



## BHA 9118 BROADBAND HORN ANTENNA 1 to 18 GHz



The BHA 9118 is a linearly polarised broadband antenna which is ideal for many applications particularly EMC/RF measurements. It can be used for both receiving and transmitting. A precision 'N' connector is used to provide low VSWR and high power handling capability.

The mounting bracket allows easy adjustment for vertical, horizontal and 45 deg polarisations, and has a standard camera thread (1/4" X 20) hole that allows fitting to many support structures including all Teseq tripods (note Teseq adapters may be required).

The precision design is rugged and corrosion resistant. However, as with any precision instrument, care should be taken when using the BHA 9118. A protective strip protects the two fiberglass sides from accidental damage.

### BHA 9118

- Broadband horn antenna
- Frequency range 1 to 18 GHz
- Uniform gain
- High power handling
- Low VSWR

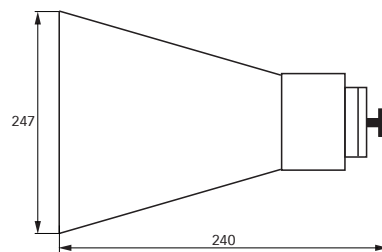
### Technical specifications

Frequency range:	1 to 18 GHz
Typical gain:	4 to 15 dBi (4 to 32 numeric)
Impedance (nominal):	50 $\Omega$
Maximum continuous power:	200 W
Cross polarisation:	20 dB minimum
Connector:	precision N type female
VSWR:	2.5:1 max, 2:1 max (2 to 18 GHz)
Field strength capability:	250 V/m at 1 m, 50 $\Omega$ source, free space conditions
Size antenna (L x H x W in mm):	approx. 240 X 147 X 247 (see drawings below)
Size transport box (L x H x W in mm):	approx. 510 X 310 X 215
Weight:	approx. 1.9 kg, approx. 4.5 kg (transport box with antenna)
Recommended tripods:	BTP 6020A plus adapter CHA 9435 or CTP 6099 plus adapter CHA 9443

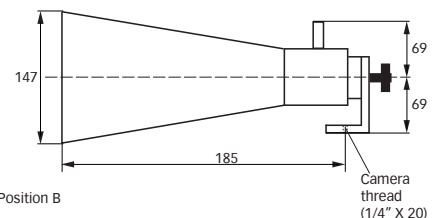


BHA 9118 plus adapter CHA 9435 onto tripod BTP 6020A

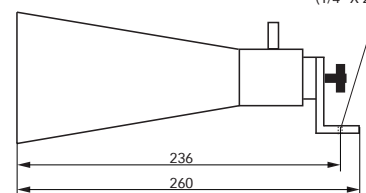
BHA 9118, dimensions in mm



Position A

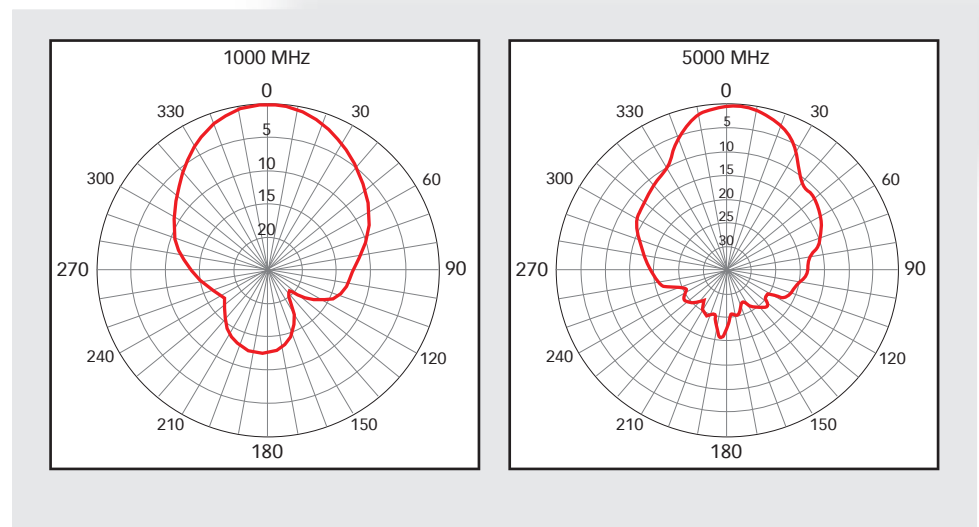


Position B

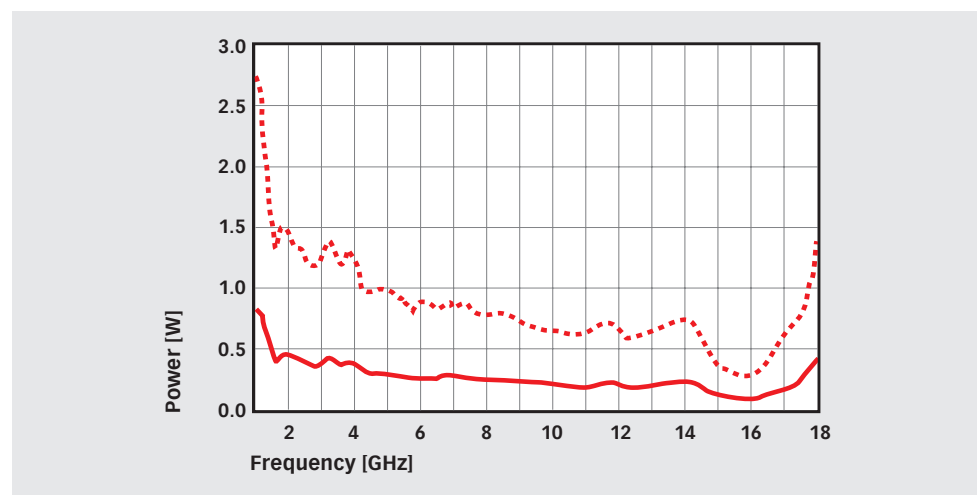


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Typical E field polar patterns



Typical drive power for 10 V/m at 1 m, — CW power, - - - power with 80% modulation

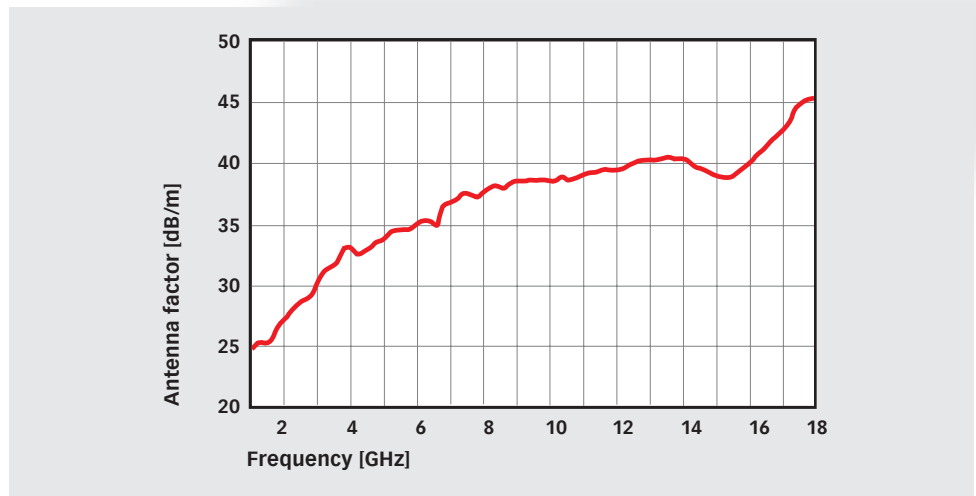




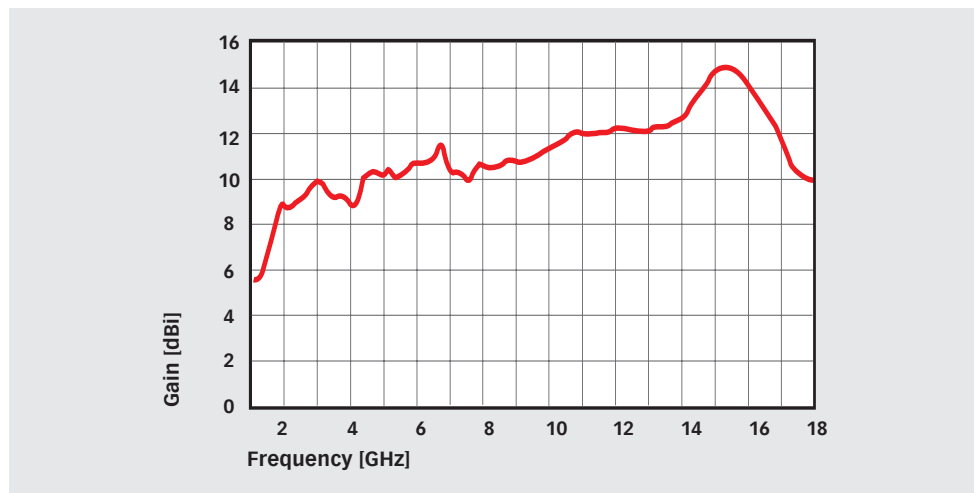
# **BHA 9118** **BROADBAND HORN ANTENNA 1 to 18 GHz**



Typical antenna factor

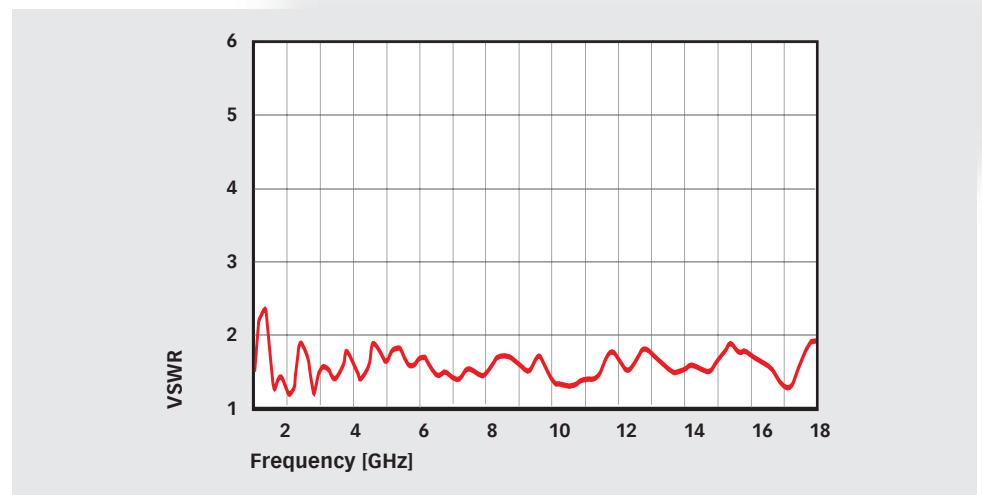


Typical gain



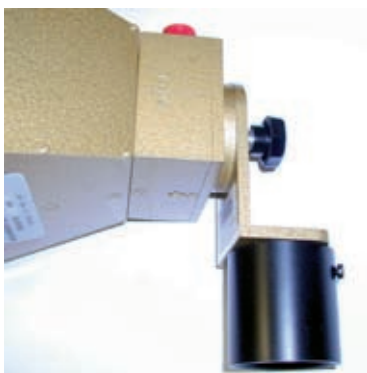
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### Typical VSWR



### Delivery information

Part number	Description
344-550	BHA 9118 Double ridged horn antenna 1 - 18 GHz
97-244570	Ant Cert-TC Traceable calibration (ISO17025), order only with the antenna, free space calibration (horizontal), other calibrations on request
248504	BTP 6020A-0880 EMC Tripod with tube 880 mm and mounting head for antennas with 22 mm tube
248505	BTP 6020A-0680 EMC Tripod with tube 680 mm and mounting head for antennas with 22 mm tube
248523	BTP 6020A-1370 EMC Tripod with tube 1370 mm and mounting head for antennas with 22 mm tube
348-810	CHA 9435 To fit field probes or BHA 9118 onto BTP 6020 (boss fits outside fibreglass pole, 50 mm), fitted with 1/4 " camera thread



BHA 9118 plus adapter CHA 9435