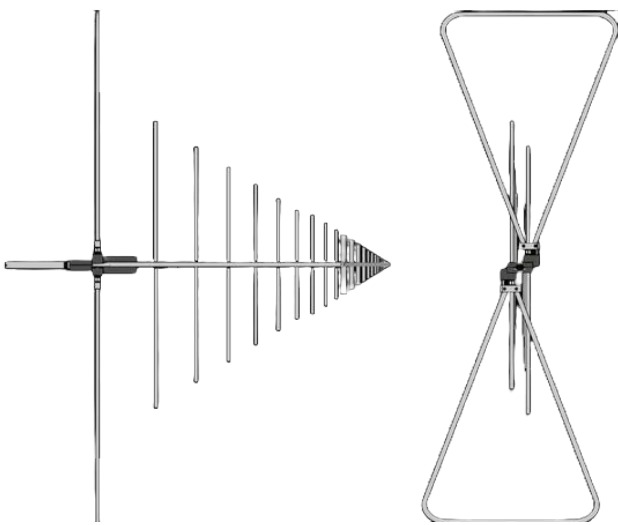


# Hybrid Broadband Antenna

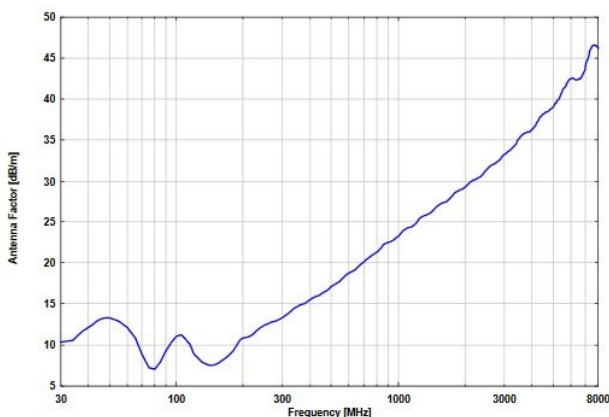
RF516

## THE IDEAL ANTENNA FOR EMC EMISSIONS AND IMMUNITY TESTING

- 30MHz—6GHz in one antenna
- No need to change antenna mid-test
- 200W max power rating
- 100W continuous rating



### EMISSIONS Antenna factor

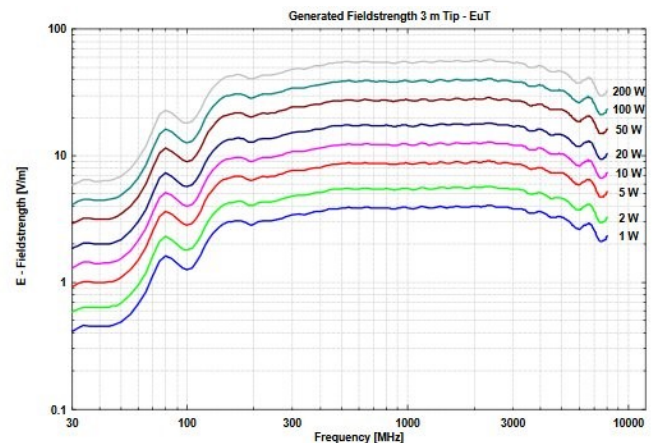


The RF516 is a linear polarised Logarithmic Periodic Broad-band Antenna combined with a 4:1 Broad-band Dipole (Aluminium tubing) for Receive and Transmit Applications .

This provides an ideal antenna for EMC requirements, combining high power rating for immunity testing together with the sensitivity required for emissions measurements.

This antenna includes tripod stand and horizontal/vertical polarisation pivot.

### IMMUNITY Field @ 3m. CW, no modulation. Input power at N type connector,



Field strength generated under free-space conditions at a separation from the antenna tip (see diagrams for several combinations of power and distance). If environmental reflections are present, this may lead to frequency and height dependent field strengths. The power figures refer to a 50  $\Omega$  source and an unmodulated (cw) signal. An 80% Amplitude Modulation requires a 1.8 times higher voltage, resulting in 3.24 times higher power compared to cw. A fieldstrength increase of factor 10 requires 100 times amplifier-power.

# Hybrid Broadband Antenna

## Specifications

Nominal Frequency Range:	30 MHz...7 GHz	Cross Polarisation:	>20dB (0.03...1 GHz)
Usable Frequency Range:	25 MHz ... 8 GHz	3 dB Beamwidth typ. (E-Plane):	45°-65° (f > 150 MHz)
Isotropic Gain (LP-Section):	6.4+/- 1.2 dBi	3 dB Beamwidth typ. (E-Plane):	78° (f < 150 MHz)
Antenna Factor:	7 ... 43 dB/m	3 dB Beamwidth typ. (H-Plane):	90°-120° (f > 150 MHz)
Nominal Impedance:	50 Ω	Input power	200 W (intermitt.) 100 W (cont.) Max.
Standing Wave Ratio SWR typical:	<1.5 (f > 150 MHz)	Input connector:	N-Connector female
Front to Back Ratio:	20 dB (f > 150 MHz)	Mount:	22 mm Tube
Weight:	3.1 kg	Width x Length x Thickness:	1500 x 1253 x 620 mm

