

Compact Monitoring Antenna

20 – 6000 MHz

VERSION: 1.1

Product Code: OMNI-A0333



SPECIFICATIONS:

| Product codes: | | |
|--|---|---------------|
| OMNI-A0333 | Active antenna | |
| OMNI-A0333-01 | Active antenna with passive bypass | |
| OMNI-A0333-02 | Passive antenna | |
| Electrical: | OMNI-A0333 /-01 | OMNI-A0333-02 |
| Frequency range | 20 – 6000 MHz | |
| Polarisation | Vertical | |
| VSWR | < 2.5:1 typical (active version) | |
| Nominal input impedance | 50 Ω | |
| Connectors | 1 X N-type female | |
| 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 | 16.9 dB @ 2 GHz | - |
| Amplifier noise figure | See graph | |
| Relay durability | > 1 M operations | |
| Relay switching time | < 3 ms | |
| Mechanical: | | |
| Dimensions, antenna | < Ø120 mm x 200 mm | |
| Total mass | 1 kg | |
| 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 range | -30 °C to +70 °C | |
| Humidity | 0% to 85% | |
| Rain and dust proof | IP 65 rain resistant | |

PRODUCT FEATURES:

- Ultra-wideband 20 to 6000 MHz
- Very good sensitivity
- Low profile compared to passive alternatives
- IP65

APPLICATION AREAS:

- General spectrum monitoring
- Suitable for mast-mount applications

RELATED PRODUCTS:

- MISC-A0022 power supply

PRODUCT DESCRIPTION:

The OMNI-A0333 is a compact monitoring antenna. Supplied in active, active with passive bypass 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 antenna is best utilised with the MISC-A0022 power supply which injects DF power into the antenna to power the amplifier. The OMNI-A0333-01 features a passive-bypass mode which is engaged when the antenna is not powered. In this mode, the antenna is completely passive, allowing for low distortion measurements in the presence of high incident fields.

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.

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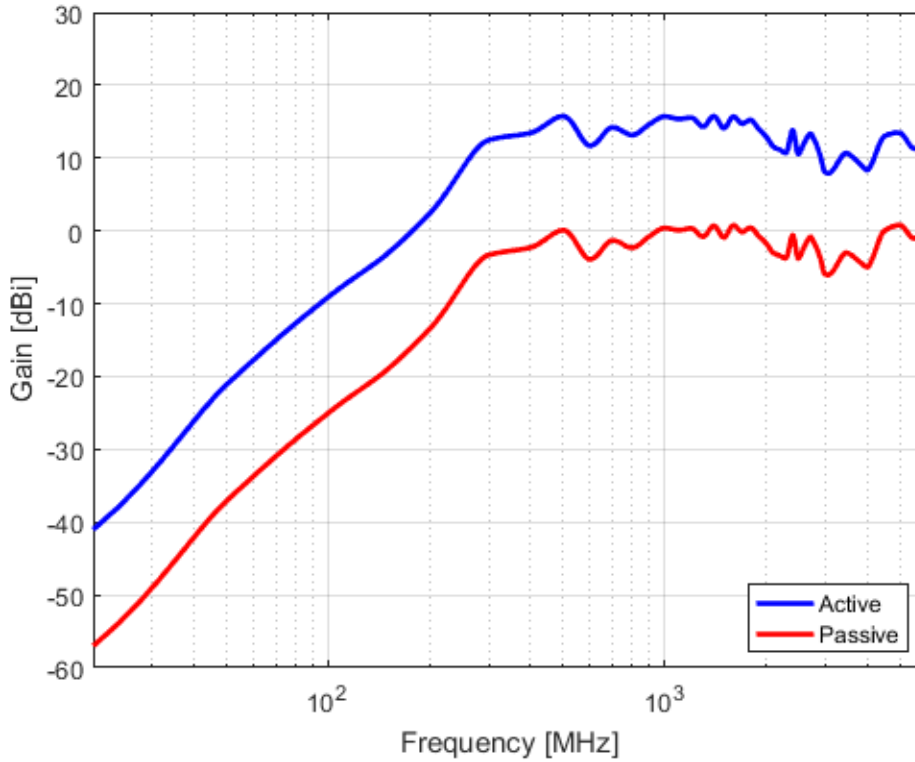
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GAIN AND NOISE FIGURE GRAPHS:

Gain:



Noise figure:

