20° - 60°	≤1.5	2.92 Female	Cu
SH-400HAA° XB°	WR22	32.9-50.1	20° - 60°	≤1.35	FUGP	Cu
SH-500HAA° XB°	WR19	39.2-59.6	20° - 60°	≤1.35	FUGP	Cu
SH-620HAA° XB°	WR15	49.8-75.8	20° - 60°	≤1.35	FUGP	Cu
SH-740HAA° XB°	WR12	60.5-91.9	20° - 60°	≤1.35	FUGP	Cu
SH-900HAA° XB°	WR10	73.8-112	20° - 60°	≤1.35	FUGP	Cu
SH-1200HAA° XB°	WR8	92.2-140	20° - 60°	/	FUGP	Cu
SH-1400HAA° XB°	WR7	113-173	20° - 60°	/	FUGP	Cu
SH-1800HAA° XB°	WR5	145-220	20° - 60°	/	FUGP	Cu
SH-2200HAA° XB°	WR4	172-261	20° - 60°	/	FUGP	Cu
SH-2600HAA° XB°	WR3	217-330	20° - 60°	/	FUGP	Cu

Conical Horn Antenna

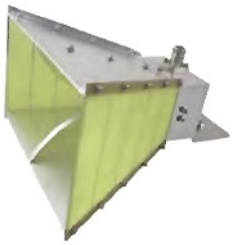
ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (Ghz)	Working Bandwidth(%)	Optional Gain RangeX(dB)	VSWR	Circular Waveguide Inner Diameter (mm)	Material	Finish
SH-114.58CHAX	1.76-2.42	20-40	≤13	≤1.50	Φ114.58	Al	Chromate Conversion
SH-97.87CHAX	2.1-2.8	20-40	≤13	≤1.50	Φ97.87	Al	Chromate Conversion
SH-83.62CHAX	2.45-3.3	20-40	≤13	≤1.50	Φ83.62	Al	Chromate Conversion
SH-71.42CHAX	2.83-3.88	20-40	≤13	≤1.50	Φ71.42	Al	Chromate Conversion
SH-51.99CHAX	3.9-5.3	20-40	≤15	≤1.50	Φ51.99	Al	Chromate Conversion
SH-44.45CHAX	4.55-6.23	20-40	≤15	≤1.50	Φ44.45	Al	Chromate Conversion
SH-38.1CHAX	5.3-7.3	20-40	≤15	≤1.50	Φ38.1	Al	Chromate Conversion
SH-32.537CHAX	6.3-8.5	20-40	≤15	≤1.50	Φ32.537	Al	Chromate Conversion
SH-27.788CHAX	7.3-9.5	20-40	≤18	≤1.50	Φ27.788	Al	Chromate Conversion
SH-23.825CHAX	8.5-11.5	20-40	≤18	≤1.50	Φ23.825	Al	Chromate Conversion
SH-17.415CHAX	11.6-15.9	20-40	≤18	≤1.50	Φ17.415	Al	Chromate Conversion
SH-15.088CHAX	13.4-18.4	20-40	≤18	≤1.50	Φ15.088	Al	Chromate Conversion
SH-12.7CHAX	15.9-21.8	20-40	≤20	≤1.50	Φ12.7	Cu	Silver Plating
SH-9.525CHAX	21.2-29.1	20-40	≤20	≤1.50	Φ9.525	Cu	Silver Plating
SH-8.331CHAX	24.3-33.2	20-40	≤20	≤1.50	Φ8.331	Cu	Silver Plating
SH-7.137CHAX	28.3-38.8	20-40	≤22	≤1.50	Φ7.137	Cu	Silver Plating
SH-5.563CHAX	36.4-49.8	20-40	≤22	≤1.50	Φ5.563	Cu	Gold Plating
SH-4.369CHAX	46.3-63.5	20-40	≤22	≤1.50	Φ4.369	Cu	Gold Plating
SH-3.581CHAX	56.6-77.5	20-40	≤24	≤1.50	Φ3.581	Cu	Gold Plating
SH-3.175CHAX	63.5-87.2	20-40	≤24	≤1.50	Φ3.17	Cu	Gold Plating
SH-2.388CHAX	84.8-116	20-40	≤24	≤1.50	Φ2.388	Cu	Gold Plating
SH-1.91CHAX	115-140	20-40	≤24	≤1.50	Φ1.91	Cu	Gold Plating
SH-150CHAX	140-160	20-40	≤24	≤1.50	Φ1.50	Cu	Gold Plating
SH-1.00CHAX	200-300	20-40	≤24	≤1.50	Φ1.00	Cu	Gold Plating
SH-0.7CHAX	280-400	20-40	≤24	≤1.50	Φ0.7	Cu	Gold Plating

Wideband Horn Antenna

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	Gain (dB)	Beam Width	VSWR	Dimensions(mm) W*H*L	Connector	Material	Finish
SH-1020HA15N	1-2	10-15	35° - 55°	≤1.5	456*386*583	N Female	Al	Chromate Conversion
SH-2040HA15N	2-4	10-15	15° - 55°	≤1.5	367*267*543	N Female	Al	Chromate Conversion
SH-4080HA15N	4-8	10-15	15° - 55°	≤1.5	144*104*246	N Female	Al	Chromate Conversion
SH-80180HA20N	8-18	15-20	15° - 55°	≤1.5	133*103*247	N Female	Al	Chromate Conversion
SH-180400HA20K	18-40	15-20	15° - 55°	≤1.5	88*51*174	2.92 Female	Cu	Silver Plating



Octave Double-Ridged Horn Antenna

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Gain (dB)	Beam Width	VSWR	Connector	Material	Finish
SH-84DRHA10N	WRD84	0.84-2.0	5-12	30° - 70°	≤2	N Female	Al	Chromate Conversion
SH-150DRHA10N	WRD150	1.5-3.6	8-12	30° - 60°	≤2	N Female	Al	Chromate Conversion
SH-200DRHA10N	WRD200	2.0-4.8	8-12	30° - 60°	≤2	N Female	Al	Chromate Conversion
SH-250DRHA10N	WRD250	2.6-7.8	8-12	30° - 60°	≤2	N Female	Al	Chromate Conversion
SH-350DRHA10N	WRD350	3.5-8.2	8-12	30° - 60°	≤2	N Female	Al	Chromate Conversion
SH-475DRHA10N	WRD475	4.75-11.0	8-12	30° - 60°	≤2	N Female	Al	Chromate Conversion
SH-500DRHA10S	WRD500	5.0-18.0	8-12	30° - 60°	≤2	SMA Female	Al	Chromate Conversion
SH-580DRHA10S	WRD580	5.8-18.0	8-12	30° - 60°	≤2	SMA Female	Al	Chromate Conversion
SH-650DRHA10S	WRD650	6.5-18.0	8-12	30° - 60°	≤2	SMA Female	Al	Chromate Conversion
SH-750DRHA10S	WRD750	7.5-18.0	8-12	30° - 60°	≤2	SMA Female	Al	Chromate Conversion
SH-700DRHA10S	WRD700	7.0-18.5	8-12	30° - 60°	≤2	SMA Female	Al	Chromate Conversion
SH-1100DRHA10S	WRD110	11.0-26.5	8-12	30° - 60°	≤2	SMA Female	Cu	Silver Plating
SH-1800DRHA10K	WRD180	18.0-40.0	8-12	30° - 60°	≤2	2.92 Female	Cu	Silver Plating

Ultra–Wideband Double–Ridged Horn Antenna

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	Gain (dB)	Beam Width	Dimensions(mm)			VSWR	Connector	Material	Finish
				W	H	L				
SH-0110DRHA8N	0.1–1	3–10	30° – 80°	2154	1423	2250	≤2.5	N Female	Al	Chromate Conversion
SH-0220DRHA8N	0.2–2	6–13	10° – 65°	933	780	960	≤2.5	N Female	Al	Chromate Conversion
SH-0660DRHA10N	0.6–6	4–16	10° – 80°	306	221	415	≤2.5	N Female	Al	Chromate Conversion
SH-0640DRHA7N	0.6–4	6–14	35° – 65°	225	155	290	≤2.0	N Female	Al	Chromate Conversion
SH-1060DRHA10N	1–6	6–18	20° – 90°	164	114	156	≤2.5	N Female	Al	Chromate Conversion
SH-10180DRHA10S	1–18	7–18	30° – 80°	160	284	245	≤2.5	SMA Female	Al	Chromate Conversion
SH-10200DRA10S	1–20	7–15	11° – 80°	183	241	243	≤2.0	SMA Female	Al	Chromate Conversion
SH-20180DRHA17S	2–18	8–17	20° – 50°	179	149	200	≤2.5	SMA Female	Al	Chromate Conversion
SH-80180DRHA10S	6–18	10–14	30° – 55°	63	43	140	≤2.5	SMA Female	Al	Chromate Conversion
SH-80400DRHA15K	8–40	7–13	10° – 30°	28	23	105	≤3.0	2.92 Female	Al	Chromate Conversion
SH-180400DRHA15K	18–40	15–20	10° – 20°	50	38	132	≤2.5	2.92 Female	Al	Chromate Conversion

Mini Ultra–Wideband Double–Ridged Horn Antenna

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	Gain (dB)	Beam Width	Dimensions(mm)			VSWR	Connector	Material	Finish
				W	H	L				
SH-20180DRHA8S	2–18	5–11	40° – 80°	119	119	88	≤2.5	SMA Female	Al	Chromate Conversion
SH-20245DRHA8S	2–24.5	5–13	40° – 80°	119	119	88	≤2.5	SMA Female	Al	Chromate Conversion
SH-180400DRHA6K	18–40	5–13	40° – 80°	90	60	50	≤2.5	2.92 Female	Al	Chromate Conversion

Linear Polarization Horn Antenna

Dual Polarization Horn Antenna

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Working Bandwidth	Gain X(dB)	Polarization Isolation (dB)	VSWR	Connector	Material
SH-84DPHAXN	WR112	7-10	≤5%	10/15	≥20	≤1.5	N Female	Al
			≤40%		≥30			
SH-100DPHAXN	WR90	8-12.4	≤5%	10/15	≥20	≤1.5	N Female	Al
			≤40%		≥30			
SH-120DPHAXN	WR75	10-15	≤5%	10/15	≥20	≤1.6	N Female	Al
			≤40%		≥30			
SH-140DPHAXS	WR62	12-18	≤5%	10/15	≥20	≤1.6	SMA Female	Al
			≤40%		≥30			
SH-180DPHAXS	WR51	15-22	≤5%	10/15/20	≥20	≤1.6	SMA Female	Cu
			≤40%		≥30			
SH-220DPHAXK	WR42	17.6-26.7	≤5%	10/15/20	≥20	≤1.6	2.92 Female	Cu
			≤40%		≥30			
SH-260DPHAXK	WR34	22-33	≤5%	10/15/20	≥20	≤1.6	2.92 Female	Cu
			≤40%		≥30			
SH-320DPHAXK	WR28	26.5-40	≤5%	10/15/20	≥20	≤1.6	2.92 Female	Cu
			≤40%		≥30			
SH-400DPHAX	WR22	33-50	≤5%	10/15/20	≥20	≤1.5	WR22	Cu
			≤40%		≥30			
SH-500DPHAX	WR19	40-60	≤5%	10/15/20	≥20	≤1.5	WR19	Cu
			≤40%		≥30			
SH-620DPHAX	WR15	50-75	≤5%	10/15/20	≥20	≤1.5	WR15	Cu
			≤40%		≥30			
SH-740DPHAX	WR12	60-90	≤5%	10/15/20	≥20	≤1.5	WR12	Cu
			≤40%		≥30			
SH-900DPHAX	WR10	75-110	≤5%	10/15/20	≥20	≤1.6	WR10	Cu
			≤40%		≥30			

Linear Polarization Horn Antenna

Ultra–Wideband Dual–Polarization Four–Ridged Horn Antenna

ELECTRICAL CHARACTERISTICS:

Part No.	Working Bandwidth	Gain(dB)	VSWR	Polarization Isolation(dB)	Dimensions(mm)			Connector
					W	H	L	
SH–0840DPHA6N	0.8–4	6–10	≤2.5	≥20	250	250	400	N Female
SH–1040DPHAXN	1–4	6–10	≤2.5	≥20	280	280	420	N Female
SH–20180DPHA6S	2–18	6–16	≤2.5	≥20	120	120	169	SMA Female
SH–180400DPHA18K	18–40	14–17	≤2.5	≥20	Φ63x146			2.92 Female
SH–260400DPHA18K	26–40	18–20	≤2.5	≥20	Φ46.5x135			2.92 Female

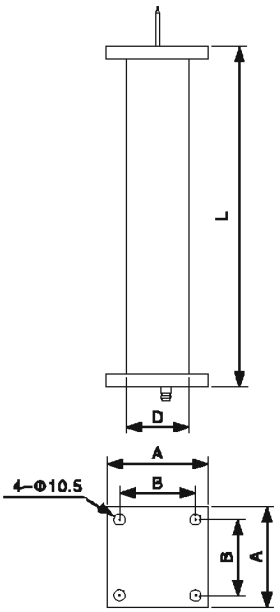
Open Boundary Dual–Polarization Four–Ridged Horn Antenna

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range	Gain	VSWR	Isolation(dB)	Dimensions(mm)			Connector
					W	H	L	
SH–0460DPOBHA10S	0.4–6	4–13	≤3.0	≥20	500	500	550	SMA Female
SH–0860DPOBHA8S	0.8–8	2–10	≤3.0	≥20	350	350	400	SMA Female
SH–30180DPOBHA10S	3–18	6–14	≤3.0	≥20	175	175	200	SMA Female

MMDS TRANSMITTING ANTENNA

Shinhom Microwave manufactures a high quality line of MMDS transmitting antennas. Please call us with your specification and discuss your needs with one of our sales engineers.



Features

- High radiation efficiency
- Wide frequency range
- Low VSWR
- More Gain values available
- Power rating 300W (CW)
- Light weight aluminium material
- Well sealed
- Easy for installation
- Direct lightning protection

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	VSWR (Max)	Gain (dB)	Polarization	Beam width (Azimuth)	Beam width (Elevation)	Dimensions (D*L)(mm)	Dimensions (A*B)(mm)	Power Handling (W)	Connector
SH-2527HOA10	2.5-2.7	1.5	10	Horizontal	360°	6°	130*1000	180*152	300	N-F
SH-2527HOA12	2.5-2.7	1.5	12	Horizontal	360°	5°	130*1300	180*152	300	N-F
SH-2527HOA16	2.5-2.7	1.5	13	Horizontal	360°	4°	130*1600	180*152	300	N-F
SH-2527VOA10	2.5-2.7	1.5	10	Vertical	360°	6°	170*1000	220*180	300	N-F
SH-2527VOA12	2.5-2.7	1.5	12	Vertical	360°	5°	170*1300	220*180	300	N-F
SH-2527VOA16	2.5-2.7	1.5	13	Vertical	360°	4°	170*1600	220*180	300	N-F
SH-2527HCA10	2.5-2.7	1.5	13	Horizontal	180°	6°	130*1000	180*152	300	N-F
SH-2527HCA12	2.5-2.7	1.5	15	Horizontal	180°	5°	130*1300	180*152	300	N-F
SH-2527HCA16	2.5-2.7	1.5	16	Horizontal	180°	4°	130*1600	180*152	300	N-F
SH-2527VCA10	2.5-2.7	1.5	13	Vertical	180°	6°	170*1000	220*180	300	N-F
SH-2527VCA12	2.5-2.7	1.5	15	Vertical	180°	5°	170*1300	220*180	300	N-F
SH-2527VCA16	2.5-2.7	1.5	16	Vertical	180°	4°	170*1600	220*180	300	N-F

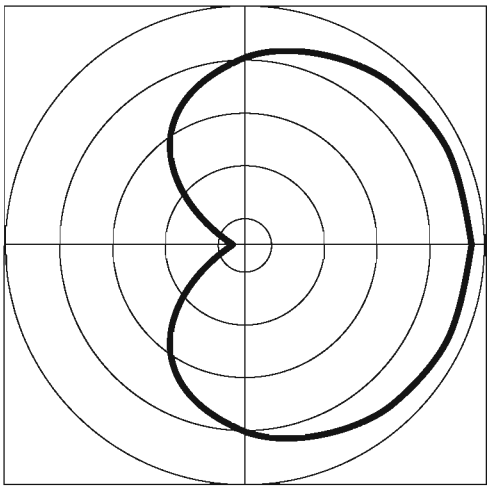
Antenna Type:

HOA – Omni–directional, Horizontal polarized

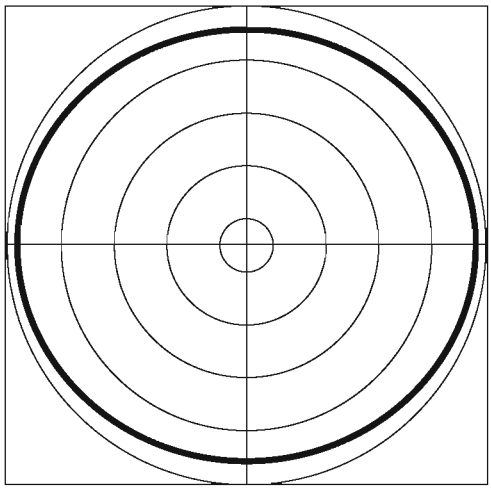
HCA – Half–directional, Horizontal polarized

VOA – Omni–directional, Vertical polarized

VCA – Half –directional, Vertical polarized



180 °



360 °

Azimuth Beam Pattern

Ordering Information

Example Part No: SH – 2527 HOA 12

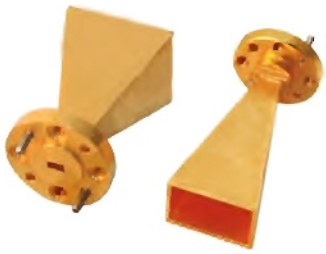
Shinhom Microwave

Freq Range:2.5–2.7GHz

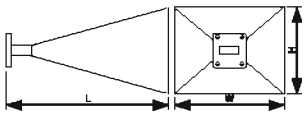
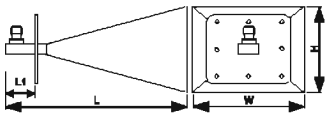
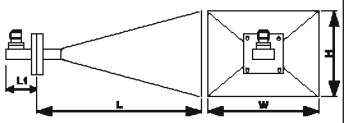
Gain: 12dB

Antenna Type:HOA

Standard Gain Horn Antenna



Standard Gain Horn Antenna (SGAH)

Part No.	With Waveguide Input Style	With Built-in Coaxial Input Style	With Coaxial Connector Style
Outline Drawing			
WG Type	WR770-WR3	R2300-R28	R975-WR22
VSWR	≤1.25	≤1.5	≤1.5

With Waveguide Input Style Standard Gain Horn Antenna

Nominal Gain Value: 10dB

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Gain (dB)	Dimensions(mm)				Flange	Material
				L	L1	W	H		
SH-12SGAH10	WR770	0.96-1.46	10	300	100	400	280	FDP	Al
SH-14SGAH10	WR650	1.13-1.73	10	280	80	315	235	FDP	Al
SH-18SGAH10	WR510	1.45-2.20	10	245	65	249	184	FDP	Al
SH-22SGAH10	WR430	1.72-2.61	10	210	60	209	154	FDP	Al
SH-26SGAH10	WR340	2.17-3.30	10	160	50	165	125	FDP	Al
SH-32SGAH10	WR284	2.60-3.95	10	150	50	144	114	FDP	Al
SH-40SGAH10	WR229	3.22-4.90	10	120	50	113	88	FDP	Al
SH-48SGAH10	WR187	3.94-5.99	10	110	40	98	73	FDP	Al
SH-58GAH10	WR159	4.64-7.05	10	100	40	83	63	FDP	Al
SH-70SGAH10	WR137	5.38-8.17	10	75	25	67	52	FDP	Al
SH-84SGAH10	WR112	6.57-9.99	10	70	25	57	42	FBP	Al
SH-100SGAH10	WR90	8.20-12.40	10	60	20	47	37	FBP	Al
SH-120SGAH10	WR75	9.84-15.0	10	55	25	40	29	FBP	Al
SH-140SGAH10	WR62	11.9-18.0	10	55	25	37	27	FBP	Al
SH-180SGAH10	WR51	14.5-22.0	10	50	20	30	20	FBP	Cu
SH-220SGAH10	WR42	17.6-26.7	10	45	15	24	17	FBP	Cu
SH-260SGAH10	WR34	21.7-33.0	10	35	15	20	14	FBP	Cu
SH-320SGAH10	WR28	26.5-40.0	10	30	10	17	12	FBP	Cu
SH-400SGAH10	WR22	32.9-50.1	10	36	/	10.8	7.9	FUGP	Cu
SH-500SGAH10	WR19	39.2-59.6	10	30	/	9	6.4	FUGP	Cu
SH-620SGAH10	WR15	49.8-75.8	10	25	/	7.5	5.3	FUGP	Cu
SH-740SGAH10	WR12	60.5-91.9	10	18	/	5.9	4.5	FUGP	Cu

Standard Gain Horn Antenna

Nominal Gain Value: 15dB

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Gain (dB)	Dimensions(mm)				Flange	Material
				L	L1	W	H		
SH-12SGAH15	WR770	0.96-1.46	15	500	100	700	480	FDP	Al
SH-14SGAH15	WR650	1.13-1.73	15	430	80	550	380	FDP	Al
SH-18SGAH15	WR510	1.45-2.20	15	365	65	456	316	FDP	Al
SH-22SGAH15	WR430	1.72-2.61	15	310	60	380	265	FDP	Al
SH-26SGAH15	WR340	2.17-3.30	15	250	50	297	216	FDP	Al
SH-32SGAH15	WR284	2.60-3.95	15	230	50	275	190	FDP	Al
SH-40SGAH15	WR229	3.22-4.90	15	180	50	205	145	FDP	Al
SH-48SGAH15	WR187	3.94-5.99	15	160	40	169	119	FDP	Al
SH-58SGAH15	WR159	4.64-7.05	15	130	40	141	97	FDP	Al
SH-70SGAH15	WR137	5.38-8.17	15	110	25	122	84	FDP	Al
SH-84SGAH15	WR112	6.57-9.99	15	100	25	105	71	FBP	Al
SH-100SGAH15	WR90	8.20-12.40	15	80	20	81	58	FBP	Al
SH-120SGAH15	WR75	9.84-15.0	15	75	25	68	47	FBP	Al
SH-140SGAH15	WR62	11.9-18.0	15	60	25	57	40	FBP	Al
SH-180SGAH15	WR51	14.5-22.0	15	55	20	47	33	FBP	Cu
SH-220SGAH15	WR42	17.6-26.7	15	45	15	39	27	FBP	Cu
SH-260SGAH15	WR34	21.7-33.0	15	40	15	32	22	FBP	Cu
SH-320SGAH15	WR28	26.5-40.0	15	35	10	26	19	FBP	Cu
SH-400SGAH15	WR22	32.9-50.1	15	30	10	22	15.5	FUGP	Cu
SH-500SGAH15	WR19	39.2-59.6	15	25	10	19	13	FUGP	Cu
SH-620SGAH15	WR15	49.8-75.8	15	21	8	15	11	FUGP	Cu
SH-740SGAH15	WR12	60.5-91.9	15	20	8	13.5	9.5	FUGP	Cu
SH-900SGAH15	WR10	73.8-112	15	18	8	11	8	FUGP	Cu

Standard Gain Horn Antenna

Nominal Gain Value: 20dB

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Gain (dB)	Dimensions(mm)				Flange	Material
				L	L1	W	H		
SH-32SGAH20	WR284	2.60-3.95	20	700	50	476	346	FDP	Al
SH-40SGAH20	WR229	3.22-4.90	20	520	50	345	264	FDP	Al
SH-48SGAH20	WR187	3.94-5.99	20	440	40	280	212	FDP	Al
SH-58SGAH20	WR159	4.64-7.05	20	400	40	245	175	FDP	Al
SH-70SGAH20	WR137	5.38-8.17	20	290	25	197	153	FDP	Al
SH-84SGAH20	WR112	6.57-9.99	20	290	25	180	128	FBP	Al
SH-100SGAH20	WR90	8.20-12.40	20	220	20	138	107	FBP	Al
SH-120SGAH20	WR75	9.84-15.0	20	200	25	115	83	FBP	Al
SH-140SGAH20	WR62	11.9-18.0	20	150	25	93	72	FBP	Al
SH-180SGAH20	WR51	14.5-22.0	20	140	20	80	56	FBP	Cu
SH-220SGAH20	WR42	17.6-26.7	20	125	15	70	49	FBP	Cu
SH-260SGAH20	WR34	21.7-33.0	20	110	15	54	42	FBP	Cu
SH-320SGAH20	WR28	26.5-40.0	20	90	10	47	33	FBP	Cu
SH-400SGAH20	WR22	32.9-50.1	20	70	10	36	27	FUGP	Cu
SH-500SGAH20	WR19	39.2-59.6	20	60	10	31.4	23	FUGP	Cu
SH-620SGAH20	WR15	49.8-75.8	20	55	8	25	18	FUGP	Cu
SH-740SGAH20	WR12	60.5-91.9	20	50	8	22	16	FUGP	Cu
SH-900SGAH20	WR10	73.8-112	20	45	8	18	13	FUGP	Cu
SH-1200SGAH20	WR8	92.2-140	20	40	8	15	11	FUGP	Cu
SH-1400SGAH20	WR7	113-173	20	32	2	12	8.5	FUGP	Cu
SH-1800SGAH20	WR5	145-220	20	35	8	9.7	7	FUGP	Cu
SH-2200SGAH20	WR4	172-261	20	30	6	8.5	5.8	FUGP	Cu
SH-2600SGAH20	WR3	217-330	20	27	6	7	4.8	FUGP	Cu

Standard Gain Horn Antenna

Nominal Gain Value: 25dB

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Gain (dB)	Dimensions(mm)				Flange	Material
				L	L1	W	H		
SH-100SGAH25	WR90	8.20-12.40	25	740	20	250	180	FBP	Al
SH-120SGAH25	WR75	9.84-15.0	25	550	25	200	155	FBP	Al
SH-140SGAH25	WR62	11.9-18.0	25	520	25	175	120	FBP	Al
SH-180SGAH25	WR51	14.5-22.0	25	400	20	134	104	FBP	Cu
SH-220SGAH25	WR42	17.6-26.7	25	350	20	120	85	FBP	Cu
SH-260SGAH25	WR34	21.7-33.0	25	300	20	92	70	FBP	Cu
SH-320SGAH25	WR28	26.5-40.0	25	240	15	80	56	FBP	Cu
SH-400SGAH25	WR22	32.9-50.1	25	205	10	66	46	FUGP	Cu
SH-500SGAH25	WR19	39.2-59.6	25	160	10	53	37	FUGP	Cu
SH-620SGAH25	WR15	49.8-75.8	25	130	8	43	31	FUGP	Cu
SH-740SGAH25	WR12	60.5-91.9	25	120	8	37	26	FUGP	Cu
SH-900SGAH25	WR10	73.8-112	25	100	8	30	23	FUGP	Cu
SH-1200SGAH25	WR8	92.2-140	25	86	4	25	17.7	FUGP	Cu
SH-1400SGAH25	WR7	113-173	25	70	5.04	20	14	FUGP	Cu
SH-1800SGAH25	WR5	145-220	25	57	5	16	11.2	FUGP	Cu
SH-2200SGAH25	WR4	172-261	25	50	6	13	9.5	FUGP	Cu
SH-2600SGAH25	WR3	217-330	25	40	6	11	7.7	FUGP	Cu

Standard Gain Horn Antenna

With Built-in Coaxial Input Style Standard Gain Horn Antenna
Nominal Gain Value: 10dB

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Gain (dB)	Dimensions(mm)				Flange	Material
				L	L1	W	H		
SH-3SGAH10N	WR2300	0.32-0.49	10	850	300	1150	800	N Female	Al
SH-4SGAH10N	WR2100	0.35-0.53	10	800	300	1050	720	N Female	Al
SH-5SGAH10N	WR1800	0.41-0.62	10	800	400	900	680	N Female	Al
SH-6SGAH10N	WR1500	0.49-0.75	10	700	350	700	500	N Female	Al
SH-8SGAH10N	WR1150	0.64-0.98	10	590	290	620	440	N Female	Al
SH-9SGAH10N	WR975	0.75-1.15	10	480	250	480	336	N Female	Al
SH-12SGAH10N	WR770	0.96-1.46	10	400	200	400	280	N Female	Al
SH-14SGAH10N	WR650	1.13-1.73	10	370	170	315	235	N Female	Al
SH-18SGAH10N	WR510	1.45-2.20	10	310	130	249	184	N Female	Al
SH-22SGAH10N	WR430	1.72-2.61	10	260	110	209	154	N Female	Al
SH-26SGAH10N	WR340	2.17-3.30	10	200	90	165	125	N Female	Al
SH-32SGAH10N	WR284	2.60-3.95	10	175	75	144	114	N Female	Al
SH-40SGAH10N	WR229	3.22-4.90	10	150	80	113	88	N Female	Al
SH-48SGAH10N	WR187	3.94-5.99	10	145	75	98	73	N Female	Al
SH-58SGAH10N	WR159	4.64-7.05	10	135	75	83	63	N Female	Al
SH-70SGAH10N	WR137	5.38-8.17	10	110	60	67	52	N Female	Al
SH-84SGAH10N	WR112	6.57-9.99	10	95	50	57	42	N Female	Al
SH-100SGAH10N	WR90	8.20-12.40	10	75	45	47	37	N Female	Al
SH-120SGAH10N	WR75	9.84-15.0	10	75	45	40	29	N Female	Al
SH-140SGAH10S	WR62	11.9-18.0	10	75	45	37	27	SMA Female	Al
SH-180SGAH10S	WR51	14.5-22.0	10	75	45	30	20	SMA Female	Cu
SH-220SGAH10K	WR42	17.6-26.7	10	75	45	24	17	2.92 Female	Cu
SH-260SGAH10K	WR34	21.7-33.0	10	53	33	20	14	2.92 Female	Cu
SH-320SGAH10K	WR28	26.5-40.0	10	54	34	17	12	2.92 Female	Cu

Standard Gain Horn Antenna

With Built-in Coaxial Input Style Standard Gain Horn Antenna
Nominal Gain Value: 15dB

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Gain (dB)	Dimensions(mm)				Flange	Material
				L	L1	W	H		
SH-9SGAH15N	WR975	0.75-1.15	15	820	250	650	580	N Female	Al
SH-12SGAH15N	WR770	0.96-1.46	15	700	200	700	480	N Female	Al
SH-14SGAH15N	WR650	1.13-1.73	15	520	170	550	380	N Female	Al
SH-18SGAH15N	WR510	1.45-2.20	15	430	130	456	316	N Female	Al
SH-22SGAH15N	WR430	1.72-2.61	15	360	110	380	265	N Female	Al
SH-26SGAH15N	WR340	2.17-3.30	15	290	90	297	216	N Female	Al
SH-32SGAH15N	WR284	2.60-3.95	15	255	75	275	190	N Female	Al
SH-40SGAH15N	WR229	3.22-4.90	15	210	80	205	145	N Female	Al
SH-48SGAH15N	WR187	3.94-5.99	15	195	75	169	119	N Female	Al
SH-58SGAH15N	WR159	4.64-7.05	15	165	75	141	97	N Female	Al
SH-70SGAH15N	WR137	5.38-8.17	15	145	60	122	84	N Female	Al
SH-84SGAH15N	WR112	6.57-9.99	15	125	50	105	71	N Female	Al
SH-100SGAH15N	WR90	8.20-12.40	15	105	45	81	56	N Female	Al
SH-120SGAH15N	WR75	9.84-15.0	15	95	45	68	47	N Female	Al
SH-140SGAH15S	WR62	11.9-18.0	15	100	45	57	40	SMA Female	Al
SH-180SGAH15S	WR51	14.5-22.0	15	80	45	47	33	SMA Female	Cu
SH-220SGAH15K	WR42	17.6-26.7	15	75	45	39	27	2.92 Female	Cu
SH-260SGAH15K	WR34	21.7-33.0	15	58	33	32	22	2.92 Female	Cu
SH-320SGAH15K	WR28	26.5-40.0	15	59	34	26	19	2.92 Female	Cu

Standard Gain Horn Antenna

With Built-in Coaxial Input Style Standard Gain Horn Antenna
Nominal Gain Value: 20dB

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Gain (dB)	Dimensions(mm)				Flange	Material
				L	L1	W	H		
SH-32SGAH20N	WR284	2.60-3.95	20	725	75	476	346	N Female	Al
SH-40SGAH20N	WR229	3.22-4.90	20	550	80	345	264	N Female	Al
SH-48SGAH20N	WR187	3.94-5.99	20	475	75	280	212	N Female	Al
SH-58SGAH20N	WR159	4.64-7.05	20	435	75	245	175	N Female	Al
SH-70SGAH20N	WR137	5.38-8.17	20	325	60	197	153	N Female	Al
SH-84SGAH20N	WR112	6.57-9.99	20	315	50	180	128	N Female	Al
SH-100SGAH20N	WR90	8.20-12.40	20	245	45	138	107	N Female	Al
SH-120SGAH20N	WR75	9.84-15.0	20	220	45	115	83	N Female	Al
SH-140SGAH20S	WR62	11.9-18.0	20	170	45	93	72	SMA Female	Al
SH-180SGAH20S	WR51	14.5-22.0	20	165	45	80	58	SMA Female	Cu
SH-220SGAH20K	WR42	17.6-26.7	20	155	45	70	49	2.92 Female	Cu
SH-260SGAH20K	WR34	21.7-33.0	20	128	33	54	42	2.92 Female	Cu
SH-320SGAH20K	WR28	26.5-40.0	20	114	34	47	33	2.92 Female	Cu

Nominal Gain Value: 25dB

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Gain (dB)	Dimensions(mm)				Flange	Material
				L	L1	W	H		
SH-100SGAH25N	WR90	8.20-12.40	25	780	40	250	180	N Female	Al
SH-120SGAH25N	WR75	9.84-15.0	25	570	45	200	155	N Female	Al
SH-140SGAH25S	WR62	11.9-18.0	25	540	45	175	120	SMA Female	Al
SH-180SGAH25S	WR51	14.5-22.0	25	424	44	134	104	SMA Female	Cu
SH-220SGAH25K	WR42	17.6-26.7	25	375	45	120	85	2.92 Female	Cu
SH-260SGAH25K	WR34	21.7-33.0	25	313	33	92	70	2.92 Female	Cu
SH-320SGAH25K	WR28	26.5-40.0	25	259	34	80	58	2.92 Female	Cu

Standard Gain Horn Antenna

With Coaxial Connector Style Standard Gain Horn Antenna
Nominal Gain Value: 10dB

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Gain (dB)	Dimensions(mm)					Flange	Material
				L	L1	L2	W	H		
SH-12SGAH15+N	WR770	0.96-1.46	10	466	100	166	400	280	N Female	Al
SH-14SGAH15+N	WR650	1.13-1.73	10	430	80	150	315	235	N Female	Al
SH-18SGAH15+N	WR510	1.45-2.20	10	360	65	120	249	184	N Female	Al
SH-22SGAH15+N	WR430	1.72-2.61	10	310	60	100	209	154	N Female	Al
SH-26SGAH15+N	WR340	2.17-3.30	10	245	50	85	165	125	N Female	Al
SH-32SGAH15+N	WR284	2.60-3.95	10	222	50	72	144	114	N Female	Al
SH-40SGAH15+N	WR229	3.22-4.90	10	185	50	65	113	88	N Female	Al
SH-48SGAH15+N	WR187	3.94-5.99	10	164	40	54	98	73	N Female	Al
SH-58SGAH15+N	WR159	4.64-7.05	10	150	40	50	83	63	N Female	Al
SH-70SGAH15+N	WR137	5.38-8.17	10	123	25	48	67	52	N Female	Al
SH-84SGAH15+N	WR112	6.57-9.99	10	110	25	40	57	42	N Female	Al
SH-100SGAH15+N	WR90	8.20-12.40	10	83	20	33	47	37	N Female	Al
SH-120SGAH15+N	WR75	9.84-15.0	10	83	24.5	30	40	29	N Female	Al
SH-140SGAH15+S	WR62	11.9-18.0	10	82	25	27	37	27	SMA Female	Al
SH-180SGAH15+S	WR51	14.5-22.0	10	77	20	27	30	20	SMA Female	Cu
SH-220SGAH15+K	WR42	17.6-26.7	10	70	15	25	24	17	2.92 Female	Cu
SH-260SGAH15+K	WR34	21.7-33.0	10	62	15	27	20	14	2.92 Female	Cu
SH-320SGAH15+K	WR28	26.5-40.0	10	56	10	26	17	12	2.92 Female	Cu

Standard Gain Horn Antenna

With Coaxial Connector Style Standard Gain Horn Antenna
Nominal Gain Value: 15dB

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Gain (dB)	Dimensions(mm)					Flange	Material
				L	L1	L2	W	H		
SH-12SGAH15+N	WR770	0.96-1.46	15	766	100	166	700	480	N Female	Al
SH-14SGAH15+N	WR650	1.13-1.73	15	580	80	150	550	380	N Female	Al
SH-18SGAH15+N	WR510	1.45-2.20	15	485	65	120	456	316	N Female	Al
SH-22SGAH15+N	WR430	1.72-2.61	15	410	60	100	380	265	N Female	Al
SH-26SGAH15+N	WR340	2.17-3.30	15	335	50	85	297	216	N Female	Al
SH-32SGAH15+N	WR284	2.60-3.95	15	302	50	72	275	190	N Female	Al
SH-40SGAH15+N	WR229	3.22-4.90	15	245	50	65	205	145	N Female	Al
SH-48SGAH15+N	WR187	3.94-5.99	15	214	40	54	169	119	N Female	Al
SH-58SGAH15+N	WR159	4.64-7.05	15	180	40	50	141	97	N Female	Al
SH-70SGAH15+N	WR137	5.38-8.17	15	158	25	48	122	84	N Female	Al
SH-84SGAH15+N	WR112	6.57-9.99	15	140	25	40	105	71	N Female	Al
SH-100SGAH15+N	WR90	8.20-12.40	15	115	20	35	81	56	N Female	Al
SH-120SGAH15+N	WR75	9.84-15.0	15	105	25	30	68	47	N Female	Al
SH-140SGAH15+S	WR62	11.9-18.0	15	107	25	27	57	40	SMA Female	Al
SH-180SGAH15+S	WR51	14.5-22.0	15	82	20	27	47	33	SMA Female	Cu
SH-220SGAH15+K	WR42	17.6-26.7	15	70	15	25	39	27	2.92 Female	Cu
SH-260SGAH15+K	WR34	21.7-33.0	15	67	15	27	32	22	2.92 Female	Cu
SH-320SGAH15+K	WR28	26.5-40.0	15	61	10	26	28	19	2.92 Female	Cu

Standard Gain Horn Antenna

With Coaxial Connector Style Standard Gain Horn Ant
Nominal Gain Value: 20dB

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Gain (dB)	Dimensions(mm)					Flange	Material
				L	L1	L2	W	H		
SH-32SGAH20+N	WR284	2.60-3.95	20	772	50	72	476	346	N Female	Al
SH-40SGAH20+N	WR229	3.22-4.90	20	585	50	65	345	264	N Female	Al
SH-48SGAH20+N	WR187	3.94-5.99	20	494	40	54	280	212	N Female	Al
SH-58SGAH20+N	WR159	4.64-7.05	20	450	40	50	245	175	N Female	Al
SH-70SGAH20+N	WR137	5.38-8.17	20	338	25	48	197	153	N Female	Al
SH-84SGAH20+N	WR112	6.57-9.99	20	330	25	40	180	128	N Female	Al
SH-100SGAH20+N	WR90	8.20-12.40	20	255	20	35	138	107	N Female	Al
SH-120SGAH20+N	WR75	9.84-15.0	20	230	25	30	115	83	N Female	Al
SH-140SGAH20+S	WR62	11.9-18.0	20	177	25	27	93	72	SMA Female	Al
SH-180SGAH20+S	WR51	14.5-22.0	20	167	20	27	80	56	SMA Female	Cu
SH-220SGAH20+K	WR42	17.6-26.7	20	150	15	25	70	49	2.92 Female	Cu
SH-260SGAH20+K	WR34	21.7-33.0	20	137	15	27	54	42	2.92 Female	Cu
SH-320SGAH20+K	WR28	26.5-40.0	20	116	10	26	47	33	2.92 Female	Cu
SH-400SGAH20+K	WR22	33-50	20	98	10	31	35	26	2.92 Female	Cu

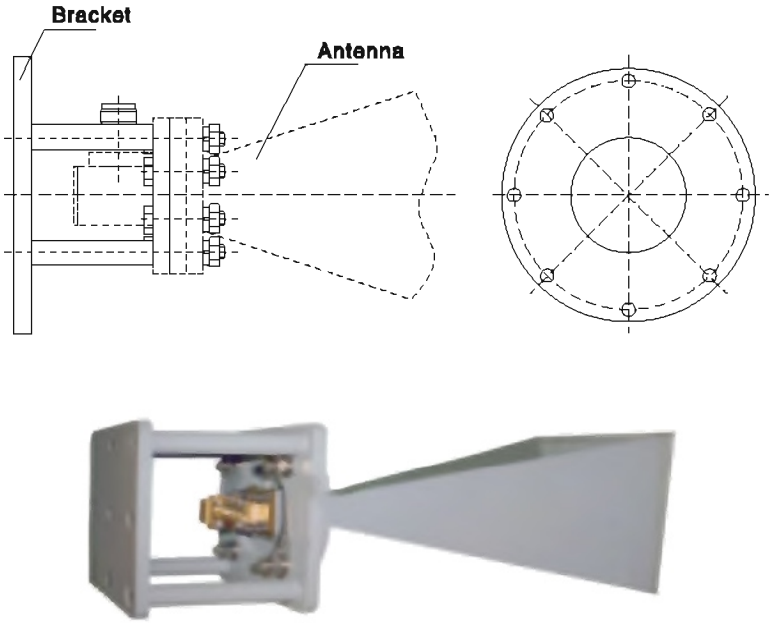
Nominal Gain Value: 25dB

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Gain (dB)	Dimensions(mm)					Flange	Material
				L	L1	L2	W	H		
SH-100SGAH25+N	WR90	8.20-12.40	25	775	40	35	250	180	N Female	Al
SH-120SGAH25+N	WR75	9.84-15.0	25	550	25	30	200	155	N Female	Al
SH-140SGAH25+S	WR62	11.9-18.0	25	547	25	27	175	120	SMA Female	Al
SH-180SGAH25+S	WR51	14.5-22.0	25	427	23	27	134	104	SMA Female	Cu
SH-220SGAH25+K	WR42	17.6-26.7	25	375	20	25	120	85	2.92 Female	Cu
SH-260SGAH25+K	WR34	21.7-33.0	25	327	20	27	92	70	2.92 Female	Cu
SH-320SGAH25+K	WR28	26.5-40.0	25	266	15	26	80	56	2.92 Female	Cu
SH-400SGAH25+K	WR22	33-50	25	236	10	31	66	46	2.92 Female	Cu

Antenna Bracket for Standard Gain Horn Antenna

1)Type 1 SH-ZJG...



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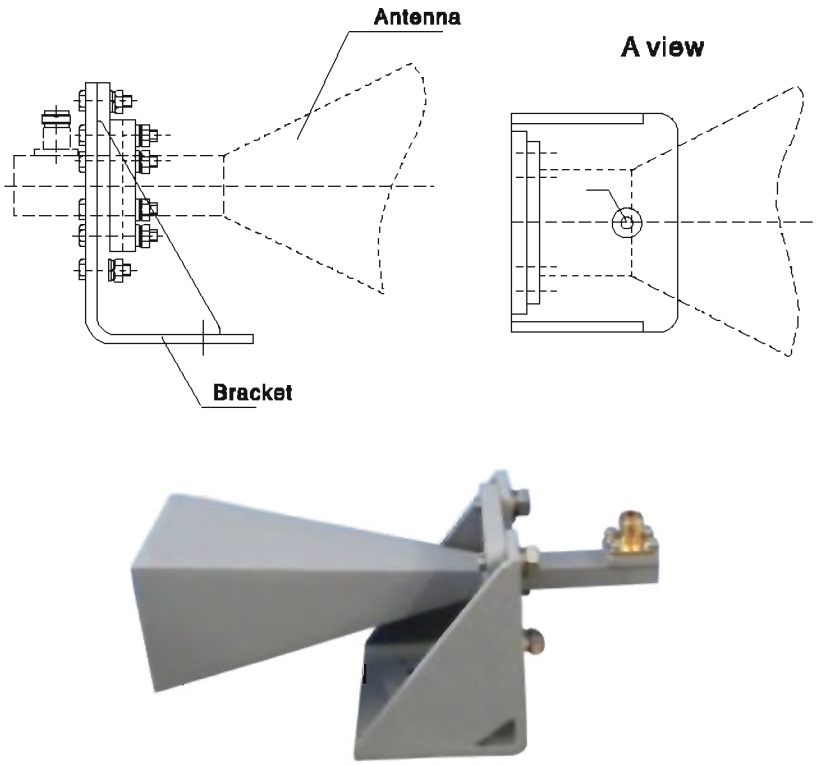
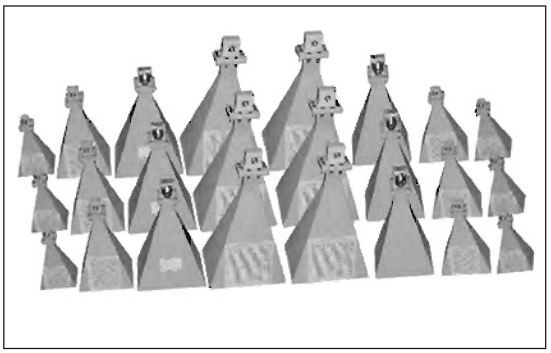


STANDARD GAIN HORN ANTENNA



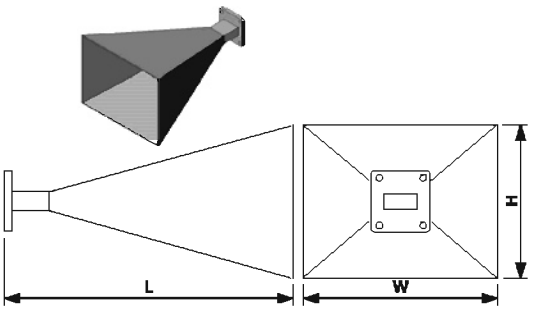
Shinhom Microwave manufactures a high quality line of standard gain horn antennas that are linearly polarized, lightweight and corrosion resistant. The most common Gain values available are 10, 15, 20, 25dB. Other Gain values and Horn sizes can be designed to your requirement. Please call us with your specification and discuss your needs with one of our sales engineers.

Standard Gain Horn Antenna, 10 dB

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	Gain (dB)	3dB Beamwidth (Nom)	Dimensions(mm)			WG Type		Flange
				L	W	H	IEC	EIA	
SH-3SGAH10	0.32-0.49	10	55°	850	1150	800	R3	WR2300	FDP
SH-4SGAH10	0.35-0.53	10	55°	800	1060	720	R4	WR2100	FDP
SH-5SGAH10	0.41-0.62	10	55°	800	900	660	R5	WR1800	FDP
SH-6SGAH10	0.49-0.75	10	55°	700	700	500	R6	WR1500	FDP
SH-8SGAH10	0.64-0.96	10	55°	590	620	440	R8	WR1150	FDP
SH-9SGAH10	0.75-1.15	10	55°	300	480	336	R9	WR975	FDP
SH-12SGAH10	0.96-1.46	10	55°	300	400	280	R12	WR770	FDP
SH-14SGAH10	1.13-1.73	10	55°	280	315	235	R14	WR650	FDP
SH-18SGAH10	1.45-2.20	10	55°	245	249	184	R18	WR510	FDP
SH-22SGAH10	1.72-2.61	10	55°	210	209	154	R22	WR430	FDP
SH-26SGAH10	2.17-3.30	10	55°	160	165	125	R26	WR340	FDP
SH-32SGAH10	2.60-3.95	10	55°	150	144	114	R32	WR284	FDP
SH-40SGAH10	3.22-4.90	10	55°	120	113	86	R40	WR229	FDP
SH-48SGAH10	3.94-5.99	10	55°	110	98	73	R48	WR187	FDP
SH-58SGAH10	4.64-7.05	10	55°	100	83	63	R58	WR159	FDP
SH-70SGAH10	5.38-8.17	10	55°	75	67	52	R70	WR137	FDP
SH-84SGAH10	6.57-9.99	10	55°	70	57	42	R84	WR112	FBP
SH-100SGAH10	8.20-12.40	10	55°	60	47	347	R100	WR90	FBP
SH-120SGAH10	9.84-15.0	10	55°	55	40	29	R120	WR75	FBP
SH-140SGAH10	11.9-18.0	10	55°	55	37	27	R140	WR62	FBP
SH-180SGAH10	14.5-22.0	10	55°	50	30	20	R180	WR51	FBP
SH-220SGAH10	17.6-26.7	10	55°	46	24	17	R220	WR42	FBP
SH-260SGAH10	21.7-33.0	10	55°	36	20	14	R260	WR34	FBP
SH-320SGAH10	26.5-40.0	10	55°	30	17	12	R320	WR28	FBP
SH-400SGAH10	32.9-50.1	10	55°	38	10.8	7.9	R400	WR22	FUGP
SH-500SGAH10	39.2-59.6	10	55°	30	9	6.4	R500	WR19	FUGP
SH-620SGAH10	49.6-75.8	10	55°	26	87.5	5.3	R620	WR15	FUGP
SH-740SGAH10	60.5-91.9	10	55°	20	5.9	4.5	R740	WR12	FUGP
SH-900SGAH10	73.8-112	10	55°	20	5.3	4	R900	WR10	FUGP

*Gain and 3dB Beamwidth values have been calculated by computer simulation.



Style 1 – Waveguide Input

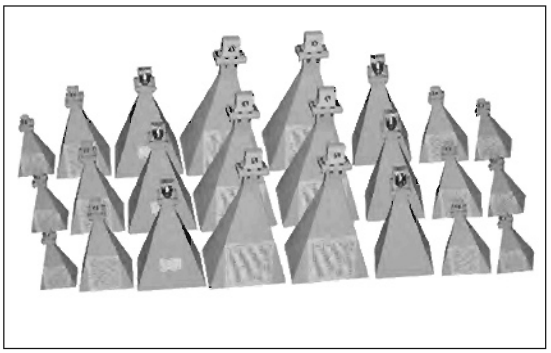
Ordering Information

Example Part No: SH – 100 SGAH 10

- SH: Shinhom Microwave
- 100: WG type:R100
- SGAH: Product Type: Standard Gain Horn Antenna with Waveguide Input
- 10: Gain: 10dB

- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black/grey top coat

STANDARD GAIN HORN ANTENNA



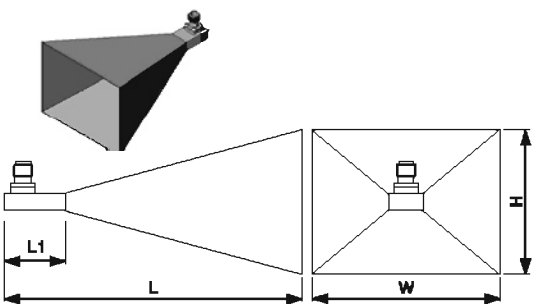
Shinhom Microwave manufactures a high quality line of standard gain horn antennas that are linearly polarized, lightweight and corrosion resistant. The most common Gain values available are 10, 15, 20, 25dB. Other Gain values and Horn sizes can be designed to your requirement. Please call us with your specification and discuss your needs with one of our sales engineers.

Standard Gain Horn Antenna, 10 dB

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	Gain (dB)	3dB Beamwidth (Nom)	Dimensions(mm)			WG Type		Connector
				L	W	H	IEC	EIA	
SH-3SGAH10N...	0.32-0.49	10	55°	850	1160	800	R3	WR2300	N Type
SH-4SGAH10N...	0.35-0.53	10	55°	800	1050	720	R4	WR2100	N Type
SH-5SGAH10N...	0.41-0.62	10	55°	800	900	660	R5	WR1800	N Type
SH-6SGAH10N...	0.49-0.75	10	55°	700	700	500	R6	WR1500	N Type
SH-8SGAH10N...	0.64-0.98	10	55°	590	620	440	R8	WR1150	N Type
SH-9SGAH10N...	0.75-1.15	10	55°	480	480	336	R9	WR975	N Type
SH-12SGAH10N...	0.96-1.46	10	55°	400	400	280	R12	WR770	N Type
SH-14SGAH10N...	1.13-1.73	10	55°	370	315	235	R14	WR650	N Type
SH-18SGAH10N...	1.45-2.20	10	55°	310	249	184	R18	WR510	N Type
SH-22SGAH10N...	1.72-2.61	10	55°	260	209	154	R22	WR430	N Type
SH-26SGAH10N...	2.17-3.30	10	55°	200	165	125	R26	WR340	N Type
SH-32SGAH10N...	2.60-3.95	10	55°	175	144	114	R32	WR284	N Type
SH-40SGAH10N...	3.22-4.90	10	55°	150	113	88	R40	WR229	N Type
SH-48SGAH10N...	3.94-5.99	10	55°	145	96	73	R48	WR187	N Type
SH-58SGAH10N...	4.64-7.05	10	55°	135	83	63	R58	WR159	N Type
SH-70SGAH10N...	5.38-8.17	10	55°	110	67	52	R70	WR137	N Type
SH-84SGAH10N...	6.57-9.99	10	55°	95	57	42	R84	WR112	N Type
SH-100SGAH10N...	8.20-12.40	10	55°	75	47	347	R100	WR90	N Type
SH-120SGAH10S...	9.84-15.0	10	55°	76	40	29	R120	WR75	SMA
SH-140SGAH10S...	11.9-18.0	10	55°	76	37	27	R140	WR62	SMA
SH-180SGAH10S...	14.5-22.0	10	55°	75	30	20	R180	WR51	SMA
SH-220SGAH10S...	17.6-26.7	10	55°	75	24	17	R220	WR42	SMA
SH-260SGAH10K...	21.7-33.0	10	55°	53	20	14	R260	WR34	K2.92mm
SH-320SGAH10K...	26.5-40.0	10	55°	54	17	12	R320	WR28	K2.92mm

*Gain and 3dB Beamwidth values have been calculated by computer simulation.



Style 2 – Built-in Coaxial Input

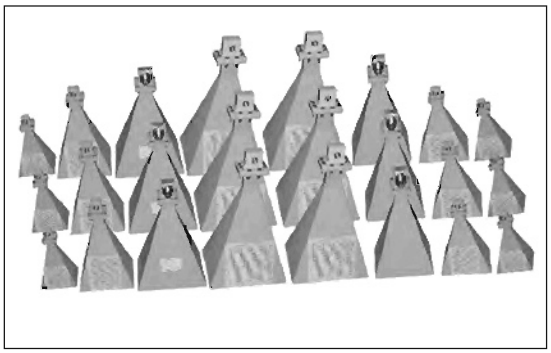
Ordering Information

Example Part No: SH – 100 SGAH 10 N K

- SH: Shinhom Microwave
- 100: WG type:R100
- SGAH: Product Type: Standard Gain Horn Antenna with Built-in Coax Input
- 10: Gain: 10dB
- N: Coax Connector Type: N=Type N,S=SMA,2.92=K2.92mm
- K: J=Male,K=Female

- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black/grey top coat

STANDARD GAIN HORN ANTENNA



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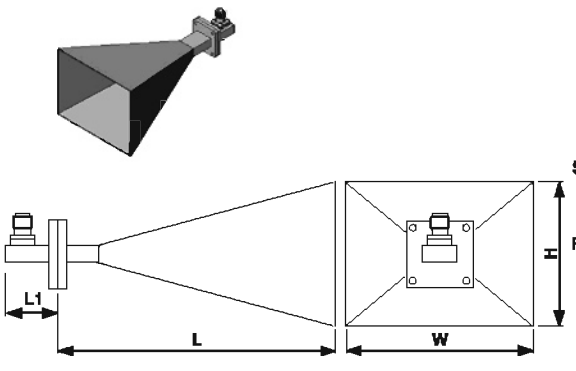
Standard Gain Horn Antenna, 10 dB

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	Gain (dB)	3dB Beamwidth (Nom)	Dimensions(mm)				WG Type		Connector
				L	L2	W	H	IEC	EIA	
SH-3SGAH10+N.	0.32–0.49	10	55°	1800	400	1150	800	R3	WR2300	N Type
SH-4SGAH10+N...	0.35–0.53	10	55°	1400	380	1050	720	R4	WR2100	N Type
SH-5SGAH10+N...	0.41–0.62	10	55°	1300	350	900	660	R5	WR1800	N Type
SH-6SGAH10+N...	0.49–0.75	10	55°	1100	300	700	500	R6	WR1500	N Type
SH-8SGAH10+N...	0.64–0.98	10	55°	1200	260	620	440	R8	WR1150	N Type
SH-9SGAH10+N...	0.75–1.15	10	55°	520	220	480	336	R9	WR975	N Type
SH-12SGAH10+N...	0.96–1.46	10	55°	466	186	400	280	R12	WR770	N Type
SH-14SGAH10+N...	1.13–1.73	10	55°	430	150	315	235	R14	WR650	N Type
SH-18SGAH10+N...	1.45–2.20	10	55°	360	120	249	184	R18	WR510	N Type
SH-22SGAH10+N...	1.72–2.61	10	55°	310	100	209	154	R22	WR430	N Type
SH-26SGAH10+N...	2.17–3.30	10	55°	245	85	165	125	R26	WR340	N Type
SH-32SGAH10+N...	2.60–3.95	10	55°	222	72	144	114	R32	WR284	N Type
SH-40SGAH10+N...	3.22–4.90	10	55°	185	65	113	88	R40	WR229	N Type
SH-48SGAH10+N...	3.94–5.99	10	55°	164	64	98	73	R48	WR187	N Type
SH-58SGAH10+N...	4.64–7.05	10	55°	150	50	83	63	R58	WR159	N Type
SH-70SGAH10+N...	5.38–8.17	10	55°	123	48	67	52	R70	WR137	N Type
SH-84SGAH10+N...	6.57–9.99	10	55°	110	40	57	42	R84	WR112	N Type
SH-100SGAH10+N...	8.20–12.40	10	55°	83	33	47	37	R100	WR90	N Type
SH-120SGAH10+S..	9.84–15.0	10	55°	55	30	40	29	R120	WR75	SMA
SH-140SGAH10+S...	11.9–18.0	10	55°	55	27	37	27	R140	WR62	SMA
SH-180SGAH10+S...	14.5–22.0	10	55°	77	27	30	20	R180	WR51	SMA
SH-220SGAH10+S...	17.6–26.7	10	55°	70	25	24	17	R220	WR42	SMA
SH-260SGAH10+K...	21.7–33.0	10	55°	62	27	20	14	R260	WR34	K2.92mm
SH-320SGAH10+K...	26.5–40.0	10	55°	56	26	17	12	R320	WR28	K2.92mm

*Indicates Modal Number. See Ordering Information for complete part number.
**Gain and 3dB Beamwidth values have been calculated by computer simulation.



Style 3 - Built-in Coaxial Input

Ordering Information

Example Part No: SH – 100 SGAH 10 +N K

- SH: Shinhom Microwave
- 100: WG type:R100
- SGAH: Product Type: Standard Gain Horn Antenna with Built-in Coax Input
- 10: Gain: 10dB
- +N: Coax Connector Type: N=Type N,S=SMA,2.92=K2.92mm
- K: J=Male,K=Female

- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black/grey top coat

STANDARD GAIN HORN ANTENNA

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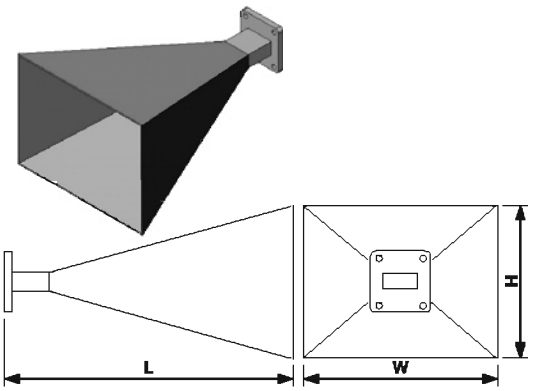
Standard Gain Horn Antenna, 15 dB

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	Gain (dB)	3dB Beamwidth (Nom)	Dimensions(mm)			WG Type		Flange
				L	W	H	IEC	EIA	
SH-9SGAH15	0.75-1.15	15	30°	640	650	580	R9	WR975	FDP
SH-12SGAH15	0.96-1.46	15	30°	600	700	480	R12	WR770	FDP
SH-14SGAH15	1.13-1.73	15	30°	430	550	380	R14	WR650	FDP
SH-18SGAH15	1.45-2.20	15	30°	385	456	316	R18	WR510	FDP
SH-22SGAH15	1.72-2.61	15	30°	310	380	265	R22	WR430	FDP
SH-26SGAH15	2.17-3.30	15	30°	250	297	216	R26	WR340	FDP
SH-32SGAH15	2.60-3.95	15	30°	230	275	190	R32	WR284	FDP
SH-40SGAH15	3.22-4.90	15	30°	180	205	145	R40	WR229	FDP
SH-48SGAH15	3.94-5.99	15	30°	160	169	119	R48	WR187	FDP
SH-58SGAH15	4.64-7.05	15	30°	130	141	97	R58	WR159	FDP
SH-70SGAH15	5.38-8.17	15	30°	110	122	84	R70	WR137	FDP
SH-84SGAH15	6.57-9.99	15	30°	100	105	71	R84	WR112	FBP
SH-100SGAH15	8.20-12.40	15	30°	80	81	56	R100	WR90	FBP
SH-120SGAH15	9.84-15.0	15	30°	75	68	47	R120	WR75	FBP
SH-140SGAH15	11.9-18.0	15	30°	60	57	40	R140	WR62	FBP
SH-180SGAH15	14.5-22.0	15	30°	55	47	33	R180	WR51	FBP
SH-220SGAH15	17.6-26.7	15	30°	45	39	27	R220	WR42	FBP
SH-260SGAH15	21.7-33.0	15	30°	40	32	22	R260	WR34	FBP
SH-320SGAH15	26.5-40.0	15	30°	35	26	19	R320	WR28	FBP
SH-400SGAH15	32.9-50.1	15	30°	30	22	15.5	R400	WR22	FUGP
SH-500SGAH15	39.2-59.6	15	30°	25	19	13	R500	WR19	FUGP
SH-620SGAH15	49.8-75.8	15	30°	21	15	11	R620	WR15	FUGP
SH-740SGAH15	60.5-91.9	15	30°	20	13.5	9.5	R740	WR12	FUGP
SH-900SGAH15	73.8-112	15	30°	18	11	8	R900	WR10	FUGP

*Gain and 3dB Beamwidth values have been calculated by computer simulation.



Style 1 - Waveguide Input

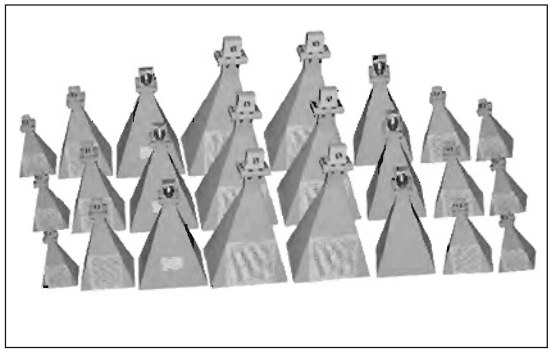
Ordering Information

Example Part No: SH – 100 SGAH 15

- SH – Shinhom Microwave
- 100 – WG type:R100
- SGAH – Product Type: Standard Gain Horn Attenna with Waveguide Input
- 15 – Gain: 15dB

- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black top coat

STANDARD GAIN HORN ANTENNA



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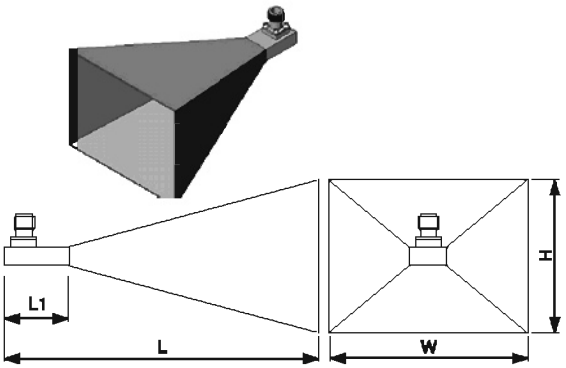
Standard Gain Horn Antenna, 15 dB

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	Gain (dB)	3dB Beamwidth (Nom)	Dimensions(mm)			WG Type		Connector
				L	W	H	IEC	EIA	
SH-9SGAH15N...	0.75-1.15	15	30°	820	650	580	R9	WR975	N Type
SH-12SGAH15N...	0.96-1.46	15	30°	700	700	480	R12	WR770	N Type
SH-14SGAH15N...	1.13-1.73	15	30°	520	550	380	R14	WR650	N Type
SH-18SGAH15N...	1.45-2.20	15	30°	430	456	316	R18	WR510	N Type
SH-22SGAH15N...	1.72-2.61	15	30°	360	380	265	R22	WR430	N Type
SH-28SGAH15N...	2.17-3.30	15	30°	280	297	216	R26	WR340	N Type
SH-32SGAH15N...	2.60-3.95	15	30°	255	275	190	R32	WR284	N Type
SH-40SGAH15N...	3.22-4.90	15	30°	210	205	145	R40	WR229	N Type
SH-48SGAH15N...	3.94-5.99	15	30°	195	169	119	R48	WR187	N Type
SH-58SGAH15N...	4.64-7.05	15	30°	165	141	97	R58	WR159	N Type
SH-70SGAH15N...	5.38-8.17	15	30°	145	122	84	R70	WR137	N Type
SH-84SGAH15N...	6.57-9.99	15	30°	125	105	71	R84	WR112	N Type
SH-100SGAH15N...	8.20-12.40	15	30°	105	81	56	R100	WR90	N Type
SH-120SGAH15S...	9.84-15.0	15	30°	95	68	47	R120	WR75	SMA
SH-140SGAH15S...	11.9-18.0	15	30°	100	57	40	R140	WR62	SMA
SH-180SGAH15S...	14.5-22.0	15	30°	80	47	33	R180	WR51	SMA
SH-220SGAH15S...	17.6-26.7	15	30°	75	29	27	R220	WR42	SMA
SH-260SGAH15K...	21.7-33.0	15	30°	58	32	22	R260	WR34	K2.92mm
SH-320SGAH15K...	26.5-40.0	15	30°	59	26	19	R320	WR28	K2.92mm

*Indicates Model Number. See Ordering Information for complete part number.
**Gain and 3dB Beamwidth values have been calculated by computer simulation.



Style 2 - Built-In Coaxial Input

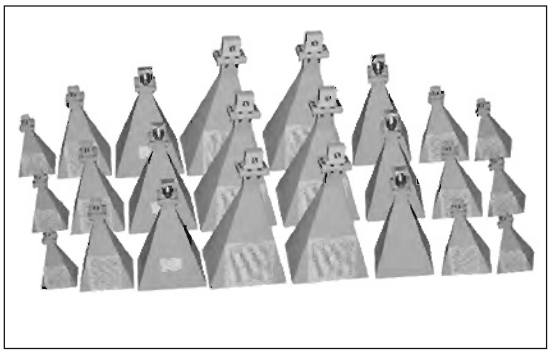
Ordering Information

Example Part No: SH – 100 SGAH 15 N K

- Shinhom Microwave
- WG type: R100
- Product Type: Standard Gain Horn Antenna with Built-In Coax Input
- Gain: 15dB
- Coax Connector Type: N=Type N, S=SMA, 2.92=K2.92mm
- J=Male, K=Female

- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black top coat

STANDARD GAIN HORN ANTENNA



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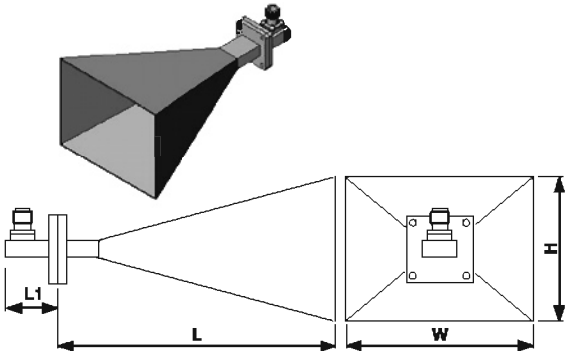
Standard Gain Horn Antenna, 15 dB

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	Gain (dB)	3dB Beamwidth (Nom)	Dimensions(mm)				WG Type		Connector
				L	L2	W	H	IEC	EIA	
SH-9SGAH15+N...	0.75–1.15	15	30°	820	231	650	560	R9	WR975	N Type
SH-12SGAH15+N...	0.96–1.46	15	30°	766	186	700	480	R12	WR770	N Type
SH-14SGAH15+N...	1.13–1.73	15	30°	560	150	550	380	R14	WR650	N Type
SH-18SGAH15+N...	1.45–2.20	15	30°	480	120	466	316	R18	WR510	N Type
SH-22SGAH15+N...	1.72–2.61	15	30°	410	100	380	265	R22	WR430	N Type
SH-26SGAH15+N...	2.17–3.30	15	30°	336	65	297	216	R26	WR340	N Type
SH-32SGAH15+N...	2.60–3.95	15	30°	320	90	275	190	R32	WR284	N Type
SH-40SGAH15+N...	3.22–4.90	15	30°	246	65	205	145	R40	WR229	N Type
SH-48SGAH15+N...	3.94–5.99	15	30°	214	54	169	119	R48	WR187	N Type
SH-58SGAH15+N...	4.64–7.05	15	30°	180	50	141	97	R58	WR159	N Type
SH-70SGAH15+N...	5.38–8.17	15	30°	158	48	1220	84	R70	WR137	N Type
SH-84SGAH15+N...	6.57–9.99	15	30°	140	40	105	71	R84	WR112	N Type
SH-100SGAH15+N...	8.20–12.40	15	30°	115	35	81	56	R100	WR90	N Type
SH-120SGAH15+S...	9.84–15.0	15	30°	105	30	68	47	R120	WR75	SMA
SH-140SGAH15+S...	11.9–18.0	15	30°	107	27	57	40	R140	WR62	SMA
SH-180SGAH15+S...	14.5–22.0	15	30°	82	27	47	33	R180	WR51	SMA
SH-220SGAH15+S...	17.6–26.7	15	30°	70	25	39	27	R220	WR42	SMA
SH-260SGAH15+K...	21.7–33.0	15	30°	67	27	32	22	R260	WR34	K2.92mm
SH-320SGAH15+K...	26.5–40.0	15	30°	61	26	26	19	R320	WR28	K2.92mm

*Indicates Model Number. See Ordering Information for complete part number.
**Gain and 3dB Beamwidth values have been calculated by computer simulation.



Style 3 - Built-in Coaxial Input

Ordering Information

Example Part No: SH – 100 SGAH 15 +N K

- Shinhom Microwave
- WG type:R100
- Product Type: Standard Gain Horn Antenna with Built-in Coax Input
- Gain: 15dB
- Coax Connector Type: N=Type N, S=SMA,2.92=K2.92mm
- J=Male,K=Female

- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black top coat

STANDARD GAIN HORN ANTENNA

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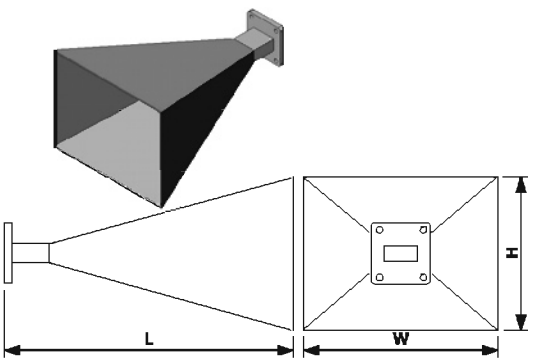
Standard Gain Horn Antenna, 20 dB

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	Gain (dB)	3dB Beamwidth (Nom)	Dimensions(mm)			WG Type		Flange
				L	W	H	IEC	EIA	
SH-32SGAH20	2.60-3.95	20	18°	700	476	348	R32	WR284	D Type
SH-40SGAH20	3.22-4.90	20	18°	520	345	264	R40	WR229	D Type
SH-48SGAH20	3.94-5.99	20	18°	440	280	212	R48	WR187	D Type
SH-58SGAH20	4.64-7.05	20	18°	400	245	175	R58	WR159	D Type
SH-70SGAH20	5.38-8.17	20	18°	290	197	153	R70	WR137	D Type
SH-84SGAH20	6.57-9.99	20	18°	290	180	128	R84	WR112	B Type
SH-100SGAH20	8.20-12.40	20	18°	220	138	107	R100	WR90	B Type
SH-120SGAH20	9.84-15.0	20	18°	200	115	83	R120	WR75	B Type
SH-140SGAH20	11.9-18.0	20	18°	150	93	72	R140	WR62	B Type
SH-180SGAH20	14.5-22.0	20	18°	140	80	56	R180	WR51	B Type
SH-220SGAH20	17.6-26.7	20	18°	125	70	49	R220	WR42	B Type
SH-260SGAH20	21.7-33.0	20	18°	110	54	42	R260	WR34	B Type
SH-320SGAH20	26.5-40.0	20	18°	90	47	33	R320	WR28	B Type
SH-400SGAH20	32.9-50.1	20	18°	70	36	27	R400	WR22	FUGP
SH-500SGAH20	39.2-59.6	20	18°	60	31.4	23	R500	WR19	FUGP
SH-620SGAH20	49.8-75.8	20	18°	55	25	18	R620	WR15	FUGP
SH-740SGAH20	60.5-91.9	20	18°	50	22	16	R740	WR12	FUGP
SH-900SGAH20	73.8-112	20	18°	45	18	13	R900	WR10	FUGP

*Gain and 3dB Beamwidth values have been calculated by computer simulation.



Style 1 - Waveguide Input

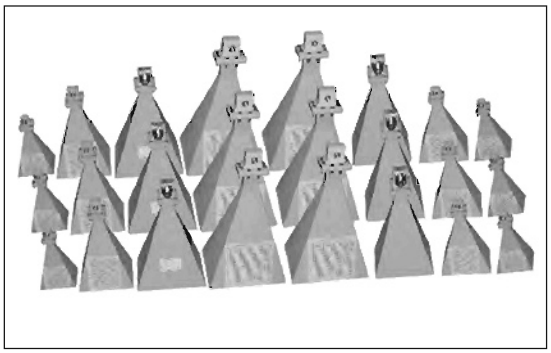
Ordering Information

Example Part No: SH – 100 SGAH 20

- SH: Shinhom Microwave
- 100: WG type:R100
- SGAH: Product Type: Standard Gain Horn Attenna with Waveguide Input
- 20: Gain: 20dB

- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black top coat

STANDARD GAIN HORN ANTENNA



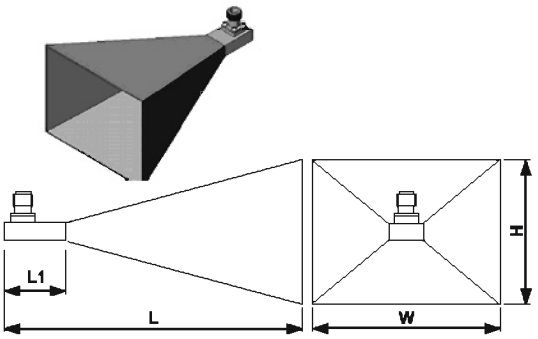
Shinhom Microwave manufactures a high quality line of standard gain horn antennas that are linearly polarized, lightweight and corrosion resistant. The most common Gain values available are 10, 15, 20, 25dB. Other Gain values and Horn sizes can be designed to your requirement. Please call us with your specification and discuss your needs with one of our sales engineers.

Standard Gain Horn Antenna, 20 dB

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	Gain (dB)	3dB Beamwidth (Nom)	Dimensions(mm)			WG Type		Connector
				L	W	H	IEC	EIA	
SH-32SGAH20N...	2.60-3.95	20	18°	725	478	348	R32	WR284	N Type
SH-40SGAH20N...	3.22-4.90	20	18°	550	345	264	R40	WR229	N Type
SH-48SGAH20N...	3.94-5.99	20	18°	475	280	212	R48	WR187	N Type
SH-58SGAH20N...	4.64-7.05	20	18°	435	245	175	R58	WR159	N Type
SH-70SGAH20N...	5.38-8.17	20	18°	325	197	153	R70	WR137	N Type
SH-84SGAH20N...	6.57-9.99	20	18°	315	180	128	R84	WR112	N Type
SH-100SGAH20N...	8.20-12.40	20	18°	245	138	107	R100	WR90	N Type
SH-120SGAH20S...	9.84-15.0	20	18°	220	115	83	R120	WR75	SMA
SH-140SGAH20S...	11.9-18.0	20	18°	170	93	72	R140	WR62	SMA
SH-180SGAH20S...	14.5-22.0	20	18°	165	80	56	R180	WR51	SMA
SH-220SGAH20S...	17.6-26.7	20	18°	155	70	49	R220	WR42	SMA
SH-260SGAH20K...	21.7-33.0	20	18°	128	54	42	R260	WR34	K2.92mm
SH-320SGAH20K...	26.5-40.0	20	18°	114	47	33	R320	WR28	K2.92mm

*Gain and 3dB Beamwidth values have been calculated by computer simulation.



Style 2 - Built-in Coaxial Input

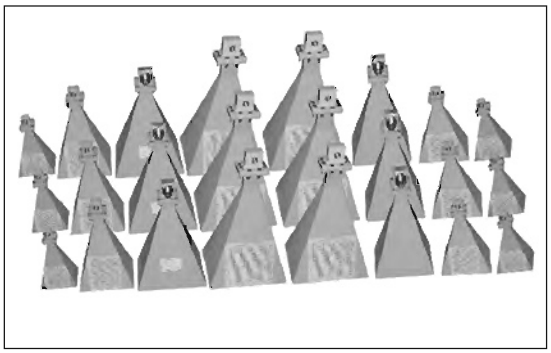
Ordering Information

Example Part No: SH – 100 SGAH 20 N K

- Shinhom Microwave
- WG type:R100
- Product Type: Standard Gain Horn Attenna with Built-in Coax Input
- Gain: 20dB
- Coax Connector Type: N=Type N, S=SMA,2.92=K2.92mm
- J=Male,K=Female

- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black top coat

STANDARD GAIN HORN ANTENNA



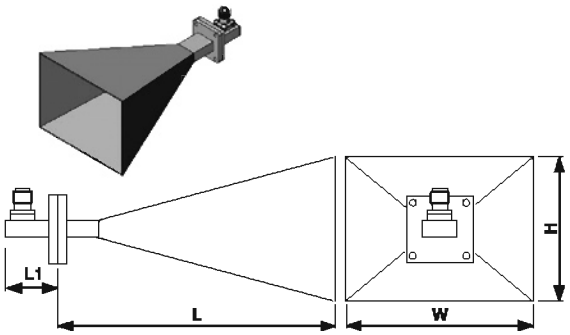
Shinhom Microwave manufactures a high quality line of standard gain horn antennas that are linearly polarized, lightweight and corrosion resistant. The most common Gain values available are 10, 15, 20, 25dB. Other Gain values and Horn sizes can be designed to your requirement. Please call us with your specification and discuss your needs with one of our sales engineers.

Standard Gain Horn Antenna, 20 dB

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	Gain (dB)	3dB Beamwidth (Nom)	Dimensions(mm)				WG Type		Connector
				L	L2	W	H	IEC	EIA	
SH-32SGAH20+N...	2.60-3.95	20	18°	772	72	476	346	R32	WR284	N Type
SH-40SGAH20+N...	3.22-4.90	20	18°	585	65	345	264	R40	WR229	N Type
SH-48SGAH20+N...	3.94-5.99	20	18°	494	64	260	212	R48	WR187	N Type
SH-58SGAH20+N...	4.64-7.05	20	18°	450	50	245	175	R58	WR159	N Type
SH-70SGAH20+N...	5.38-8.17	20	18°	338	48	197	153	R70	WR137	N Type
SH-84SGAH20+N...	6.57-9.99	20	18°	330	40	160	126	R84	WR112	N Type
SH-100SGAH20+N...	8.20-12.40	20	18°	255	35	138	107	R100	WR90	N Type
SH-120SGAH20+S...	9.84-15.0	20	18°	230	30	115	83	R120	WR75	SMA
SH-140SGAH20+S...	11.9-18.0	20	18°	177	27	93	72	R140	WR62	SMA
SH-180SGAH20+S...	14.5-22.0	20	18°	167	27	80	58	R180	WR51	SMA
SH-220SGAH20+K...	17.6-26.7	20	18°	150	25	70	49	R220	WR42	K2.92mm
SH-260SGAH20+K...	21.7-33.0	20	18°	137	27	54	42	R260	WR34	K2.92mm
SH-320SGAH20+K...	26.5-40.0	20	18°	116	26	47	33	R320	WR28	K2.92mm

*Indicates Model Number. See Ordering Information for complete part number.
**Gain and 3dB Beamwidth values have been calculated by computer simulation.



Style 3 - with Coaxial Connector

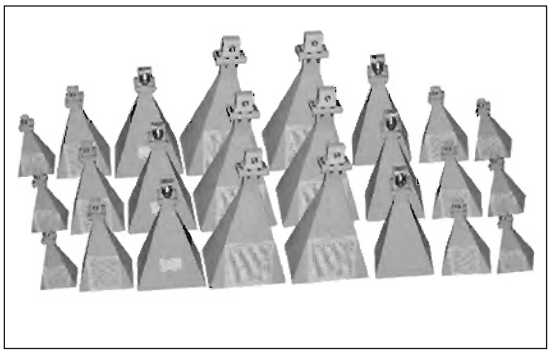
Ordering Information

Example Part No: SH – 100 SGAH 20 +N K

- Shinhom Microwave
- WG type:R100
- Product Type: Standard Gain Horn Antenna with Built-in Coax Input
- Gain: 20dB
- Coax Connector Type: N=Type N, S=SMA,2.92=K2.92mm
- J=Male,K=Female

- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black top coat

STANDARD GAIN HORN ANTENNA



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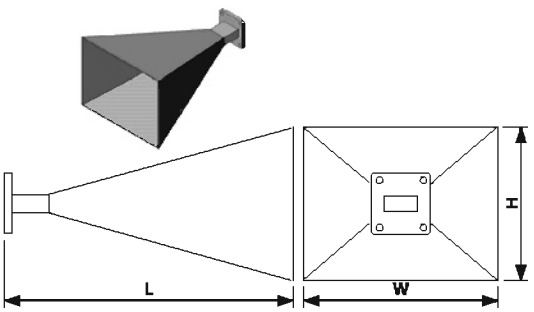
Standard Gain Horn Antenna, 25 dB

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	Gain (dB)	3dB Beamwidth (Nom)	Dimensions(mm)			WG Type		Flange
				L	W	H	IEC	EIA	
SH-100SGAH25	8.20-12.40	25	10°	740	250	180	R100	WR90	FBP
SH-120SGAH25	9.84-15.0	25	10°	550	200	155	R120	WR75	FBP
SH-140SGAH25	11.9-18.0	25	10°	520	175	120	R140	WR62	FBP
SH-180SGAH25	14.5-22.0	25	10°	400	134	104	R180	WR51	FBP
SH-220SGAH25	17.6-26.7	25	10°	350	120	85	R220	WR42	FBP
SH-260SGAH25	21.7-33.0	25	10°	300	92	70	R260	WR34	FBP
SH-320SGAH25	28.5-40.0	25	10°	240	80	56	R320	WR28	FBP
SH-400SGAH25	32.9-50.1	25	10°	205	66	46	R400	WR22	FUGP
SH-500SGAH25	39.2-59.6	25	10°	160	53	37	R500	WR19	FUGP
SH-620SGAH25	49.8-75.8	25	10°	130	43	31	R620	WR15	FUGP
SH-740SGAH25	60.5-91.9	25	10°	120	37	26	R740	WR12	FUGP
SH-900SGAH25	73.8-112	25	10°	100	30	23	R900	WR10	FUGP

*Gain and 3dB Beamwidth values have been calculated by computer simulation.



Style 1 - Waveguide Input

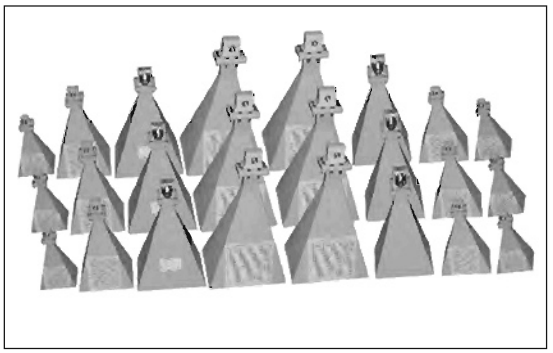
Ordering Information

Example Part No: SH – 100 SGAH 20

- SH: Shinhom Microwave
- 100: WG type:R100
- SGAH: Product Type: Standard Gain Horn Attenna with Waveguide Input
- 20: Gain: 20dB

- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black top coat

STANDARD GAIN HORN ANTENNA



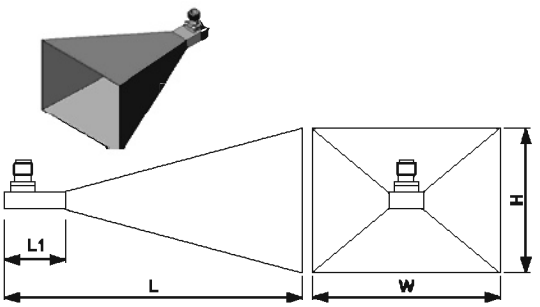
Shinhom Microwave manufactures a high quality line of standard gain horn antennas that are linearly polarized, lightweight and corrosion resistant. The most common Gain values available are 10, 15, 20, 25dB. Other Gain values and Horn sizes can be designed to your requirement. Please call us with your specification and discuss your needs with one of our sales engineers.

Standard Gain Horn Antenna, 25 dB

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	Gain (dB)	3dB Beamwidth (Nom)	Dimensions(mm)			WG Type		Connector
				L	W	H	IEC	EIA	
SH-100SGAH25N...	8.20-12.40	25	10°	760	250	180	R100	WR90	N Type
SH-120SGAH25S...	9.84-15.0	25	10°	570	200	155	R120	WR75	SMA
SH-140SGAH25S...	11.9-18.0	25	10°	540	175	120	R140	WR62	SMA
SH-180SGAH25S...	14.5-22.0	25	10°	424	134	104	R180	WR51	SMA
SH-220SGAH25K...	17.6-26.7	25	10°	375	120	85	R220	WR42	K2.92mm
SH-260SGAH25K...	21.7-33.0	25	10°	313	92	70	R260	WR34	K2.92mm
SH-320SGAH25K...	28.5-40.0	25	10°	259	80	56	R320	WR28	K2.92mm

*Indicates Model Number. See Ordering Information for complete part number.
**Gain and 3dB Beamwidth values have been calculated by computer simulation.



Style 2 - Built-In Coaxial Input

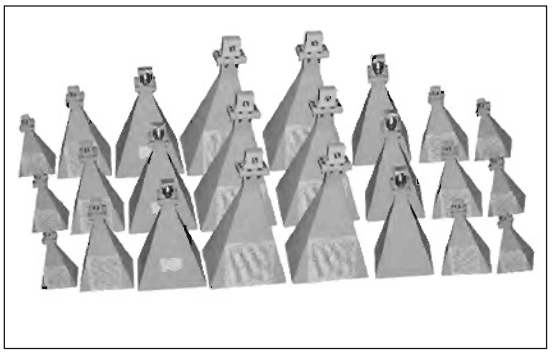
Ordering Information

Example Part No: SH - 100 SGAH 25 N K

- SH: Shinhom Microwave
- 100: WG type:R100
- SGAH: Product Type: Standard Gain Horn Attenna with Built-In Coax Input
- 25: Gain: 25dB
- N: Coax Connector Type: N=Type N,S=SMA,2.92=K2.92mm
- K: J=Male,K=Female

- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black top coat

STANDARD GAIN HORN ANTENNA



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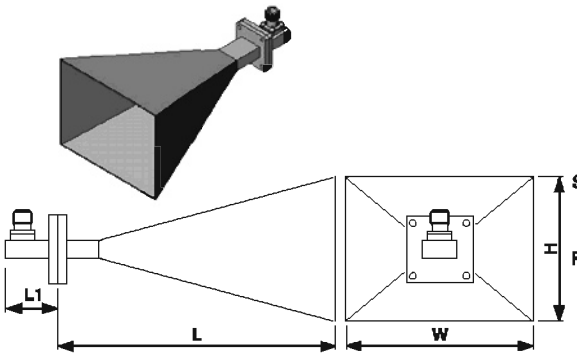
Standard Gain Horn Antenna, 25 dB

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	Gain (dB)	3dB Beamwidth (Nom)	Dimensions(mm)				WG Type		Connector
				L	L2	W	H	IEC	EIA	
SH-100SGAH25+N...	8.20-12.40	25	10°	775	35	250	180	R100	WR90	N Type
SH-120SGAH25+S...	9.84-15.0	25	10°	550	30	200	155	R120	WR75	SMA
SH-140SGAH25+S...	11.9-18.0	25	10°	547	27	175	120	R140	WR62	SMA
SH-180SGAH25+S...	14.5-22.0	25	10°	427	27	134	104	R180	WR51	SMA
SH-220SGAH25+K...	17.6-26.7	25	10°	375	25	120	85	R220	WR42	K2.92mm
SH-260SGAH25+K...	21.7-33.0	25	10°	327	27	92	70	R260	WR34	K2.92mm
SH-320SGAH25+K...	28.5-40.0	25	10°	266	26	80	56	R320	WR28	K2.92mm

*Indicates Model Number. See Ordering Information for complete part number.
**Gain and 3dB Beamwidth values have been calculated by computer simulation.



Style 3 - with Coaxial Connector

Ordering Information

Example Part No: SH - 100 SGAH 25 +N K

- SH: Shinhom Microwave
- 100: WG type:R100
- SGAH: Product Type: Standard Gain Horn Antenna with Coaxial Connector
- 25: Gain: 25dB
- +N: Coax Connector Type: N=Type N,S=SMA,2.92=K2.92mm
- K: J=Male,K=Female

- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black top coat

STANDARD GAIN HORN ANTENNA FAMILY

INSTRUCTION OF STANDARD GAIN ANTENNA

In order to meet higher requirements of standard gain antenna in military and commercial applications, on the basis of 17 years development on standard gain antennas, and combining of products development situation of international authority companies, Shinhom Microwave prompts the comprehensive upgrade of standard gain horn antenna in structure, gain accuracy and credibility of gain value. Improve and adiust design, manufacturing process, test method, model definition, and authority of gain VS frequency data provided etc. To meet the requirements of standard gain antenna in different industries and frequency range of customer' s applications, the operating frequency range of standard gain horn antenna covers from 0.32GHz to 300 GHz. The most common gain values available are 25, 20, 15 and 10 dB. HD–SGA series standard gain antenna are composed of HD–SGAH standard gain horn antenna series, HD–SGAD standard gain symmetrical dipole antenna series, the series of HD–SGACD standard gain folded dipole antenna, the series of HD–SGATD standard gain dipole antenna of variable length, the series of HD–SGABM ternary yagi standard gain antenna, the series of HD–SGARD binary half–wavelength dipole standard gain antenna and HD–SGACP circular polarized standard antenna gain series. HD–SGAH series standard gain horn antenna can achieve the standard gain of 15, 10, 20 and 25dB. HD–SGAD standard gain symmetrical dipole antenna series, the series of HD–SGACD standard gain folded dipole antenna, the series of HD–SGATD standard gain dipole antenna of variable length provide the standard gain of 2.15dB. The series of HD–SGABM ternary yagi standard gain antenna provide the standard gain of 5.3dB. The series of HD–SGARD binary half–wavelength dipole standard gain antenna provide the standard gain of 7.7dB.In low–frequency, HD – SGAH series standard gain horn antenna is made of aluminum with argon arc welding or brazing welding. In high–frequency, it is copper with silver brazing welding. In UHF, it is made of precision electro–processing. Characteristic is reliable structure, stable performance, precision calibration and high purity of linear polarization. It widely is used in standard antenna of antenna gain measurement,auxiliary transmitting antenna of antenna measurement,receiving antenna of electric wave detection.jammer and transmitting or receiving antenna of other electronic equipment.

GAIN VALUE OF STANDARD GAIN ANTENNA

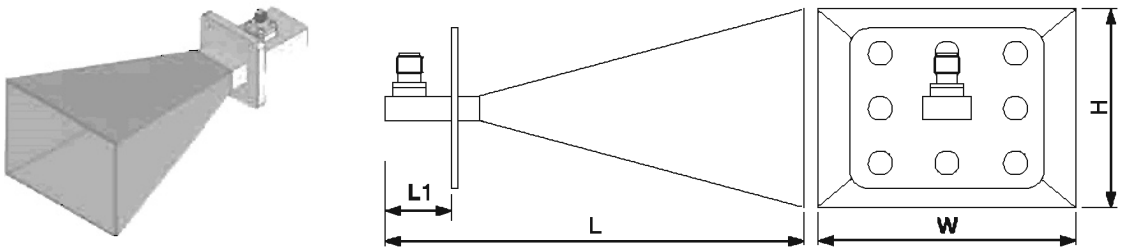
In order to ensure effective calibration and transmit of gain values of HD – SGA series standard gain antenna, according to the part of accurate calibration measurement data and analysis, we confirm the reliability calibration methods of gain data. It is based accurate calculation formula+ calibration correction factor. Correction factors are: the different structures correction factors, different frequency range correction factors, different materials correction factors, different coating ways correction factors, different VSWR correction factors etc.

STANDARD GAIN HORN ANTENNA FAMILY

25 DB STANDARD GAIN HORN ANTENNA

25 dB Standard gain antenna adopt HD-SGAH standard gain horn antenna, designed by optimum pyramid horn design principles. Frequency range covers from 0.32 to 300 GHz, each antenna covers the corresponding whole waveguide bandwidth. Because of high gain value of 25 dB, its disadvantage is large volume, especially due to consideration of diameter difference, relative aperture size and antenna length is relatively long, so it' s a few inconvenient in use. Regularly it is used in high gain measurement or millimeter wave antenna measurement or as transmitting and receiving antennas of wave detection in system.For the convenience of all kinds of users to select, 25 dB standard gain antenna includes Waveguide Input,Built-in Coaxial Input and Waveguide Input + Waveguide to Coaxial Adapter. For Waveguide Input type, the typical value of Max VSWR is 1.2, Built-in Coaxial Input and Waveguide Input + Waveguide to Coaxial Adapter types, the typical value of Max. VSWR is 1.5.

Built-in CoaxialInput, 25 dB Standard Gain Horn Antenna



ELECTRICAL CHARACTERISTICS:

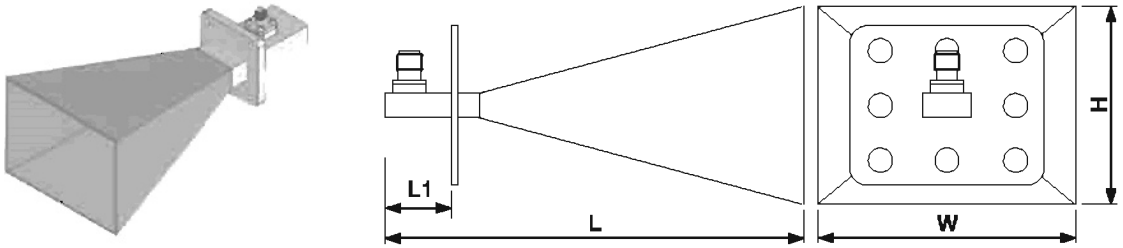
Part No.	Freq Range (GHz)	Gain (dB)	3dB Beamwidth (Nom)	Dimensions(mm)				WG Type		Connector
				L	L1	W	H	IEC	EIA	
SH-100SGAH25+N	8.20-12.40	25	10°	775	40	35	180	BJ100	WR90	N
SH-120SGAH25+S	9.84-15.0	25	10°	550	25	30	155	BJ120	WR75	SMA
SH-140SGAH25+S	11.9-18.0	25	10°	547	25	27	120	BJ140	WR62	SMA
SH-180SGAH25+S	14.5-22.0	25	10°	427	23	27	104	BJ180	WR51	SMA
SH-220SGAH25+K	17.6-26.7	25	10°	375	20	25	85	BJ220	WR42	K2.92mm
SH-260SGAH25+K	21.7-33.0	25	10°	327	20	27	70	BJ260	WR34	K2.92mm
SH-320SGAH25+K	26.5-40.0	25	10°	288	15	26	58	BJ320	WR28	K2.92mm

STANDARD GAIN HORN ANTENNA FAMILY

20 DB STANDARD GAIN HORN ANTENNA

20dB Standard gain antenna adopts HD–SGAH standard gain horn antenna. Its main feature is moderate volume, light weight, high gain and easy to use. Regularly it is used in auxiliary transmitting antenna of portable antenna measurements, receiving antenna and jammer of wave detection and other transmitting or receiving antenna of electronic devices.For the convenience of all kinds of users to select, 20 dB standard gain antenna includes Waveguide Input,Built–in Coaxial Input and Waveguide Input + Waveguide to Coaxial Adapter. For Waveguide Input type, the typical value of Max. VSWR is1.2, Built–in Coaxial Input and Waveguide Input + Waveguide to Coaxial Adapter types, the typical value of Max VSWR is1.5.

Built–in CoaxialInput, 20 dB Standard Gain Horn Antenna



ELECTRICAL CHARACTERISTICS:

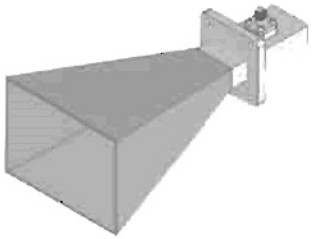
Part No.	Freq Range (GHz)	Gain (dB)	3dB Beamwidth (Nom)	Dimensions(mm)				WG Type		Connector
				L	L1	W	H	IEC	EIA	
SH–32SGAH20N	2.60–3.95	20	18°	725	75	476	346	BJ32	WR284	N
SH–40SGAH20N	3.22–4.90	20	16°	550	80	345	264	BJ40	WR229	N
SH–48SGAH20N	3.94–5.99	20	16°	475	75	280	212	BJ48	WR187	N
SH–58SGAH20N	4.64–7.05	20	18°	435	75	245	175	BJ58	WR159	N
SH–70SGAH20N	5.38–8.17	20	16°	325	60	197	153	BJ70	WR137	N
SH–84SGAH20N	6.57–9.99	20	18°	315	50	160	128	BJ84	WR112	N
SH–100SGAH20N	8.20–12.40	20	18°	245	450	138	107	BJ100	WR90	N
SH–120SGAH20S	9.84–15.0	20	16°	220	45	115	83	BJ120	WR75	SMA
SH–140SGAH20S	11.9–18.0	20	16°	170	45	93	72	BJ140	WR62	SMA
SH–180SGAH20S	14,5–22.0	20	16°	185	45	80	58	BJ180	WR51	SMA
SH–220SGAH20K	17.6–26.7	20	16°	155	45	70	49	BJ220	WR42	K2.92mm
SH–260SGAH20K	21.7–33.0	20	16°	128	33	54	42	BJ260	WR34	K2.92mm
SH–320SGAH20K	26.5–40.0	20	16°	114	34	47	33	BJ320	WR28	K2.92mm

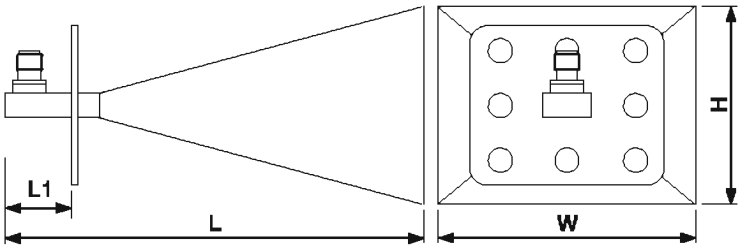
STANDARD GAIN HORN ANTENNA FAMILY

15 DB STANDARD GAIN HORN ANTENNA

15 dB Standard gain antenna adopt HD–SGAH standard gain horn antenna. Its main feature is moderate volume,light weight, easy to use. Regularly it is used in auxiliary transmitting antenna of portable antenna measurements,receiving antenna and jammer of wave detection and other transmitting or receiving antenna of electronic devices.
For the convenience of all kinds of users to select, 15dB standard gain antenna includes Waveguide Input, Built–inCoaxial Input and Waveguide Input + Waveguide to Coaxial Adapter. For Waveguide Input type, the typical valueof Max. VSWR is 1.2, Built–in Coaxial Input and Waveguide Input + Waveguide to Coaxial Adapter types, the typical value of Max VSWR is 1.5.

Built–in CoaxialInput, 15 dB Standard Gain Horn Antenna





ELECTRICAL CHARACTERISTICS:

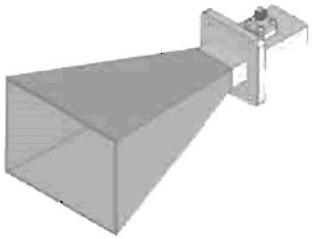
Part No.	Freq Range (GHz)	Gain (dB)	3dB Beamwidth (Nom)	Dimensions(mm)				WG Type		Connector
				L	L1	W	H	IEC	EIA	
SH–9SGAH15N	0.75–1.15	15	30°	820	250	850	680	BJ9	WR975	N
SH–12SGAH15N	0.96–1.46	15	30°	700	200	700	480	BJ12	WR770	N
SH–14SGAH15N	1.13–1.73	15	30°	520	170	550	380	BJ14	WR650	N
SH–18SGAH15N	1.45–2.20	15	30°	430	130	455	316	BJ18	WR510	N
SH–22SGAH15N	1.72–2.61	15	30°	360	110	380	265	BJ22	WR430	N
SH–26SGAH15N	2.17–3.30	15	30°	290	90	297	216	BJ26	WR340	N
SH–32SGAH15N	2.60–3.95	15	30°	255	75	275	190	BJ32	WR284	N
SH–40SGAH15N	3.22–4.90	15	30°	210	80	205	145	BJ40	WR229	N
SH–48SGAH15N	3.94–5.99	15	30°	195	75	169	119	BJ48	WR187	N
SH–58SGAH15N	4.64–7.05	15	30°	165	75	141	97	BJ58	WR159	N
SH–70SGAH15N	5.38–8.17	15	30°	145	60	122	84	BJ70	WR137	N
SH–84SGAH15N	6.57–9.99	15	30°	125	50	105	71	BJ84	WR112	N
SH–100SGAH15S	8.20–12.40	15	30°	105	45	81	56	BJ100	WR90	SMA
SH–120SGAH15S	9.84–15.0	15	30°	95	45	68	47	BJ120	WR75	SMA
SH–140SGAH15S	11.9–18.0	15	30°	100	45	57	40	BJ140	WR62	SMA
SH–180SGAH15K	14.5–22.0	15	30°	80	45	47	33	BJ180	WR51	K2.92
SH–220SGAH15K	17.6–26.7	15	30°	75	45	39	27	BJ220	WR42	K2.92
SH–260SGAH15K	21.7–33.0	15	30°	56	33	32	22	BJ260	WR34	K2.92
SH–320SGAH15K	26.5–40.0	15	30°	59	34	26	19	BJ320	WR28	K2.92

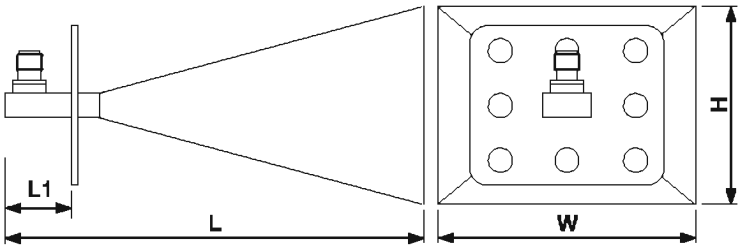
STANDARD GAIN HORN ANTENNA FAMILY

10 DB STANDARD GAIN HORN ANTENNA

10 dB Standard gain antenna adopt HD-SGAH standard gain horn antenna. Its main feature is small volume,light weight, easy to use. Regularly it is used in auxiliary transmitting antenna of portable antenna measurements, receiving antenna and jammer of wave detection and other transmitting or receiving antenna of electronic devices.For the convenience of all kinds of users to select, 10dB standard gain antenna includes Waveguide Input.Built-in Coaxial Input and Waveguide Input + Waveguide to Coaxial Adapter. For Waveguide Input type, the typical value of Max. VSWR is1.3, Built-in Coaxial Input and Waveguide Input + Waveguide to Coaxial Adapter types, the typical value of Max. VSWR is 1.5.

Built-in CoaxialInput, 10 dB Standard Gain Horn Antenna



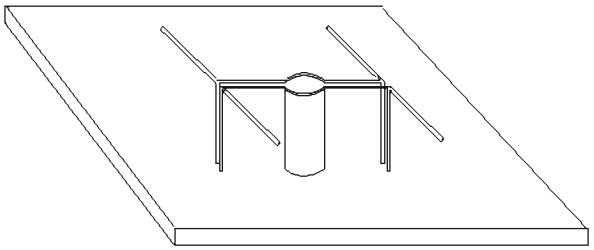


ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	Gain (dB)	3dB Beamwidth (Nom)	Dimensions(mm)				WG Type		Connector
				L	L1	W	H	IEC	EIA	
SH-3SGAH10N	0.32-0.49	10	55°	850	300	1150	800	BJ3	WR2300	N
SH-4SGAH10N	0.35-0.53	10	55°	800	300	1050	720	BJ4	WR2100	N
SH-5SGAH10N	0.41-0.62	10	55°	800	400	900	660	BJ5	WR1800	N
SH-6SGAH10N	0.49-0.75	10	55°	700	350	700	500	BJ6	WR1500	N
SH-8SGAH10N	0.64-0.98	10	55°	590	290	620	440	BJ8	WR1150	N
SH-9SGAH10N	0.75-1.15	10	55°	480	250	480	336	BJ9	WR975	N
SH-12SGAH10N	0.96-1.46	10	55°	400	200	400	280	BJ12	WR770	N
SH-14SGAH10N	1.13-1.73	10	55°	370	170	315	235	BJ14	WR650	N
SH-18SGAH10N	145-2.20	10	55°	310	130	249	184	BJ18	WR510	N
SH-22SGAH10N	1.72-2.61	10	55°	260	110	209	154	BJ22	WR430	N
SH-26SGAH10N	2.17-3.30	10	55°	200	90	165	125	BJ26	WR340	N
SH-32SGAH10N	2.60-3.95	10	55°	175	75	144	116	BJ32	WR284	N
SH-40SGAH10N	3.22-4.90	10	55°	150	80	113	88	BJ40	WR229	N
SH-48SGAH10N	3.94-5.99	10	55°	145	75	98	73	BJ48	WR187	N
SH-58SGAH10N	4.64-7.05	10	55°	136	75	83	63	BJ58	WR159	N
SH-70SGAH10N	5.38-8.17	10	55°	110	60	57	42	BJ70	WR137	N
SH-84SGAH10N	6.57-9.99	10	55°	95	50	57	42	BJ84	WR112	N
SH-100SGAH10S	8.20-12.40	10	55°	75	45	47	37	BJ100	WR90	SMA
SH-120SGAH10S	9.84-15.0	10	55°	75	45	40	29	BJ120	WR75	SMA
SH-140SGAH10S	11.9-18.0	10	55°	75	45	37	27	BJ140	WR62	SMA
SH-180SGAH10K	14.5-22.0	10	55°	75	45	30	20	BJ180	WR51	K2.92
SH-220SGAH10K	17.6-26.7	10	55°	75	45	24	17	BJ220	WR42	K2.92
SH-260SGAH10K	21.7-33.0	10	55°	53	33	20	14	BJ260	WR34	K2.92
SH-320SGAH10K	26.5-40.0	10	55°	54	34	17	12	BJ320	WR28	K2.92

STANDARD GAIN HORN ANTENNA FAMILY

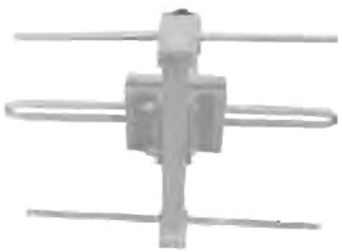
SH-SGARD BINARY HALF-WAVELENGTH DIPOLE STANDARD GAIN ANTENNA

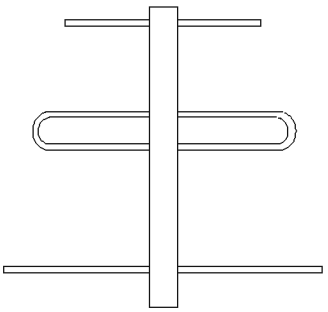


ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (MHz)	VSWR (Max)	Gain (dB)	Connector
SH-1SGAR7.7N	30-160	1.5	7.7	N-50K
SH-3SGAR7.7N	160-350	1.5	7.7	N-50K
SH-5SGAR7.7N	350-650	1.5	7.7	N-50K
SH-8SGAR7.7N	650-1000	1.5	7.7	N-50K

SH-SGABM TERNARY YAGISTANDARD GAIN ANTENNA



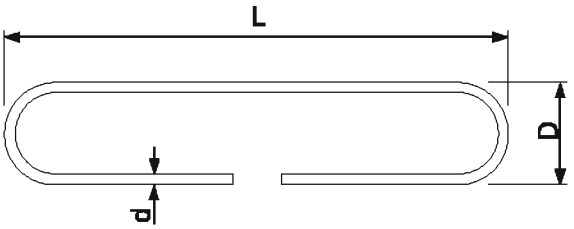


ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (MHz)	VSWR (Max)	Gain (dB)	Connector
SH-1SGABM5.3N	30-160	1.5	5.3	N-50K
SH-3SGABM5.3N	160-350	1.5	5.3	N-50K
SH-5SGABM5.3N	350-650	1.5	5.3	N-50K
SH-8SGABM5.3N	650-1000	1.5	5.3	N-50K

STANDARD GAIN HORN ANTENNA FAMILY

SH-SGAC STANDARD GAIN FOLDED DIPOLE ANTENNA



ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (MHz)	Dimension(mm)			VSWR (Max)	Gain (dB)	Connector
		L	D	d			
SH-1SGAC2N	30-160	0.465	75	13	13	2.15	N-50K
SH-3SGAC2N	160-350	0.465	45	8-13	8-13	2.15	N-50K
SH-5SGAC2N	350-650	0.465	25	4-8	4-8	2.15	N-50K
SH-8SGAC2N	650-1000	0.465	12.5	4	4	2.15	N-50K

SH-SGAD STANDARD GAIN SYMMETRICAL DIPOLE ANTENNA

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (MHz)	Gain (dB)	VSWR (Max)	L(mm)	W(mm)	Connector
SH-5SGAD2N	450-500	2	1.5	298.6	319	N-50K
SH-9SGAD2N	800-1000	2	1.5	173.6	175	N-50K
SH-157SGAD2N	157±2	2	1.5	552.7	1145	N-50K
SH-137SGAD2N	137.55±2	2	1.5	620.7	1308	N-50K
SH-15SGAD2N	1450-1550	2	1.5	150	107	N-50K
SH-450SGAD2N	450-500	2	1.5	231	362	N-50K
SH-950SGAD2N	950	2	1.5	133	190	N-50K

STANDARD GAIN HORN ANTENNA FAMILY

CIRCULAR POLARIZED STANDARD GAIN ANTENNA

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (MHz)	Band width %	Gain (dB)	Axial Ratio (dB)	VSWR (Max)	Connector
SH-1040SGACPS7N	1-4	10	7	2	1.5	N-50K
		20		3		
		30		2		
		40		2		

SH-SGACPH CIRCULAR POLARIZED STANDARD GAIN ANTENNA

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (MHz)	Band width %	Gain (dB)	Axial Ratio (dB)	VSWR (Max)	Connector
SH-1040SGACPH7N	1-4	10	7	2	1.6	N-50K
		20		3	2	
SH-4080SGACPH10N	4-8	5	10	1	1.6	N-50K
		15		3	2	
SH-84SGACPH10S	7-10	5	10	0.5	1.5	SMA-50K
		15		2	1.8	

Part No.	Freq Range (MHz)	Band width %	Gain (dB)	Axial Ratio (dB)	VSWR (Max)	Connector
SH-84SGACPH10	7-10	5	10	0.5	1.3	FBP84
		15		2		
SH-84SGACPH15S	7-10	5	15	0.5	1.5	SMA-50K
		15		2		
SH-84SGACPH15	7-10	5	15	0.5	1.3	FBP84
		15		2		
SH-100SGACPH10S	8-12.4	5	10	0.5	1.5	SMA-50K
		15		2		
SH-100SGACPH10	8-12.4	5	10	0.5	1.3	FBP100
		15		2		
SH-100SGACPH15S	8-12.4	5	15	0.5	1.5	SMA-50K
		15		2		
SH-100SGACPH15	8-12.4	5	15	0.5	1.3	FBP100
		15		2		
SH-120SGACPH10S	10-15	5	10	0.5	1.6	SMA-50K
		15		2		
SH-120SGACPH10	10-15	5	10	0.5	1.3	FBP120
		15		2		
SH-120SGACPH155	10-15	5	15	0.5	1.6	SMA-50K
		15		2		
SH-120SGACPH15	10-15	5	15	0.5	1.3	FBP140
		15		2		
SH-140SGACPH10S	12.4-18	5	10	0.5	1.6	K2.92-50K
		15		2		
SH-140SGACPH10	12,4-18	5	10	0.5	1.3	FBP180
		15		2		
SH-140SGACPH15S	12.4-18	5	15	0.5	1.6	K2.92-50K
		15		2		
SH-140SGACPH15	12.4-18	5	15	0.5	1.3	FBP180
		15		2		
SH-180SGACPH10K	15-22	5	10	0.5	1.6	K2.92-50K
		15		2		
SH-180SGACPH10	15-22	5	10	0.5	1.35	FBP180
		15		2		
SH-180SGACPH1K	15-22	5	15	0.5	1.6	K2.92-50K
		15		2		
SH-180SGACPH15	15-22	5	15	0.5	1.35	FBP220
		15		2		
SH-180SGACPH20K	15-22	5	20	0.5	1.6	K2.92-50K
		15		2		
SH-180SGACPH20	15-22	5	20	0.5	1.35	FBP220
		15		2		
SH-220SGACPH10K	15-22	5	10	0.5	1.6	K2.92-50K
		15		2		
SH-220SGACPH10	15-22	5	10	0.5	1.35	FBP220
		15		2		
SH-220SGACPH15K	15-22	5	15	0.5	1.6	K2.92-50K
		15		0.5		
SH-220SGACPH15	15-22	5	15	2	1.35	FBP260
		15		0.5		
SH-220SGACPH20K	15-22	5	20	2	1.6	K2.92-50K
		15		0.5		
SH-220SGACPH20	15-22	5	20	2	1.35	FBP260
		15		0.5		
SH-260SGACPH10K	22-33	5	10	2	1.6	K2.92-50K
		15		0.5		

Part No.	Freq Range (MHz)	Band width %	Gain (dB)	Axial Ratio (dB)	VSWR (Max)	Connector
SH-260SGACPH10	22-33	5	10	0.5	1.35	FBP260
		15		2		
SH-260SGACPH15K	22-33	5	15	0.5	1.6	K2.92-50K
		15		2		
SH-260SGACPH15	22-33	5	15	0.5	1.35	FBP260
		15		2		
SH-260SGACPH20K	22-33	5	20	0.5	1.6	K2.92-50K
		15		2		
SH-260SGACPH20	22-33	5	20	0.5	1.35	FBP260
		15		2		
SH-320SGACPH10K	26.5-40	5	10	0.5	1.6	K2.92-50K
		15		2		
SH-320SGACPH10	26.5-40	5	10	0.5	1.35	FBP320
		15		2		
SH-320SGACPH15K	26.5-40	5	15	0.5	1.6	K2.92-50K
		15		2		
SH-320SGACPH15	26.5-40	5	15	0.5	1.35	FBP320
		15		2		
SH-320SGACPH20K	26.5-40	5	20	0.5	1.6	K2.92-50K
		15		2		
SH-320SGACPH20	26.5-40	5	20	0.5	1.35	FBP320
		15		2		
SH-400SGACPH10	33-50	5	10	1	1.5	FUGP400
		15		3		
SH-400SGACPH15	33-50	5	15	1	1.5	FUGP400
		15		3		
SH-400SGACPH20	33-50	5	20	1	1.5	FUGP400
		15		3		
SH-500SGACPH10	40-60	5	10	1	1.5	FUGP500
		15		3		
SH-500SGACPH15	40-60	5	15	1	1.5	FUGP500
		15		3		
SH-500SGACPH20	40-60	5	20	1	1.5	FUGP500
		15		3		
SH-600SGACPH10	50-75	5	10	1	1.5	FUGP600
		15		3		
SH-600SGACPH15	50-75	5	15	1	1.5	FUGP600
		15		3		
SH-600SGACPH20	50-75	5	20	1	1.5	FUGP600
		15		3		
SH-740SGACPH10	60-90	5	10	1	1.5	FUGP740
		15		3		
SH-740SGACPH15	60-90	5	15	1	1.5	FUGP740
		15		3		
SH-740SGACPH20	60-90	5	20	1	1.5	FUGP740
		15		3		
SH-900SGACPH10	75-110	5	10	1	1.6	FUGP900
		15		3		
SH-900SGACPH15	75-110	5	15	1	1.6	FUGP900
		15		3		
SH-900SGACPH20	75-110	5	20	1	1.6	FUGP900

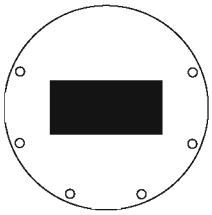
TECHNICAL REFERENCE

RECTANGULAR WAVEGUIDE TUBING INFORMATION

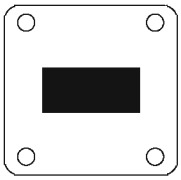
Part No.	EIA WG Design ation	IEC WG Design ation	Freq Range (GHz)	Material (Stock)	Inside Dimensions (mm)	Std Tol ± Inside Dim (mm)	Nom Wall Thick ness (mm)	Outside Dimensions (mm)	Std Tol ± Outside Dim (mm)	Freq of Cut-Off for TE1.0 Mode (GHz)	Wave-length of Cut-Off TE1.0 Mode (mm)	Theoretical Attenuation lowest to highest freq (dB/100ft)	
												Al	Cu
SH3	WR2300	R3	0.32–0.49	Aluminum	584.2*292.1	–	6	–	–	0.257	1169.2	0.270–0.400	–
SH4	WR2100	R4	0.35–0.53	Aluminum	533.4*266.7	–	5	–	–	0.281	1067.5	0.310–0.460	–
SH5	WR1800	R5	0.41–0.62	Aluminum	457.2*228.6	0.51	5	–	–	0.328	915.0	0.390–0.580	–
SH6	WR1500	R6	0.49–0.75	Aluminum	381*190.5	0.38	3.18	–	–	0.393	762.5	0.510–0.760	–
SH8	WR1150	R8	0.64–0.98	Aluminum	292.1*146.05	0.38	3.18	–	–	0.513	584.6	0.760–0.113	–
SH9	WR975	R9	0.76–1.15	Aluminum	247.65*123.82	–	3.18	–	–	0.605	495.6	0.098–0.145	–
SH12	WR770	R12	0.96–1.46	Aluminum	195.5*897.79	–	3.18	–	–	0.766	391.4	0.140–0.206	–
SH14	WR650	R14	1.13–1.73	Copper Aluminum	165.1*82.55	0.33	2.03	169.16*86.61	0.2	0.908	330.4	0.180–0.266	0.214–0.317
SH18	WR510	R18	1.45–2.2	Copper Aluminum	129.54*64.77	0.26	2.03	133.6*68.83	0.2	1.157	259.1	0.259–0.382	0.309–0.456
SH22	WR430	R22	1.72–2.6	Copper Aluminum	109.22*54.61	0.22	2.03	113.28*58.67	0.2	1.372	218.4	0.334–0.494	0.399–0.588
SH25	WR340	R26	12.17–3.3	Copper Aluminum	86.36*43.18	0.17	2.03	90.42*47.24	0.17	1.736	172.7	0.475–0.702	0.567–0.837
SH32	WR284	R32	2.6–3.95	Copper Aluminum	72.14*34.04	0.14	2.03	76.2*38.1	0.14	2.075	144.3	0.652–0.953	0.777–1.136
SH40	WR2290	R4	3.22–4.9	Copper Aluminum	58.17*29.08	0.12	1.625	61.4232.33	0.12	2.577	116.3	0.860–1.270	1.026–1.514
SH48	WR187	R48	3.94–5.99	Copper Aluminum	47.549*22.149	0.095	1.625	50.8*25.4	0.1	3.153	95.1	1.231–1.795	1.467–2.140
SH58	WR159	R58	4.64–7.05	Copper Aluminum	40.386*20.193	0.081	1.625	43.64*23.44	0.08	3.712	80.77	1.487–2.195	1.773–2.617
SH70	WR137	R70	5.38–8.17	Copper Aluminum	34.849*15.799	0.07	1.625	38.1*19.05	0.08	4.301	69.7	2.004–2.910	2.390–3.470
SH84	WR112	R84	6.57–9.99	Copper Aluminum	28.499*12.624	0.057	1.625	31.75*15.88	0.05	5.260	57	2.761–3.993	3.292–4.761
SH100	WR90	R100	8.2–12.5	Copper Aluminum	22.86*10.16	0.046	1.27	25.4*12.7	0.05	6.557	45.72	3.833–5.547	4.570–6.614
SH120	WR75	R120	9.84–15	Copper Aluminum	19.05*9.525	0.038	1.27	21.59*12.06	0.05	7.869	38.1	4.590–6.775	5.472–8.078
SH140	WR62	R140	11.9–18	Copper Aluminum	15.799*7.899	0.031	1.015	17.83*9.93	0.05	9.488	31.6	6.077–8.971	7.246–10.696
SH180	WR51	R180	14.5–22	Copper Aluminum	12.95*6.477	0.026	1.015	14.99*8.51	0.05	11.575	25.91	8.185–12.082	9.759–14.406
SH220	WR42	R220	17.6–26.7	Copper Aluminum	10.668*4.318	0.021	1.015	12.7*6.35	0.05	14.051	21.34	12.970–18.487	15.464–22.042
SH260	WR34	R260	21.7–33	Copper Aluminum	8.636*4.318	0.02	1.015	10.67*6.35	0.05	17.358	17.27	15.036–22.197	17.928–26.465
SH320	WR28	R320	26.3–40	Copper Aluminum	7.123.556	0.02	1.015	9.14*5.59	0.05	21.053	14.22	20.120–29.701	23.989–35.413
SH400	WR22	R400	32.9–50.1	Copper Aluminum	5.69*2.845	0.02	1.015	7.72*4.88	0.05	26.344	11.38	28.119–41.508	33.526–49.491
SH500	WR19	R500	39.2–59.6	Copper	4.775*2.388	0.02	1.015	6.81*4.42	0.05	31.393	9.55	–	43.60364.367
SH520	WR15	R620	49.8–75.8	Copper	3.795*1.88	0.02	1.015	5.79*3.91	0.05	39.499	7.52	–	62.425–92.152
SH740	WR12	R740	60.5–91.9	Copper	3.0988*1.5494	0.0127	1.015	5.13*3.58	0.05	48.374	6.2	–	83.409–123.128
SH900	WR10	R900	73.8–112	Copper	2.54*1.27	0.0127	1.015	4.57*3.3	0.05	59.016	5.08	–	112.397–165.92

TECHNICAL REFERENCE

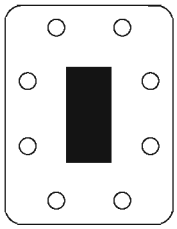
FLANGE TYPES DESIGNATIONS



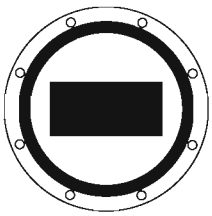
FAP
(RND.Cover,UAR)



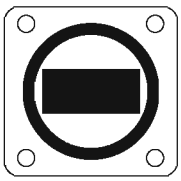
FBP
(SQ.Cover,UBR)



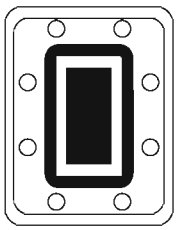
FDP
(CPRF,UDR)



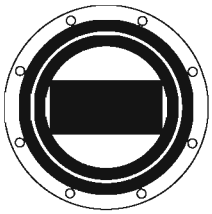
FAM
(RND.Groover,PAR)



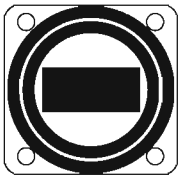
FBM
(SQ.Grooved,PBR)



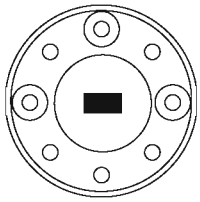
FDM
(CPRG,PDR)



FAE
(RND.Choke,CAR)



FBE
(SQ.Choke,CBR)



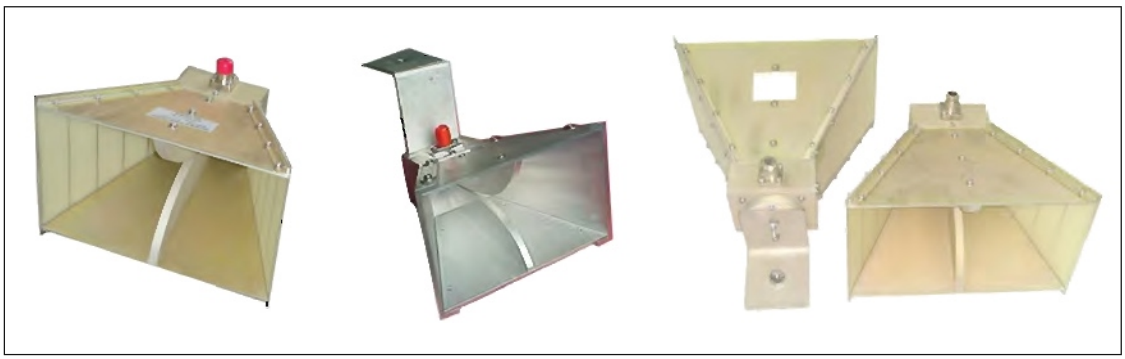
FUGP
(RND.)

CLICK FLANGE TYPE NO TO SEE THE DETAILED OUTLINE DRAWINGS.

WG Type		A Type			B Type			D Type		FUGP
EIA Std	IEC Std	FAP (RND COVER)	FAM (RND GROOVED)	FAE (RND CHOKE)	FBP (SQ COVER)	FBM (SQ GROOVED)	FBE (SQ CHOKE)	FDP (CPRF)	FDM (CPRG)	
WR2300	R3							FDP3	FDM3	
WR2100	R4							FDP4	FDM4	
WR1800	R5							FDP5	FDM5	
WR1500	R6							FDP6	FDM6	
WR1150	R8							FDP8	FDM8	
WR975	R9							FDP9	FDM9	
WR770	R12							FDP12	FDM12	
WR650	R14							FDP14	FDM14	
WR510	R18							FDP18	FDM18	
WR430	R22							FDP22	FDM22	
WR340	R26							FDP26	FDM26	
WR284	R32	FAP32	FAM32	FAE32				FDP32	FDM32	
WR229	R40	FAP40	FAM40	FAE40				FDP40	FDM40	
WR187	R48	FAP48	FAM48	FAE48				FDP48	FDM48	
WR159	R58	FAP58	FAM58	FAE58				FDP58	FDM58	
WR137	R70	FAP70	FAM70	FAE70				FDP70	FDM70	
WR112	R84				FBP84	FBM84	FBE84	FDP84	FDM84	
WR90	R100				FBP100	FBM100	FBE100	FDP100	FDM100	
WR75	R120				FBP120	FBM120	FBE120	FDP120	FDM120	
WR62	R140				FBP140	FBM140	FBE140	FDP140	FDM140	
WR51	R180				FBP180	FBM180	FBE180	FDP180	FDM180	
WR42	R220				FBP220	FBM220	FBE220			
WR34	R260				FBP260	FBM260	FBE260			
WR28	R320				FBP320	FBM320	FBE320			
WR22	R400	FAP400	FAM400							FUGP400
WR18	R500	FAP500	FAM500							FUGP500
WR14	R620	FAP620	FAM620							FUGP620
WR12	R740	FAP740	FAM740							FUGP740
WR10	R900	FAP900	FAM900							FUGP900
WR8	R1200	FAP1200	FAM1200							FUGP1200
WR7	R1400	FAP1400	FAM1400							FUGP1400
WR5	R1800	FAP1800	FAM1800							FUGP1800
WR4	R2200	FAP2200	FAM2200							FUGP2200
WR3	R2600	FAP2600	FAM2600							FUGP2600

WIDEBAND HORN ANTENNA

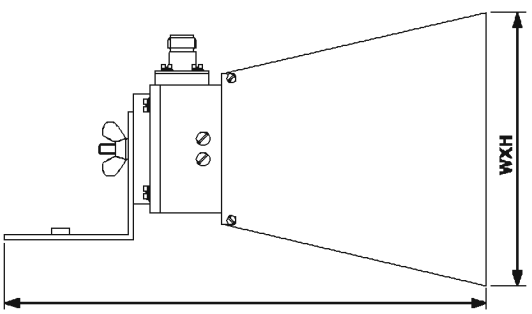
Shinhom Microwave manufactures a high quality line of dual-ridged horn antennas typically used for EMI testing, surveillance equipment, antenna gain and pattern measurement. Wideband dual-ridged horn antennas are linearly polarized with high Gain, low VSWR, lightweight, covering from 0.2GHz to 40GHz. Please contact us with your specification and discuss your needs with one of our sales engineers.



ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	Gain (dB)	VSWR (Max)	Dimensions(mm)			WG Type		Connector
				L	W	H	E-Plane	H-Plane	
SH-10180DRHA10S...	1.0-18.0	6.2-14.6	2.5	284	160	245	30° -77°	23° -60°	SMA
SH-10180DRHA10N...	1.0-18.0	6.2-14.6	2.5	284	160	245	30° -77°	23° -60°	Type N
SH-80180DRHA10N...	8.0-18.0	10-12	2.5	114.5	63	53	21° -34°	21° -44°	Type N
SH-80180DRHA10S...	8.0-18.0	10-12	2.5	114.5	63	53	21° -34°	21° -44°	SMA
SH-180400DRHA15K...	18.0-40.0	9-15.6	2.5	100	42	57	17° -44°	18° -33°	K2.4mm

*Indicates Model Number. See Ordering Information for complete part number.



Ordering Information

Example Part No: SH - 100 SGAH 25 +N K

- SH: Shinhom Microwave
- 100: WG type:R100
- SGAH: Product Type: Standard Gain Horn Attenna with Coaxial Connector
- 25: Gain: 25dB
- +N: Coax Connector Type: N=Type N,S=SMA,2.92=K2.92mm
- K: J=Male,K=Female

- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black top coat

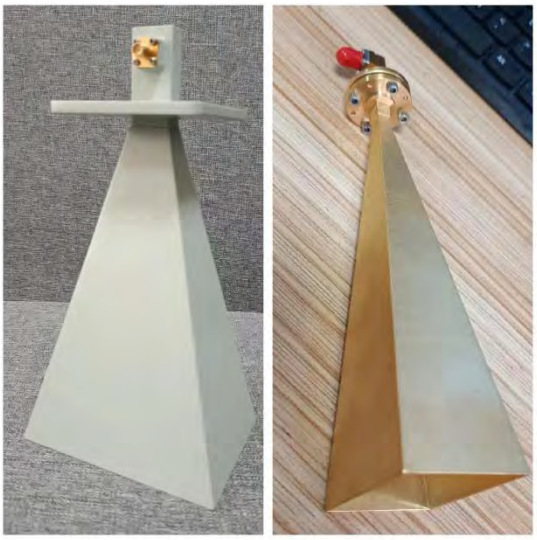
Waveguide coaxial adapter

Frequency Range GHZ 0.32-112G WR2300-WR10 standard frequency

VSWR: 1.5max

Connector: N SMA 2.92 2.4 1.85 1.0

Material: Copper AL



Standard gain horn antenna

Frequency Range GHZ 0.32-112G WR2300-WR10 standard frequency

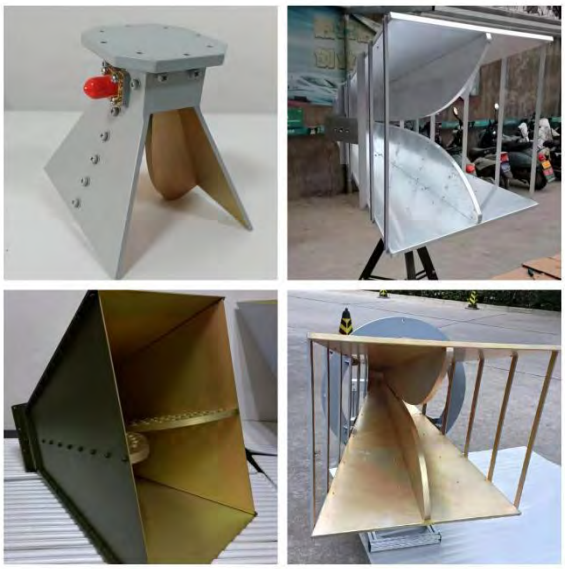
Gain db :10 15 20 25 db

VSWR: 1.5 2max

Connector N SMA 2.92 2.4

1.85 1.0

Material: Copper AL



broadband antenna

Frequency Range GHZ 0.2-330G user defined 0.2-3G 1-18G 3.5-50G 9-67G .....

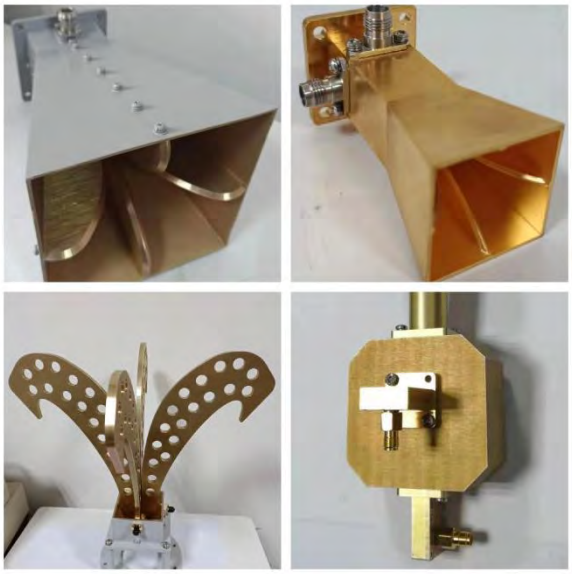
Gain db :10 15 20 25

VSWR: 2TYP

Connector N SMA 2.92 2.4
1.85 1.0

band-width user defined

Material: Copper AL



dual polarized antenna

Frequency Range GHZ 0.2-112G(user defined)

Gain db :10 15 20db

VSWR:2typ

Connector N SMA 2.92 2.4 1.85 1.0

band-width user defined

Material: Copper AL

Omnidirectional antenna

Frequency Range GHZ 0.5-60G(user defined)

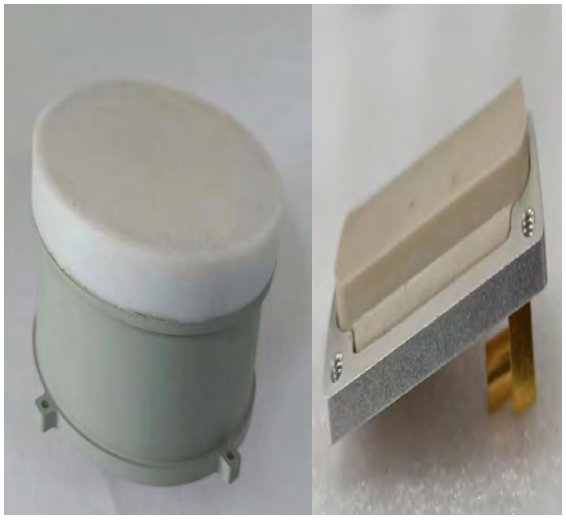
Axial-ratio ≤ 3

VSWR: 2TYP

Connector N SMA 2.92 2.4

band-width user defined

Material: Copper AL



microstrip antenna:

Missile antenna

test antenna

Frequency Range GHZ user defined

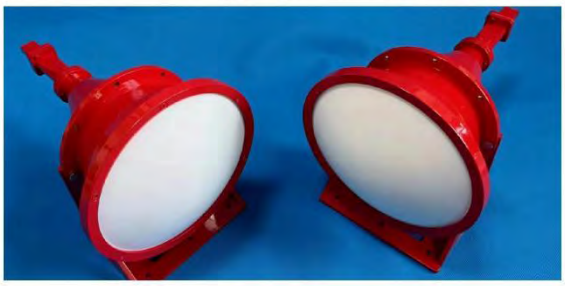
VSWR: 2TYP 2.5max

Connector N SMA 2.92 2.4

Band-width user defined

Material: Copper AL





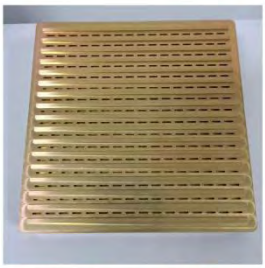
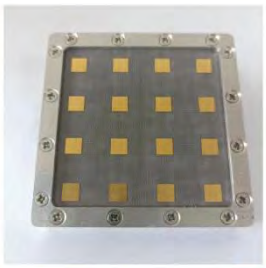
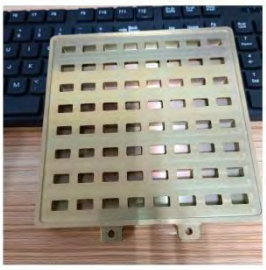
lens antenna:
high gain antenna
point focusing

Frequency Range GHZ

VSWR: 2.5max

Connector N SMA 2.92 2.4

Material: Copper AL


array antenna

Frequency Range GHZ 0.4-60Guser defined

Gain db :10-50db

VSWR: 2.5 max

Connector N SMA 2.92 2.4
1.85 1.0

Material: Copper AL



ground penetrating radar

Frequency Range GHZ

VSWR: 2TYP 2.5 max

Connector N SMA 2.92 2.4

band-width user defined

Material: Copper AL

1 Corrugated horn antenna

2 Waveguide cross coupling

Frequency Range GHZ 0.6-90Guser defined

Connector N SMA 2.92 2.4

Material: Copper AL

log-periodic antenna

Frequency Range GHZ 0.03-3G 1-18G

VSWR: 2TYP 2.5 max

Connector N SMA 2.92 2.4

Material: Copper AL

parabolic antenna

Frequency Range GHZ 1-100G

Gain db :20 30 40 50 db

VSWR: 2TYP 2.5 max

Connector N SMA 2.92 2.4

band-width user defined

Material: Copper AL

airborne antenna

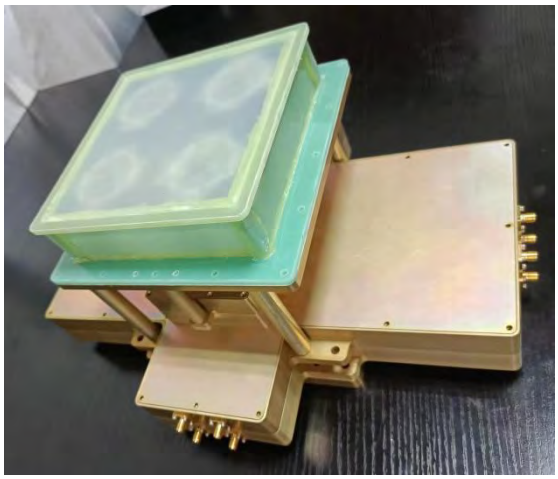
Frequency Range GHZ user defined

VSWR: 2TYP 2.5 max

Connector: N SMA 2.92 2.4

band-width user defined

Material: Copper AL



monopulse feed.

VSWR: 1.5TYP 2.5 max

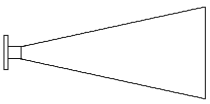
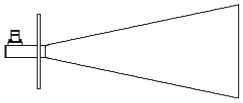
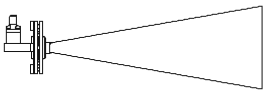
Connector: N SMA 2.92 2.4

band-width user defined

Material: Copper AL

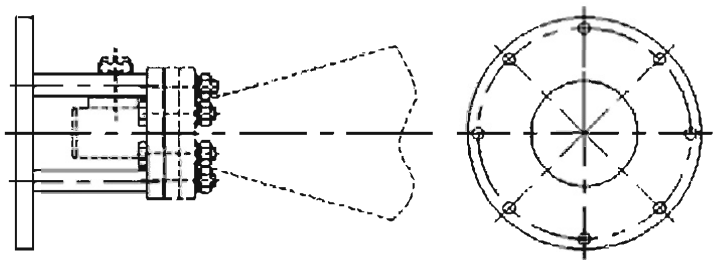
Standard gain antenna

1. Product type

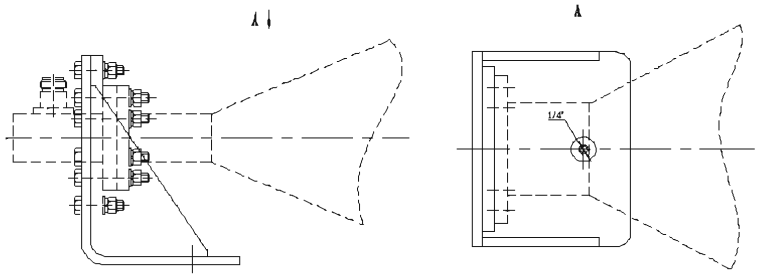
Product type	Waveguide input type	Integrated coaxial input type	Split coaxial input type
Outline drawing			
Standing-wave ratio	≤1.25	≤1.5	≤1.5

2.Way to install

H-shaped bracket installation



L-shaped bracket installation



Product name	Nominal gian	Applicable frequency
Standard gain horn antenna	10	0.3-90GHz
	15	1-100GHz
	20	3-300GHz
	25	10-300GHz
Circular polarization standard gain antenna	15	1-110GHz
	20	

3.Standard gain horn antenna with waveguide input(Nominal gain 10dB)

Part Number	Frequency Range (GHz)	Gain (dB)	Dimensions(mm)				Flange	Material	Coatings
			L	L1	W	H			
SH12SGAH10	0.96–1.46	10	300	100	400	280	FDP	Al	Oxide
SH14SGAH10	1.13–1.73	10	280	80	315	235	FDP	Al	Oxide
SH18SGAH10	1.45–2.20	10	245	65	249	184	FDP	Al	Oxide
SH22SGAH10	1.72–2.61	10	210	60	209	154	FDP	Al	Oxide
SH26SGAH10	2.17–3.30	10	160	50	165	125	FDP	Al	Oxide
SH32SGAH10	2.60–3.95	10	150	50	144	114	FDP	Al	Oxide
SH40SGAH10	3.22–4.90	10	120	50	113	88	FDP	Al	Oxide
SH48SGAH10	3.94–5.99	10	110	40	98	73	FDP	Al	Oxide
SH58SGAH10	4.64–7.05	10	100	40	8	63	FDP	Al	Oxide
SH70SGAH10	5.38–8.17	10	75	25	67	52	FDP	Al	Oxide
SH84SGAH10	6.57–9.99	10	70	25	57	42	FBP	Al	Oxide
SH100SGAH10	8.20–12.40	10	50	20	47	37	FBP	Al	Oxide
SH120SGAH10	9.84–15.0	10	55	25	40	29	FBP	Al	Oxide
SH140SGAH10	11.9–18.0	10	55	25	37	27	FBP	Al	Oxide
SH180SGAH10	14.5–22.0	10	50	20	30	20	FBP	Au	Silver
SH220SGAH10	17.6–26.72	10	45	15	24	17	FBP	Au	Silver
SH260SGAH10	1.7–33.0	10	35	15	20	14	FBP	Au	Silver
SH320SGAH10	26.5–40.0	10	30	10	17	12	FBP	Au	Silver
SH400SGAH10	32.9–50.1	10	36	/	10.8	7.9	FUGP	Au	Gold
SH500SGAH10	39.2–59.6	10	30	/	9	6.4	FUGP	Au	Gold
SH620SGAH10	49.8–75.8	10	25	/	7.5	5.3	FUGP	Au	Gold
SH740SGAH10	60.5–91.9	10	18	/	5.6	4.5	FUGP	Au	Gold

3.Standard gain horn antenna with waveguide input(Nominal gain 15dB)

Part Number	Frequency Range (GHz)	Gain (dB)	Dimensions(mm)				Flange	Material	Coatings
			L	L1	W	H			
SH12SGAH15	0.96–1.46	15	600	100	700	480	FDP	Al	Oxide
SH14SGAH15	1.13–1.73	15	430	80	550	380	FDP	Al	Oxide
SH18SGAH15	1.45–2.20	15	365	65	456	316	FDP	Al	Oxide
SH22SGAH15	1.72–2.61	15	310	60	380	265	FDP	Al	Oxide
SH26SGAH15	2.17–3.30	15	250	50	297	216	FDP	Al	Oxide
SH32SGAH15	2.60–3.95	15	230	50	275	190	FDP	Al	Oxide
SH40SGAH15	3.22–4.90	15	180	50	205	145	FDP	Al	Oxide
SH48SGAH15	3.94–5.99	15	160	40	169	119	FDP	Al	Oxide
SH58SGAH15	4.64–7.05	15	130	40	141	97	FDP	Al	Oxide
SH70SGAH15	5.38–8.17	15	110	25	122	84	FDP	Al	Oxide
SH84SGAH15	6.57–9.99	15	100	25	105	71	FBP	Al	Oxide
SH100SGAH15	8.20–12.40	15	80	20	81	56	FBP	Al	Oxide
SH120SGAH15	9.84–15.0	15	75	25	68	47	FBP	Al	Oxide
SH140SGAH15	11.9–18.0	15	80	25	57	40	FBP	Al	Oxide
SH180SGAH15	14.5–22.0	15	55	20	47	33	FBP	Au	Silver
SH220SGAH15	17.6–26.7	15	45	15	39	27	FBP	Au	Silver
SH260SGAH15	21.7–33.0	15	40	15	32	22	FBP	Au	Silver
SH320SGAH15	26.5–40.0	15	35	10	26	19	FBP	Au	Silver
SH400SGAH15	32.9–50.1	15	30	10	22	15.5	FUGP	Au	Gold
SH500SGAH15	39.2–59.6	15	25	10	19	13	FUGP	Au	Gold
SH620SGAH15	49.8–75.8	15	21	8	15	11	FUGP	Au	Gold
SH740SGAH15	60.5–91.9	15	20	8	13.5	9.5	FUGP	Au	Gold
SH900SGAH15	73.8–112	15	18	8	11	8	FUGP	Au	Gold

3.Standard gain horn antenna with waveguide input(Nominal gain 20dB)

Part Number	Frequency Range (GHz)	Gain (dB)	Dimensions(mm)				Flange	Material	Coatings
			L	L1	W	H			
SH32SGAH20	2.60–3.95	20	700	50	476	346	FDP	Al	Oxide
SH40SGAH20	3.22–4.90	20	520	50	345	264	FDP	Al	Oxide
SH48SGAH20	3.94–5.99	20	440	40	280	212	FDP	Al	Oxide
SH58SGAH20	4.64–7.05	20	400	40	245	175	FDP	Al	Oxide
SH70SGAH120	5.38–8.17	20	290	25	197	153	FDP	Al	Oxide
SH84SGAH20	6.57–9.99	20	290	25	180	128	FBP	Al	Oxide
SH100SGAH20	8.20–12.40	20	220	20	138	107	FBP	Al	Oxide
SH120SGAH20	9.84–15.0	20	200	25	115	83	FBP	Al	Oxide
SH140SGAH20	11.9–18.0	20	150	25	93	72	FBP	Al	Oxide
SH180SGAH20	14.5–22.0	20	140	20	80	56	FBP	Au	Silver
SH220SGAH20	17.6–26.7	20	125	15	70	49	FBP	Au	Silver
SH260SGAH20	21.7–33.0	20	110	15	54	42	FBP	Au	Silver
SH320SGAH20	26.5–40.0	20	90	10	47	33	FBP	Au	Silver
SH400SGAH20	32.9–50.1	20	70	10	36	27	FUGP	Au	Gold
SH500SGAH20	39.2–59.6	20	60	10	31.4	23	FUGP	Au	Gold
SH620SGAH20	49.8–75.8	20	55	8	25	18	FUGP	Au	Gold
SH740SGAH20	60.5–91.9	20	50	8	22	16	FUGP	Au	Gold
SH900SGAH20	73.8–112	20	45	8	18	13	FUGP	Au	Gold
SH1200SGAH20	92.2–140	20	40	8	15	11	FUGP	Au	Gold
SH1400SGAH20	113–173	20	32	2	12	8.5	FUGP	Au	Gold
SH1800SGAH20	145–220	20	35	8	9.7	7	FUGP	Au	Gold
SH2200SGAH20	172–261	20	30	6	8.5	5.8	FUGP	Au	Gold
SH2600SGAH20	217–330	20	27	6	7	4.8	FUGP	Au	Gold

3.Standard gain horn antenna with waveguide input(Nominal gain 25dB)

Part Number	Frequency Range (GHz)	Gain (dB)	Dimensions(mm)				Flange	Material	Coatings
			L	L1	W	H			
SH100SGAH25	8.20–12.40	25	740	20	250	180	FBP	Al	Oxide
SH120SGAH25	9.84–15.0	25	550	25	200	155	FBP	Al	Oxide
SH140SGAH25	11.9–18.0	25	520	25	175	120	FBP	Al	Oxide
SH180SGAH25	14.5–22.0	25	400	20	134	104	FBP	Au	Silver
SH220SGAH125	17.6–26.7	25	350	20	120	85	FBP	Au	Silver
SH260SGAH25	21.7–33.0	25	300	20	92	70	FBP	Au	Silver
SH320SGAH25	26.5–40.0	25	240	15	80	56	FBP	Au	Silver
SH400SGAH25	32.9–50.1	25	205	10	66	46	FUGP	Au	Gold
SH500SGAH25	39.2–59.6	25	160	10	53	37	FUGP	Au	Gold
SH620SGAH25	49.8–75.8	25	130	8	43	31	FUGP	Au	Gold
SH740SGAH25	60.5–91.9	25	120	8	37	26	FUGP	Au	Gold
SH900SGAH25	73.8–112	25	100	8	30	23	FUGP	Au	Gold
SH1200SGAH25	92.2–140	25	86	4	25	17.7	FUGP	Au	Gold
SH1400SGAH25	113–173	25	70	5.04	20	14	FUGP	Au	Gold
SH1800SGAH25	145–220	25	57	5	16	11.2	FUGP	Au	Gold
SH2200SGAH25	172–261	25	50	6	13	9.5	FUGP	Au	Gold
SH2600SGAH25	217–330	25	40	6	11	7.7	FUGP	Au	Gold

4.Coaxial input standard gain antenna(Nominal gain 10dB)

Part Number	Frequency Range (GHz)	Gain (dB)	Dimensions(mm)				Contact	Material	Coatings
			L	L1	W	H			
SH3SGAH10N	0.32–0.49	10	850	300	1150	800	N–K	Al	Oxide
SH4SGAH10N	0.35–0.53	10	800	300	1050	720	N–K	Al	Oxide
SH5SGAH10N	0.41–0.62	10	800	400	900	660	N–K	Al	Oxide
SH6SGAH10N	0.49–0.75	10	700	350	700	500	N–K	Al	Oxide
SH8SGAH10N	0.64–0.98	10	590	290	620	440	N–K	Al	Oxide
SH9SGAH110N	0.75–1.15	10	480	250	480	336	N–K	Al	Oxide
SH12SGAH10N	0.96–1.46	10	400	200	400	280	N–K	Al	Oxide
SH14SGAH10N	1.13–1.73	10	370	170	315	235	N–K	Al	Oxide
SH18SGAH10N	1.45–2.20	10	310	130	249	184	N–K	Al	Oxide
SH22SGAH10N	1.72–2.61	10	260	110	209	154	N–K	Al	Oxide
SH26SGAH10N	2.17–3.30	10	200	90	165	125	N–K	Al	Oxide
SH32SGAH10N	2.60–3.95	10	175	75	144	114	N–K	Al	Oxide
SH40SGAH10N	3.22–4.90	10	150	80	113	88	N–K	Al	Oxide
SH48SGAH10N	3.94–5.99	10	145	75	98	73	N–K	Al	Oxide
SH58SGAH10N	4.64–7.05	10	135	75	83	63	N–K	Al	Oxide
SH70SGAH10N	5.38–8 17	10	110	60	67	52	N–K	Al	Oxide
SH84SGAH10N	6.57–9.99	10	95	50	57	42	N–K	Al	Oxide
SH100SGAH10N	8.20–12.40	10	75	45	47	37	N–K	Al	Oxide
SH120SGAH10N	9.84–15.0	10	75	45	40	29	N–K	Al	Oxide
SH140SGAH10S	11.9–18.0	10	75	45	37	27	SMA–K	Al	Oxide
SH180SGAH10S	14.5–22.0	10	75	45	30	20	SMA–K	Au	Silver
SH220SGAH10K	17.6–26.7	10	75	45	24	17	2.92–K	Au	Silver
SH260SGAH10K	21.7–33.0	10	53	33	20	14	2.92–K	Au	Silver
SH320SGAH10K	26.5–40.0	10	54	34	17	12	2.92–K	Au	Silver

4.Coaxial input standard gain antenna(Nominal gain 15dB)

Part Number	Frequency Range (GHz)	Gain (dB)	Dimensions(mm)				Contact	Material	Coatings
			L	L1	W	H			
SH9SGAH15N	0.75–1.15	15	820	250	850	580	N–K	Al	Oxide
SH12SGAH15N	0.96–1.46	15	700	200	700	480	N–K	Al	Oxide
SH14SGAH15N	1.13–1.73	15	520	170	550	380	N–K	Al	Oxide
SH18SGAH15N	1.45–2.20	15	430	130	456	316	N–K	Al	Oxide
SH22SGAH15N	1.72–2.61	15	360	110	380	265	N–K	Al	Oxide
SH26SGAH115N	2.17–3.30	15	290	90	297	216	N–K	Al	Oxide
SH32SGAH15N	2.60–3.95	15	255	75	275	190	N–K	Al	Oxide
SH40SGAH15N	3.22–4.90	15	210	80	205	145	N–K	Al	Oxide
SH48SGAH15N	3.94–5.99	15	195	75	169	119	N–K	Al	Oxide
SH58SGAH15N	4.64–7.05	15	165	75	141	97	N–K	Al	Oxide
SH70SGAH15N	5.38–8.17	15	145	60	122	84	N–K	Al	Oxide
SH84SGAH15N	6.57–9.99	15	125	50	105	71	N–K	Al	Oxide
SH100SGAH15N	8.20–12.40	15	105	45	81	56	N–K	Al	Oxide
SH120SGAH15N	9.84–15.0	15	95	45	68	47	N–K	Al	Oxide
SH140SGAH15S	11.9–18.0	15	100	45	57	40	SMA–K	Al	Oxide
SH180SGAH15S	14.5–22.0	15	80	45	47	33	SMA–K	Au	Silver
SH220SGAH15K	17.6–26.7	15	75	45	39	27	2.92–K	Au	Silver
SH260SGAH15K	21.7–33.0	15	58	33	32	22	2.92–K	Au	Silver
SH320SGAH15K	26.5–40.0	15	59	34	26	19	2.92–K	Au	Silver

4.Coaxial input standard gain antenna(Nominal gain 20dB)

Part Number	Frequency Range (GHz)	Gain (dB)	Dimensions(mm)				Contact	Material	Coatings
			L	L1	W	H			
SH32SGAH20N	2.60–3.95	20	725	75	476	346	N–K	Al	Oxide
SH40SGAH20N	3.22–4.90	20	550	80	345	264	N–K	Al	Oxide
SH48SGAH20N	3.94–5.99	20	475	75	280	212	N–K	Al	Oxide
SH58SGAH20N	4.64–7.05	20	435	75	245	175	N–K	Al	Oxide
SH70SGAH20N	5.38–8.17	20	325	60	197	153	N–K	Al	Oxide
SH84SGAH120N	6.57–9.99	20	315	50	180	128	N–K	Al	Oxide
SH100SGAH20N	8.20–12.40	20	245	45	138	107	N–K	Al	Oxide
SH120SGAH20N	9.84–15.0	20	220	45	115	83	N–K	Al	Oxide
SH140SGAH20S	11.9–18.0	20	170	45	93	72	SMA–K	Al	Oxide
SH180SGAH20S	14.5–22.0	20	165	45	80	56	SMA–K	Au	Silver
SH220SGAH20K	17.6–26.7	20	155	45	70	49	2.92–K	Au	Silver
SH260SGAH20K	21.7–33.0	20	128	33	54	42	2.92–K	Au	Silver
SH320SGAH20K	26.5–40.0	20	114	34	47	33	2.92–K	Au	Silver

4.Coaxial input standard gain antenna(Nominal gain 25dB)

Part Number	Frequency Range (GHz)	Gain (dB)	Dimensions(mm)				Contact	Material	Coatings
			L	L1	W	H			
SH100SGAH25N	8.20–12.40	25	760	40	250	180	N–K	Al	Oxide
SH120SGAH25N	9.84–15.0	25	570	45	200	155	N–K	Al	Oxide
SH140SGAH25S	11.9–18.0	25	540	45	175	120	SMA–K	Al	Oxide
SH180SGAH25S	14.5–22.0	25	424	44	134	104	SMA–K	Au	Silver
SH220SGAH25K	17.6–26.7	25	375	45	120	85	2.92–K	Au	Silver
SH260SGAH25K	21.7–33.0	25	313	33	92	70	2.92–K	Au	Silver
SH320SGAH25K	26.5–40.0	25	259	34	80	56	2.92–K	Au	Silver

5.Coaxial input split type standard gain antenna(Nominal gain 10dB)

Part Number	Frequency Range (GHz)	Gain (dB)	Dimensions(mm)					Contact	Material	Coatings
			L	L1	L2	W	H			
SH12SGAH10+N	0.96–1.46	10	466	100	166	400	280	N–K	Al	Oxide
SH14SGAH10+N	1.13–1 .73	10	430	80	150	315	235	N–K	Al	Oxide
SH18SGAH10+N	1.45–2.20	10	360	65	120	249	184	N–K	Al	Oxide
SH22SGAH10+N	1.72–2.61	10	310	60	100	209	154	N–K	Al	Oxide
SH26SGAH10+N	2.17–3.30	10	245	50	85	165	125	N–K	Al	Oxide
SH32SGAH110+N	2.60–3.95	10	222	50	72	144	114	N–K	Al	Oxide
SH40SGAH10+N	3.22–4.90	10	185	50	65	113	88	N–K	Al	Oxide
SH48SGAH10+N	3.94–5.99	10	164	40	54	98	73	N–K	Al	Oxide
SH58SGAH10+N	4.64–7.05	10	150	40	50	83	63	N–K	Al	Oxide
SH70SGAH10+N	5.38–8.17	10	123	25	48	67	52	N–K	Al	Oxide
SH84SGAH10+N	6.57–9.99	10	110	25	40	57	42	N–K	Al	Oxide
SH100SGAH10+N	8.20–12.40	10	83	20	33	47	37	N–K	Al	Oxide
SH120SGAH10+N	9.84–15.0	10	83	25	30	40	29	N–K	Al	Oxide
SH140SGAH10+S	11.9–18.0	10	82	25	27	37	27	SMA–K	Al	Oxide
SH180SGAH10+S	14.5–22.0	10	77	20	27	30	20	SMA–K	Au	Silver
SH220SGAH10+K	17.6–26.7	10	70	15	25	24	17	2.92–K	Au	Silver
SH260SGAH10+K	21.7–33.0	10	62	15	27	20	14	2.92–K	Au	Silver
SH320SGAH10+K	26.5–40.0	10	56	10	26	17	12	2.92–K	Au	Silver

5.Coaxial input split type standard gain antenna(Nominal gain 15dB)

Part Number	Frequency Range (GHz)	Gain (dB)	Dimensions(mm)					Contact	Material	Coatings
			L	L1	L2	W	H			
SH12SGAH15+N	0.96–1.46	15	766	100	166	700	480	N–K	Al	Oxide
SH14SGAH15+N	1.13–1 .73	15	580	80	150	550	380	N–K	Al	Oxide
SH18SGAH15+N	1.45–2.20	15	485	65	120	456	316	N–K	Al	Oxide
SH22SGAH15+N	1.72–2.61	15	410	60	100	380	265	N–K	Al	Oxide
SH26SGAH15+N	2.17–3.30	15	335	50	85	297	216	N–K	Al	Oxide
SH32SGAH115+N	2.60–3.95	15	302	50	72	275	190	N–K	Al	Oxide
SH40SGAH15+N	3.22–4.90	15	245	50	65	205	145	N–K	Al	Oxide
SH48SGAH15+N	3.94–5.99	15	214	40	54	169	119	N–K	Al	Oxide
SH58SGAH15+N	4.64–7.05	15	180	40	50	141	97	N–K	Al	Oxide
SH70SGAH15+N	5.38–8.17	15	158	25	48	122	84	N–K	Al	Oxide
SH84SGAH15+N	6.57–9.99	15	140	25	40	105	71	N–K	Al	Oxide
SH100SGAH15+N	8.20–12.40	15	115	20	33	81	56	N–K	Al	Oxide
SH120SGAH15+N	9.84–15.0	15	105	24.5	30	68	47	N–K	Al	Oxide
SH140SGAH15+S	11.9–18.0	15	107	25	27	57	40	SMA–K	Al	Oxide
SH180SGAH15+S	14.5–22.0	15	82	20	27	47	33	SMA–K	Au	Silver
SH220SGAH15+K	17.6–26.7	15	70	15	25	39	27	2.92–K	Au	Silver
SH260SGAH15+K	21.7–33.0	15	67	15	27	32	22	2.92–K	Au	Silver
SH320SGAH15+K	26.5–40.0	15	61	10	26	26	19	2.92–K	Au	Silver

5.Coaxial input split type standard gain antenna(Nominal gain 20dB)

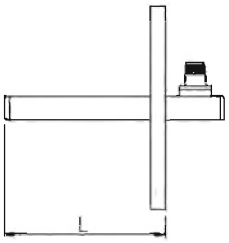
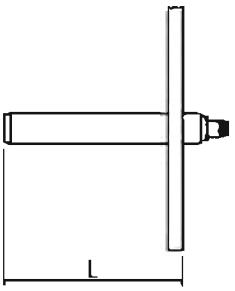
Part Number	Frequency Range (GHz)	Gain (dB)	Dimensions(mm)					Contact	Material	Coatings
			L	L1	L2	W	H			
SH32SGAH20+N	2.60–3.95	20	772	50	72	476	346	N–K	Al	Oxide
SH40SGAH20+N	3.22–4.90	20	585	50	65	345	264	N–K	Al	Oxide
SH48SGAH20+N	3.94–5.99	20	494	40	54	280	212	N–K	Al	Oxide
SH58SGAH20+N	4.64–7.05	20	450	40	50	245	175	N–K	Al	Oxide
SH70SGAH20+N	5.38–8.17	20	338	25	48	197	153	N–K	Al	Oxide
SH84SGAH20+N	6.57–9.99	20	330	25	40	180	128	N–K	Al	Oxide
SH100SGAH20+N	8.20–12.40	20	255	20	35	138	107	N–K	Al	Oxide
SH120SGAH20+N	9.84–15.0	20	230	25	30	115	83	N–K	Al	Oxide
SH140SGAH20+S	11.9–18.0	20	177	25	27	93	72	SMA–K	Al	Oxide
SH180SGAH20+S	14.5–22.0	20	167	20	27	80	56	SMA–K	Au	Silver
SH220SGAH20+K	17.6–26.7	20	150	15	25	70	49	2.92–K	Au	Silver
SH260SGAH20+K	21.7–33.0	20	137	15	27	54	42	2.92–K	Au	Silver
SH320SGAH20+K	26.5–40.0	20	116	10	26	47	33	2.92–K	Au	Silver
SH400SGAH20+K	33–50	20	96	10	31	35	26	2.92–K	Au	Gold

5.Coaxial input split type standard gain antenna(Nominal gain 25dB)

Part Number	Frequency Range (GHz)	Gain (dB)	Dimensions(mm)					Contact	Material	Coatings
			L	L1	L2	W	H			
SH100SGAH20+N	8.20–12.40	25	775	40	35	250	180	N–K	Al	Oxide
SH120SGAH20+N	9.84–15.0	25	550	25	30	200	155	N–K	Al	Oxide
SH140SGAH20+S	11.9–18.0	25	547	25	27	175	120	SMA–K	Al	Oxide
SH180SGAH20+S	14.5–22.0	25	427	23	27	134	104	SMA–K	Au	Silver
SH220SGAH20+K	17.6–26.7	25	375	20	25	120	85	2.92–K	Au	Silver
SH260SGAH20+K	21.7–33.0	25	327	20	27	92	70	2.92–K	Au	Silver
SH320SGAH20+K	26.5–40.0	25	266	15	26	80	56	2.92–K	Au	Silver
SH400SGAH20+K	33–50	25	236	10	31	66	46	2.92–K	Au	Gold

Antenna near-field measurement probe

The near-field sampling probe is indispensable to the near-field measurement system of antenna plane near-field, cylindrical near-field, spherical near-field and time-domain near-field. Near field measurement probe with cross polarization isolation greater than 25dB. The specifications are waveguide orthogonal feed type, waveguide end feed type, dual polarization near field measurement probe and broadband near field measurement probe, which can adapt to various domestic and foreign antenna near field measurement systems.

Product type	Waveguide orthogonal feed	Waveguide end feed
Product structure		

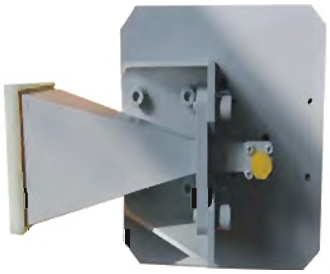
Antenna near-field measurement probe

Part Number	Frequency Range (GHz)	Length (mm)	Contact	SWR	Material	Coatings
SH-6WOEWPN	0.49-0.75	813	N-K	≤2.2	Al	Oxide
SH-8WOEWPN	0.64-0.98	813	N-K	≤2.2	Al	Oxide
SH-9WOEWPN	0.75-1.15	813	N-K	≤2.2	Al	Oxide
SH-12WOEWPN	0.96-1.46	940	N-K	≤2.2	Al	Oxide
SH-14WOEWPN	1.13-1.73	813	N-K	≤2.2	Al	Oxide
SH-18WOEWPN	1 45-2.20	635	N-K	≤2.2	Al	Oxide
SH-22WOEWPN	1.72-2.61	533	N-K	≤2.2	Al	Oxide
SH-26WOEWPN	2.17-3.30	475	N-K	≤2.2	Al	Oxide
SH-32WOEWPN	2.60-3.95	356	N-K	≤2.2	Al	Oxide
SH-40WOEWPN	3.22-4.90	305	N-K	≤2.2	Al	Oxide
SH-48WOEWPN	3.94-5.99	229	N-K	≤2.2	Al	Oxide
SH-58WOEWPN	4.64-7.05	203	N-K	≤2.2	Al	Oxide
SH-70WOEWPN	5.38-8.17	203	N-K	≤2.2	Au	Silver
SH-84WOEWPN	6.57-9.99	203	N-K	≤2.2	Au	Silver
SH-100WOEWPN	8.20-12.40	152	N-K	≤2.2	Au	Silver
SH-120WOEWPN	9.84-15.0	152	N-K	≤2.2	Au	Silver
SH-140WOEWPS	11.9-18.0	152	SMA-K	≤2.2	Au	Silver
SH-180WOEWPS	14.5-22.0	152	SMA-K	≤2.2	Au	Silver
SH-220WOEWPK	17.6-26.7	152	2.92-K	≤2.2	Au	Silver
SH-260WOEWPK	21.7-33.0	152	2.92-K	≤2.2	Au	Silver
SH-320WOEWPK	26.5-40.0	152	2.92-K	≤2.2	Au	Silver
SH-400WOEWPV	32.9-50.1	152	2.4-K	≤2.2	Au	Gold
SH-500WOEWPV	39.2-59.6	152	2.4-K	≤2.2	Au	Gold
SH-620WOEWP	49.8-75.8	152	FUGP	≤2.2	Au	Gold
SH-740WOEWP	60.5-91.9	152	FUGP	≤2.2	Au	Gold
SH-900WOEWP	73.8-112	152	FUGP	≤2.2	Au	Gold

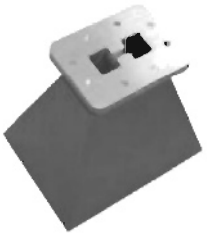
Linearly polarized horn antenna

1.Cone horn antenna

Antennas can be designed according to user requirements



2.Wide-band horn antenna

Product type	Double ridged waveguide input type	Split coaxial input type
Part Number	DRHAX	DRHAX+...
Product structure		

Part Number	Frequency (GHz)	Gain (dB)	Standing-wave ratio	Materials
SH84DRHA10N	0.84~2.0	10/15	≤2	Al
SH150DRHA10N	1.5~3.6	10/15	≤2	Al
SH200DRHA10N	2.0~4.8	10/15	≤2	Al
SH250DRHA10N	2.6~7.8	10/15	≤2	Al
SH350DRHA10N	3.5~8.2	10/15	≤2	Al
SH475DRHA10N	4.75~11.0	10/15	≤2	Al
SH500DRHA10S	5.0~18.0	10/15/20	≤2	Al
SH580DRHA10S	5.8~16.0	10/15/20	≤2	Al
SH650DRHA10S	6.5~18.0	10/15/20	≤2	Al
SH750DRHA10S	7.5~18.0	10/15/20	≤2	Al
SH700DRHA10S	7.0~18.5	10/15/20	≤2	Al
SH1100DRHA10S	11.0~26.5	10/15/20	≤2	Au
SH1800DRHA10K	18.0-40.0	10/15/20	≤2	Au

Linearly polarized horn antenna

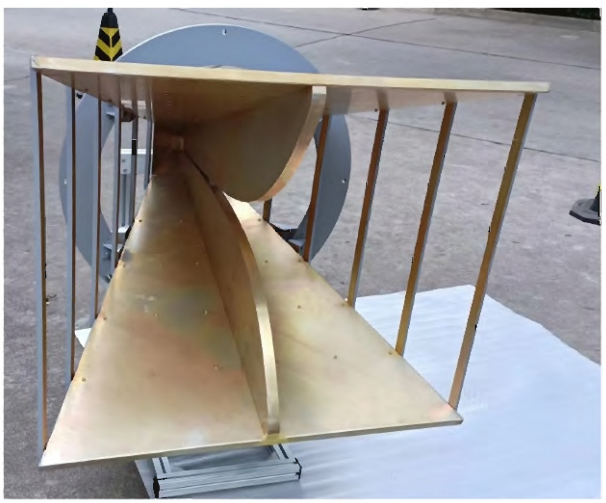
3.Double-ridged horn antenna

The ultra-wideband double ridge horn antenna series has extremely wide frequency bandwidth, high gain and good VSWR characteristics. The frequency covers several octaves, even up to dozens of octaves. Suitable for broadband monitoring, direction finding, EMC, EMI and other applications. High power EMC transmitting antenna, wide beam direction finding and so on.
Can be customized according to user needs









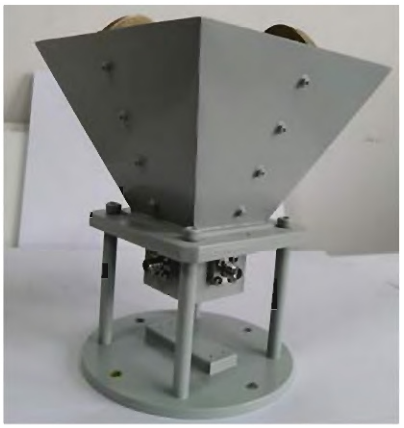
Double-ridged horn antenna

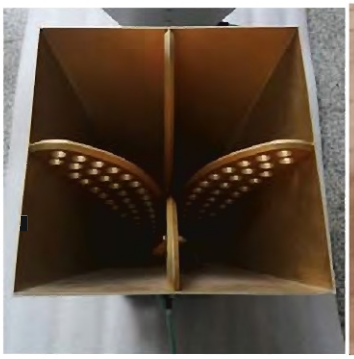
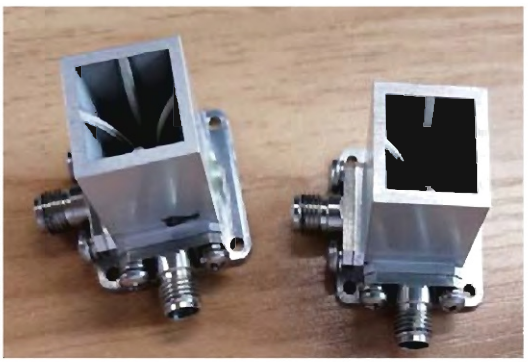
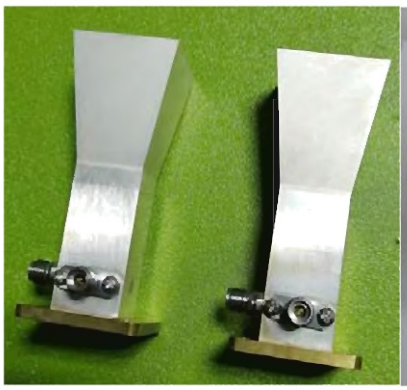
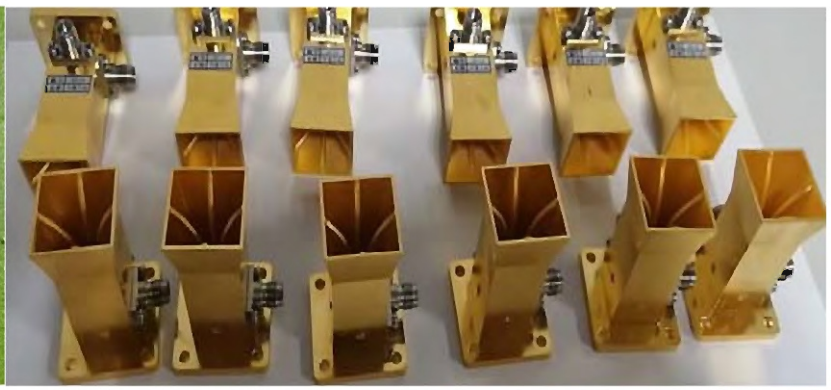
Part Number	Frequency Range (GHz)	Gain(dB)	Dimensions (mm)	SWR	Material
SH0220SJLB10N	0.2-2.0	5-18	761*933*960	≤2.5	Al
SH0330SJLB10N	0.3-3	5-18	550*410*580	≤2.5	Al
SH0440SJLB10N	0.4-4	5-18	400*300*420	≤2.5	Al
SH0460SJLB10N	0.4-6	5-18	430*310*400	≤2.5	Al
SH0780SJLB10N	0.7-8	5-18	240*180*260	≤2.5	Al
SH10180SJLB10N	1-18	5-18	153*127*200	≤2.5	Al
SH10180SJLB10N1	1-18	7-18	244*160*210	≤2.5	Al
SH20180SJLB10N	2-18	5-18	80*63*90	≤2.5	Al
SH20265SJLB10N	2-26.5	5-18	80*63*95	≤2.5	Al
SH60180JLB10N	6-18.0	5-18	36*23*60	≤2	Al
SH40400JLB10N	7.5-18.0	5-18	44*32*62	≤2	Al
SH80400JLB10N	8-40	5-18	24*19*38	≤2	Al
SH180400JLB10K	18-40	15	35*27*65	≤2	Au
SH180500JLB10K	18-50	15	35*27*75	≤2	Au
SH0825JLB10N	0.8-2.5	≥12	635*465*851	≤2.5	Al
SH1760JLB12N	1.7-6	≥12	275*213*365	≤2	Al
SH1060JLB12N	1-6	≥10	440*436*693	≤2.5	Al

4.Ultra–wideband dual–polarized four–ridge horn antenna and wideband circular polarized horn antenna

In EMC, EMI and antenna measurement work, multi–polarization function is required more and more. The wideband bridge can also make the antenna series a wideband double circularly polarized antenna. The series antenna frequency covers octave bandwidth and up to tens of octave bandwidth, polarization isolation > 20dB.





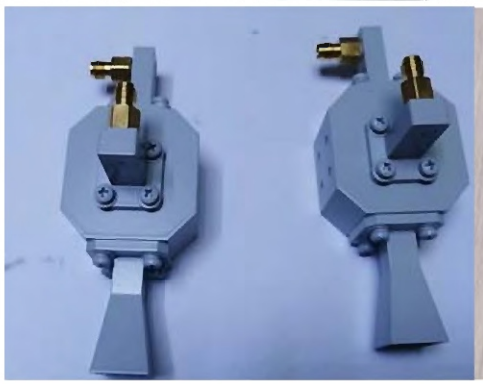
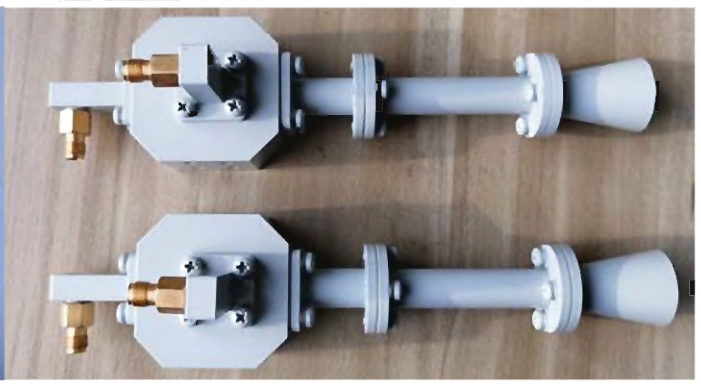
Ultra-wideband dual-polarized four-ridge horn antenna and wideband circular polarized horn antenna

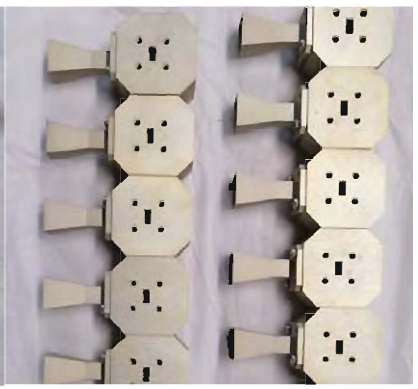
Part Number	Frequency Range (GHz)	Gain(dB)	Dimensions (mm)	SWR	Material
SH0330DPHA10N	0.3–3.0	5–18	530*530*600	≤2.5	Al
SH0880DPHA10N	0.3–3	5–18	200*200*230	≤2.5	Al
SH0660DPHA10N	0.6–6	5–18	296*296*380	≤2.5	Al
SH1060DPHA10N	1–6	5–18	184*184*217	≤2.5	Al
SH0860DPHA10N	0.8–6	5–18	205*105*240	≤2.5	Al
SH1035DPHA10N	1–3.5	5–18	184*184*217	≤2.5	Al
SH20180DPHA10S	2–18	5–18	110*110*105	≤2.5	Al
SH10180DPHA10S	1–18	5–18	230*230*250	≤3	Al
SH60180DPHA10S	6–18	5–18	27*27*40	≤2.5	Al
SH60180DPHA15S	6–18	≥9	47*47*75	≤2.5	Al
SH180400DPHA10K	18–40	≥11	23*23*62	≤2.5	Au
SH180500DPHA12V	18–50	≥12	23*23*47	≤2.5	Au
SH180500DPHA12V1	18–50	≥12	28*28*62	≤2.5	Au

5.Dual polarization horn antenna, dual polarization feed, dual polarization compact field feed, dual polarization probe

The dual-polarized horn antenna can be realized by OMT plus horn scheme, among which OMT is realized in many ways. The common OMT adopts the conventional form, its design and processing is simple, the bandwidth is narrow; The other is the OMT form with a symmetrical feed structure, which has the disadvantage of complex design and processing, and the advantage is that it can achieve 40% bandwidth, and the polarization isolation can reach more than 30dB. Can be equipped with a variety of forms of speakers, to meet the requirements of users. Commonly used are the compressed long feed, circular polarized horn to form a double circular polarized antenna, equipped with waveguide probe to form a double polarized probe, and so on. It can be customized.





Dual polarization horn antenna, dual polarization feed, dual polarization compact field feed, dual polarization probe

Part Number	Frequency Range (GHz)	Gain(dB) Optional/ Customized	SWR	Material
SH14DPHAN	1.13–1.73	10/15/20/25	≤1.5	Al
SH22DPHAN	1.72–2.6	10/15/20/25	≤1.5	Al
SH32DPHAN	12.6–3.95	10/15/20/25	≤1.5	Al
SH48DPHAN	3.94–5.99	10/15/20/25	≤1.5	Al
SH70DPHAN	5.38–8.17	10/15/20/25	≤1.5	Al
SH100DPHAS	8.2–12.4	10/15/20/25	≤1.5	Al
SH140DPHAS	12–18	10/15/20/25	≤1.5	Al
SH220DPHAK	17.6–26.7	10/15/20/25	≤1.5	Al
SH240435DPHA10K	24–43.5	10/15/20/25	≤1.5	Al
SH240300DPHAK	24–30	10/15/20/25	≤1.5	Al
SH320DPHAK	26.5–40	10/15/20/25	≤1.5	Al
SH620DPHAFUGP	50–75.8	10/15/20/25	≤1.6	Au

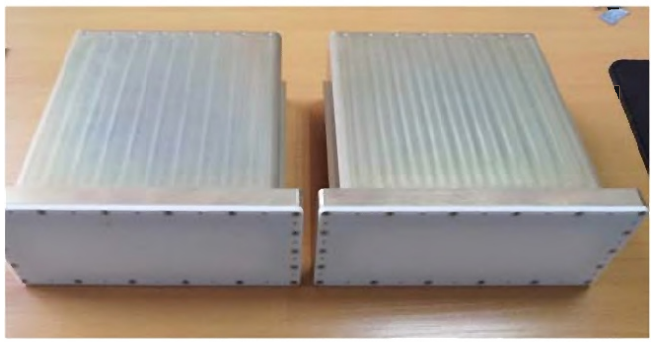
6.Lens antenna

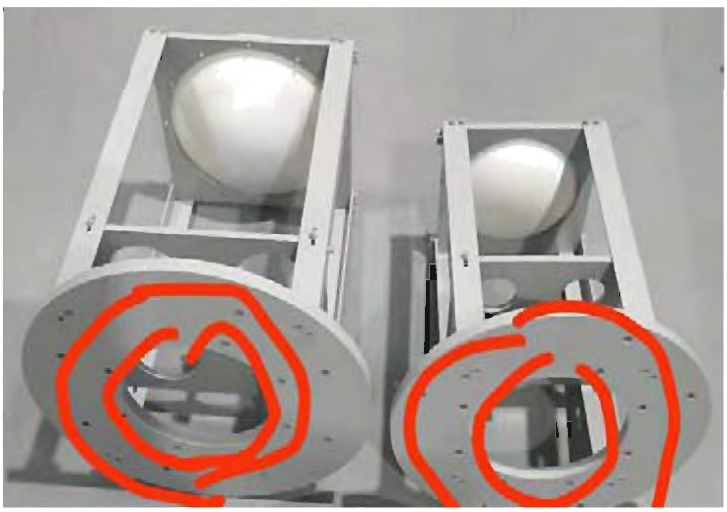
Horn lens antenna has high gain lens horn antenna, point focusing lens antenna, Gaussian optical lens antenna and so on.

The high-gain horn lens antenna can be composed of a cone horn and a convex lens. It is characterized by short axial size, high gain (relative to ordinary speakers), and low sidelobe level.

The point focusing lens antenna consists of a conical horn or conical corrugated horn and a convex lens. The characteristic is that the beam converges on the focus of the design to form a focal spot. The focal length and aperture size can be customized according to user requirements. When the focal points of two point-focusing lens antennas coincide, the transmission loss between the two antennas is minimal. Because the area near the intersection point is small, it is one of the best methods to study the local microwave transmittance and reflection characteristics of special materials and substances.

It should be noted that the electrical parameters of point focusing lens antennas cannot be defined and tested in accordance with general antennas. Since there is no definition of beam width and antenna gain, their electrical parameters are mainly: operating frequency range, focal length, and focal spot size.
The Gauss optical lens antenna is composed of feed horn and convex lens, crescent lens, hyperbolic lens, etc. It is characterized by low side shift and high gain.



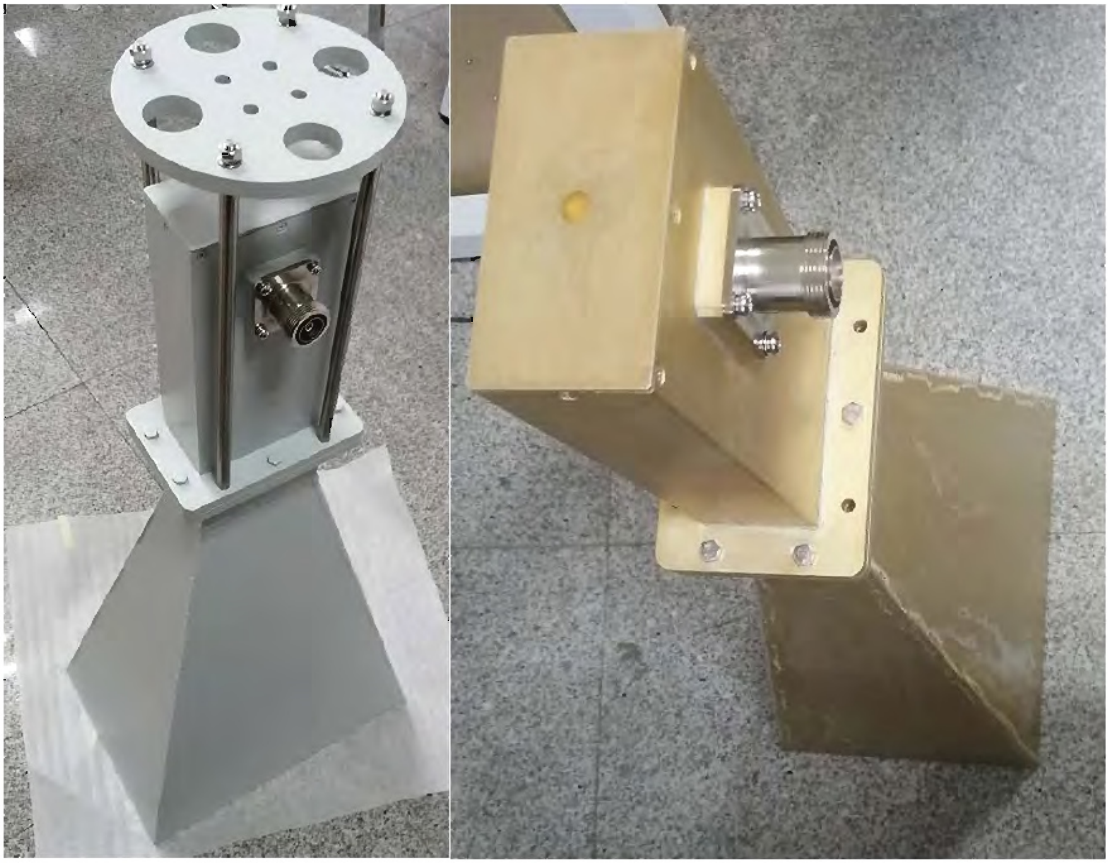


7.Corrugated horn, multi-mode horn antenna, compressed field feed

he corrugated horn antenna adopts the technology of variable slot depth and slot width, so that it has good VSWR and radiation characteristics in the bandwidth of close to the frequency multiplier. It is widely used in high performance broadband feedforward, biased feed and compressed field feed antenna, and the notable feature is that the E-H lobe is equal to < ±5dB at -15dB. Can be customized according to the user's requirements for frequency range and lobe width

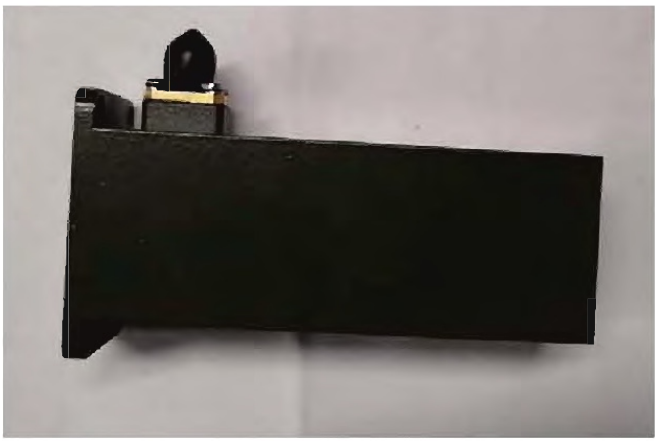
8.High-power antenna

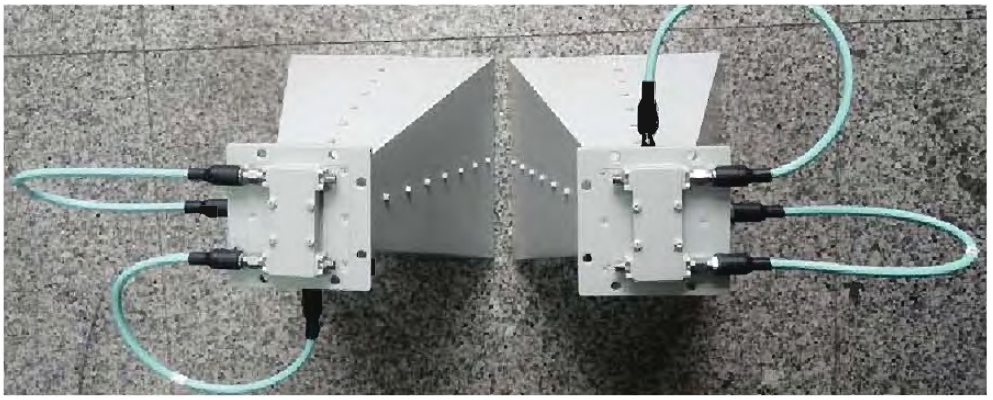
Mainly used in EMC transmitting antenna, interference antenna, electromagnetic countermeasures, etc.

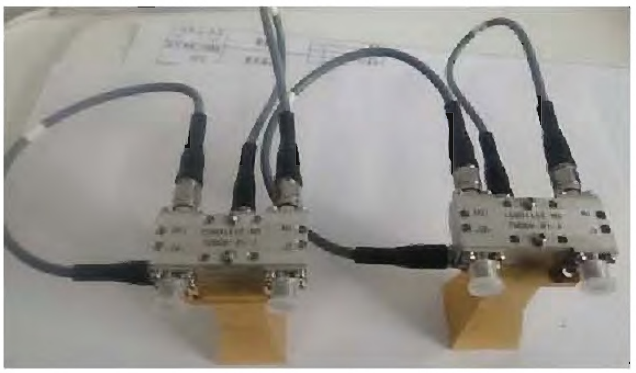


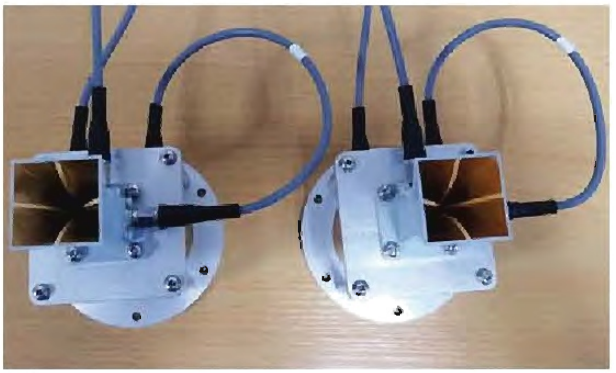
Standard circular polarized antenna
Double circular polarized antenna
Broadband circular polarized antenna

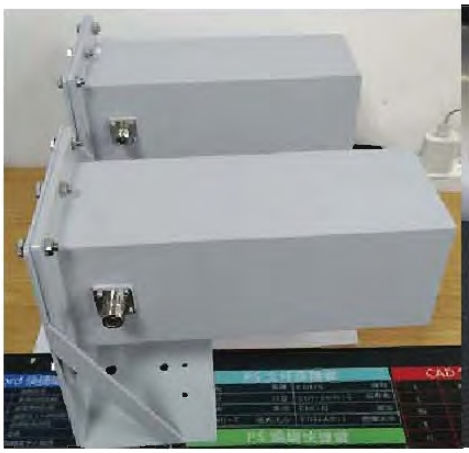
There are many ways to realize circular polarized antenna. Commonly used are spiral antenna, circularly polarized microstrip patch antenna, orthogonal slot circularly polarized antenna, circular polarization converter and horn antenna, dual–line polarized antenna through the 90 degree bridge to form circular polarization radiation and so on

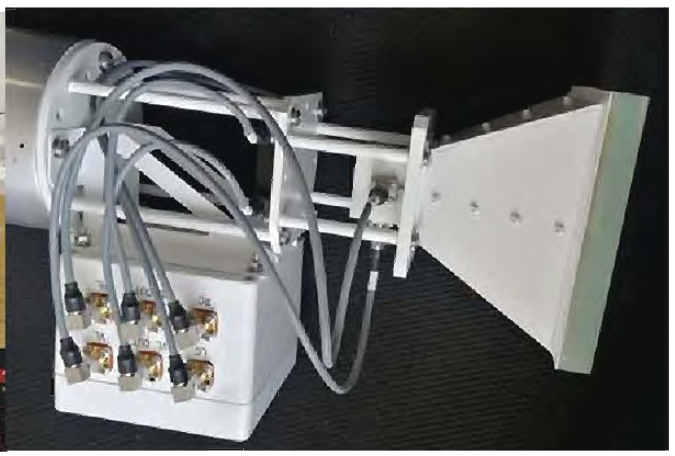












Spiral antenna

Axial mode spiral antenna, simple structure, bandwidth up to 40%

Planar spiral antenna

Parabolic reflector antenna, Cassegrain antenna








Log-periodic antenna
dual-polarized log-periodic antenna
microstrip log-periodic antenna

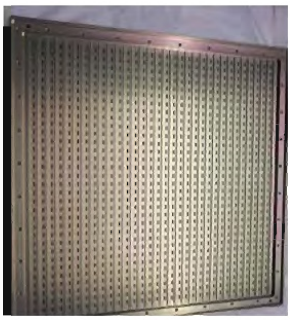


Part Number	Frequency Range (GHz)	Gain (dB)	Beamwidth (°)	SWR	Polarization Mode	Achievable
SH00705LPAN	70-500	5	110-50	2.5	Linear	Dual-polarized
SH0105LPAN	100-500	5	80-60	2.5	Linear	Dual-polarized
SH0204LPAN	200-400	7.5	90-60	2.5	Linear	Dual-polarized
SH0120LPAN	100-2000	6	140-60	2.5	Linear	Dual-polarized
SH0220LPAN	200-2000	7	135-55	2.5	Linear	Dual-polarized
SH0415LPAN	400-1500	9	130-30	2	Linear	Dual-polarized
SH03520LPAN	350-2000	6	120-65	2	Linear	Dual-polarized
SH03820LPAN	380-2000	4	140-50	2	Linear	Dual-polarized
SH0520LPAN	500-2000	7	110-68	2.5	Linear	Dual-polarized
SH1050LPAN	1000-5000	7	80-55	2.5	Linear	Dual-polarized
SH2060LPAN	2000-6000	5	110-50	2.5	Linear	Dual-polarized

Hemispherical antenna

Microstrip antenna

Array antenna, phased array antenna



Omnidirectional antenna, half-directional antenna