



PRODUCT DESCRIPTION:

The OMNI-A0190 is a compact monitoring antenna. Supplied in both active and passive versions, it allows monitoring over the full 20 to 6000 MHz band.

The active version of the antenna includes amplification to help improve sensitivity. The lower cost passive version has no amplification and is more appropriate for use where high incident power levels are expected.

Table-top mounting is used for system demonstrations. Using the supplied base and RF cable, the antenna can be neatly positioned on a table for shows, meetings and demos. The product printing can be customised to suit the client's requirements.

Mast-mounting with the supplied bracket allows the antenna to be permanently mounted outdoors. The antenna is waterproof and UV stabilised, it can be used as a compact antenna for a permanent monitoring system.

The antenna gain can be characterised if required for field strength monitoring requirements.

The OMNI-A0190-05 has built in internal E-field protection circuitry.

SPECIFICATIONS:

Product codes:		
OMNI-A0190	Active version including amplifier	
OMNI-A0190-02	Passive version	
OMNI-A0190-03	Active version including amplifier without table stand. Supplied with RF cable with N-m connector	
OMNI-A0190-04	Passive version without table stand. Supplied with RF cable with N-m connector	
OMNI-A0190-05	Active version including amplifier without table stand. Supplied with RF cable with N-m connector. Contains internal E-Field protection circuitry via 2W limiter.	
Electrical:		
	OMNI-A0190	OMNI-A0190-02
Frequency range	20 – 6000 MHz, gain drops off below 80 MHz	
Polarisation	Vertical	
VSWR	< 2.5:1 typical (active version)	
Nominal input impedance	50 Ω	
Internal construction	2 x bi-conical antennas with diplexer	
Connectors	1 x TNC-f in base for standard and -02 versions 1 X N-f in base for -03, -04 and -05 versions	
OP1dB (typ.) (in active mode)	11 - 15.5 dBm	
OIP3 (typ.) (in active mode)	24 - 30 dBm	
Noise Figure	5 dB	
E-plane beamwidth	60° nominal	
H-plane beamwidth	360°	
Azimuth ripple	< 6 dB	
DC voltage supply	15 ± 1 VDC	-
Supply current	< 150 mA	-
Amplifier gain	10 dB nominal	-
Mechanical:		
Dimensions, antenna	Ø102 mm x 311 mm	
Total mass	1 kg	
Mounting method, table	Mounts on supplied stand Includes 2 m flexible cable	
Mounting method, mast	Mounts to 30 mm to 60 mm pole using supplied right-angle U-bolt bracket	
Environmental: designed to meet the following specifications		
Wind survival	160 km/h when mounted on pole	
Effective wind area	0.03 m ²	
Temperature Operational	-35 °C to +71 °C	
Temperature Storage	-40 °C to +71 °C	
Humidity	0% to 95%	
Rain and dust proof	IP 65 rain resistant	

Compact Monitoring Antenna

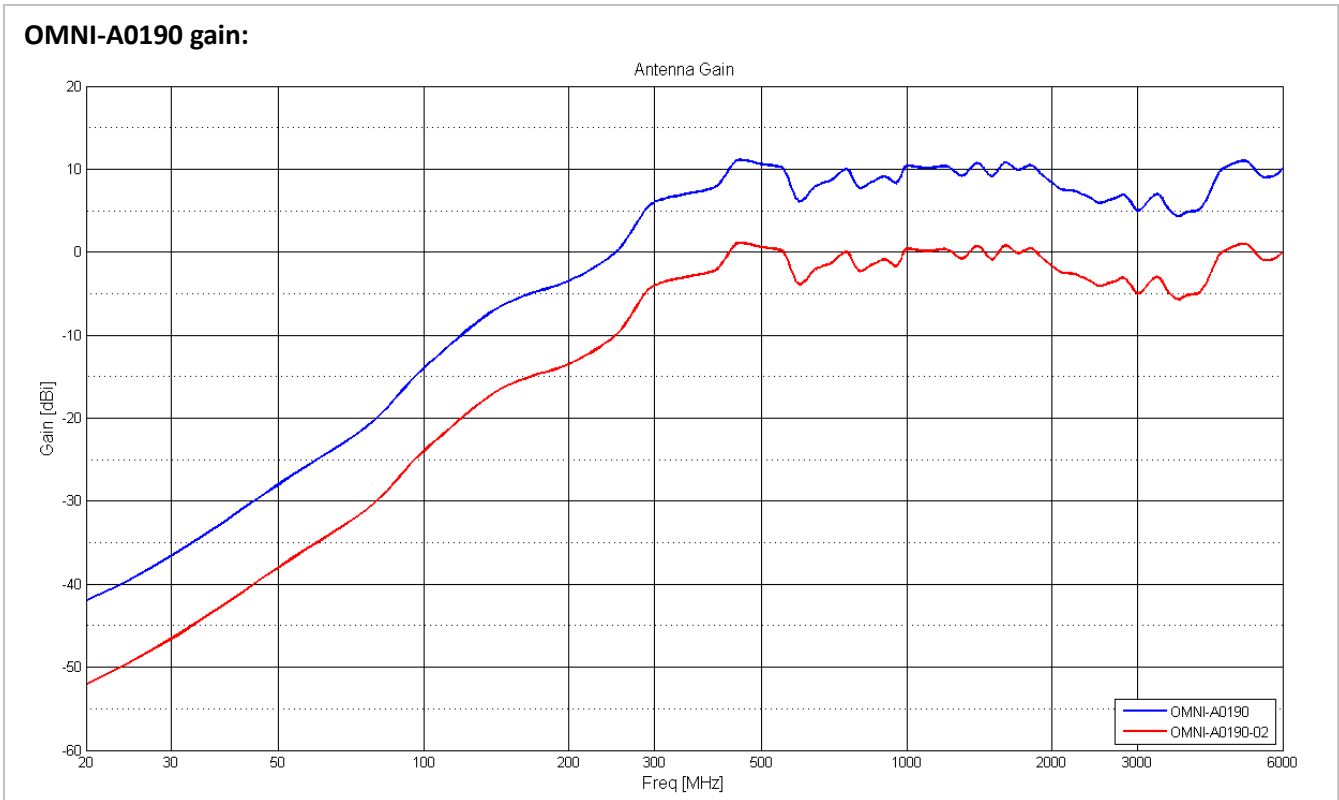
20 – 6000 MHz

Product Code: OMNI-A0190

VERSION: 2.3

GAIN AND FIELD STRENGTH SENSITIVITY GRAPHS:

OMNI-A0190 gain:



OMNI-A0190 field strength sensitivity:

