

WA-ATDA

Passive / Active UHF Directional Antenna

Order # 711.004



FEATURES

- Passive and active logarithmic periodic directional antenna for the UHF range between 470 and 1,000 MHz
- Selectable gain of passive (0 dB), low gain (6 dB), high gain (12 dB)
- Compatible to all receivers and antenna splitters, with a supply voltage of 8 - 9 V DC
- Integrated thread adapter (3/8" or 5/8") for easy mounting to microphone stands

TECHNICAL SPECIFICATIONS

| | |
|--------------------------------|--|
| Frequency range | 470 - 1,000 MHz |
| Overload Intercept Point | |
| 3 rd order (OIP3) | 26 dBm |
| Antenna gain | 5 dBi |
| Selectable gain in 3 stages | 0 dB (passive), +6 dB, +12 dB |
| Power consumption | 8-9 V DC, 75 mA |
| Wave impedance | 50 Ω |
| Polar pattern / beam width | beam width: 120° (-10 dB) vertical |
| Operating temperature | 0 °C to +45 °C [32 °F to 113 °F] |
| RF connector | BNC socket |
| Overall dimensions (H x W x D) | 332 x 270 x 25 mm [13.07" x 10.63" x 0.98"] |
| Weight | 270 g [9.5 oz.] |
| IP protection class | IP53 |

APPLICATIONS

The active WA-ATDA directional antenna is a receiving antenna for indoor or outdoor use. It has a logarithmic periodic dipole field and provides a better reception and suppression of interfering RF signals from the rear than omnidirectional half-wave antennas due to its lobe polar pattern.

The antenna operates in the UHF range between 470 and 1,000 MHz and can be used with all wireless system with an antenna voltage of 8 to 9 V such as the beyerdynamic series TG 1000. It is connected via a BNC socket.

The WA-ATDA can be operated as a passive or active antenna with a selectable gain of 6 or 12 dB. The selectable gain can compensate cable loss.

The external voltage supply of 8-9 V DC is achieved via a coaxial cable connected to a receiver or antenna splitter. An LED displays the correct supply voltage. If the gain has been set to "passive", the antenna operates in the passive mode, for which a supply voltage is required as well.

The antenna can be mounted on stands (3/8" or 5/8"), installed hanging from a ceiling or attached to a wall by using the integrated swivelling adapter.

For diversity operation two WA-ATDA antennas are required.

SUPPLIED ACCESSORY

TNC-BNC Adapter Order # 475.203

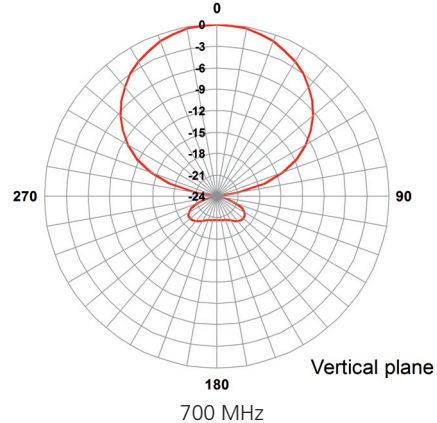
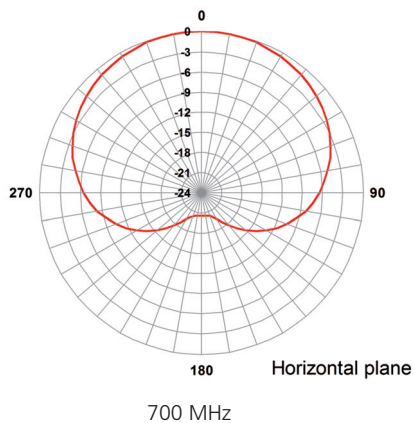
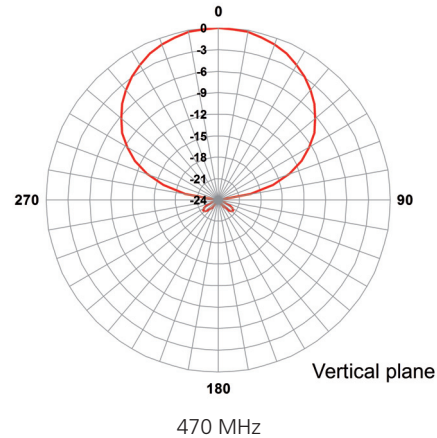
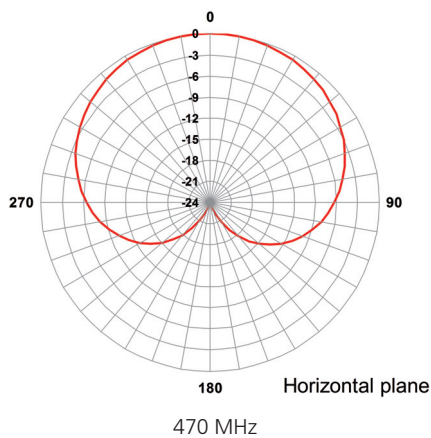
WA-ATDA

TABLE CABLE LENGTH / GAIN

The table below displays which gain has to be selected for the appropriate cable type and cable length.

| | Standard Cable | Professional beyerdynamic Cable |
|----------------|-------------------------------|---------------------------------|
| | RG 58 (standard cable) | Aircell 7 |
| Passive (0 dB) | <5 m [<16.4 ft] | 0 <10 m [0 <32.81 ft] |
| +6 dB | 10 - 20 m [32.81 - 65.62 ft] | 25 - 50 m [82.02 - 164.04 ft] |
| +12 dB | 25 - 35 m [82.02 - 114.83 ft] | 75 - 100 m [246.06 - 328.08 ft] |

POLAR PATTERNS



OPTIONAL ACCESSORIES

MS-50 Wall-mount set of antennas. Order # 707.732
 WA-ATO Omnidirectional antenna passive,
 470 - 790 MHz Order # 711.586
 WA-AMP Antenna amplifier 470 - 790 MHz . . . Order # 711.497

WA-CKL Connecting cable set of one pair
 to cascade TG 1000 receivers. Order # 711.535
 WA-CKF Connecting cable for antenna front
 mounting, for TG 1000 series Order # 711.527