

The AD-70/A-60120 is an omnidirectional antenna with horizontal polarization. It has wide coverage in the UHF frequency range of 600 to 1200 MHz and is mainly used for monitoring horizontally polarized RF signals. Thanks to its sturdy design, it can also be used for jamming applications. The antenna's unique design allows for various types of mounting.

The antenna is composed of two main parts: the antenna base and the antenna radiating element. The radiating element is protected by a hard plastic material. The radiating element is painted with military green (RAL 6014) two-component UV-resistant paint.

The vehicle antenna base is made of aluminum and durable plastic materials, optionally with integrated GPS L1 or L1/L2. The vehicle antenna base has NATO standard mounting holes equally spaced on a 4.5" (114.3 mm) circle.

The mast antenna base is made of two stainless steel joints and a aluminum tube with an outer diameter of 42.7 mm. The tube is equipped with special mounting console adapters which can be installed on the poles up to 60 mm in diameter.

The plate antenna base is designed for through-hole installation (hole diameter 30 - 31 mm), with plate thickness of max. 10 mm.

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| ELECTRICAL SPECS.: | |
| Frequency range | 600 - 1200 MHz |
| Impedance | 50 ohms |
| VSWR | < 2.5 |
| Gain | See diagram |
| Polarization | Horizontal |
| Radiation Pattern | Omnidirectional |
| Maximum power | 500 W CW |
| Connector | N female |
| ELECTRICAL SPECS - GPS: | |
| Frequency range | L1 1575.42 +/- 40 MHz or L1/L2 1575/1227 MHz |
| Impedance | 50 ohms |
| VSWR | < 2 |
| Polarization | RHC |
| Gain (LNA) / Voltage / Current | 18 dB (+/- 2 dB) / 5 V / 19 mA 16 dB (+/- 2 dB) / 3.5 V / 13 mA 10 dB (+/- 2 dB) / 2 V / 7 mA |
| Noise fig. | < 1.5 dB |
| Connector | SMA female |
| MECHANICAL SPECS: | |
| Design | Dipole |
| Height (Option 1) | 385 mm |
| Height (Option 2) | 420 mm |
| Height (Option 3) | 200 mm |
| Weight (Option 1) | 5.80 kg |
| Weight (Option 2) | 5.61 kg |
| Weight (Option 3) | 4.19 kg |
| Wind rating | 50 m/s (180 km/h) |
| Color | RAL 6014 |
| ENVIRONMENTAL SPECS: | |
| High Temperature - Storage | MIL-STD-810G; Method 501.5; Proc. I; +75 °C for 96h |
| High Temperature - Operating | MIL-STD-810G; Method 501.5; Proc. II; +65 °C for 16h |
| Low Temperature - Storage | MIL-STD-810G; Method 502.5; Proc. I; -55 °C for 96h |
| Low temperature - Operating | MIL-STD-810G; Method 502.5; Proc. II; -40 °C for 16h |
| Humidity | MIL-STD-810G; Method 507.5; 10 cycles of 24 h; 95% |
| Solar radiation | MIL-STD-810G; Method 505.5; Proc. I; 3 cycles |
| Rain | MIL-STD-810G; Method 506.5; Proc. III |
| Icing/Freezing Rain | MIL-STD-810G; Method 521.5 |
| Sand and Dust | MIL-STD-810G; Method 510.5; Proc. I and II |
| Vibration | MIL-STD 810G, Method 514.6; Proc. I |
| Shock-Transit Drop | MIL-STD-810G, Method 516.6, Procedure IV |



Option 1:
Vehicle base: AD-70/A-60120-V



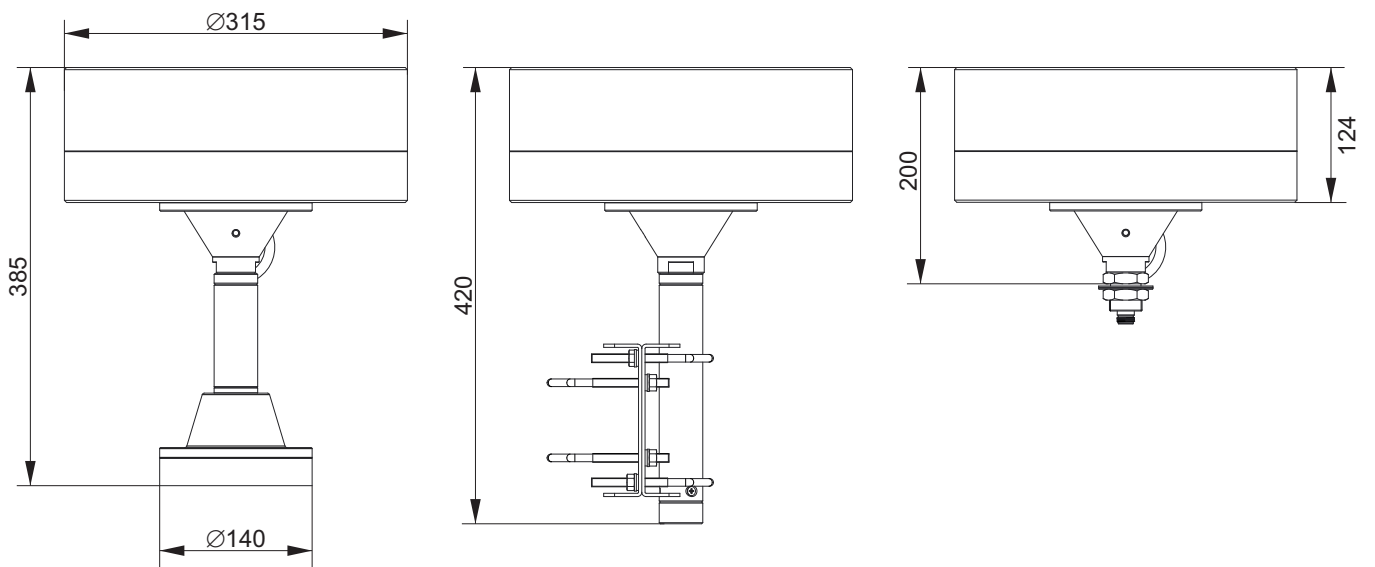
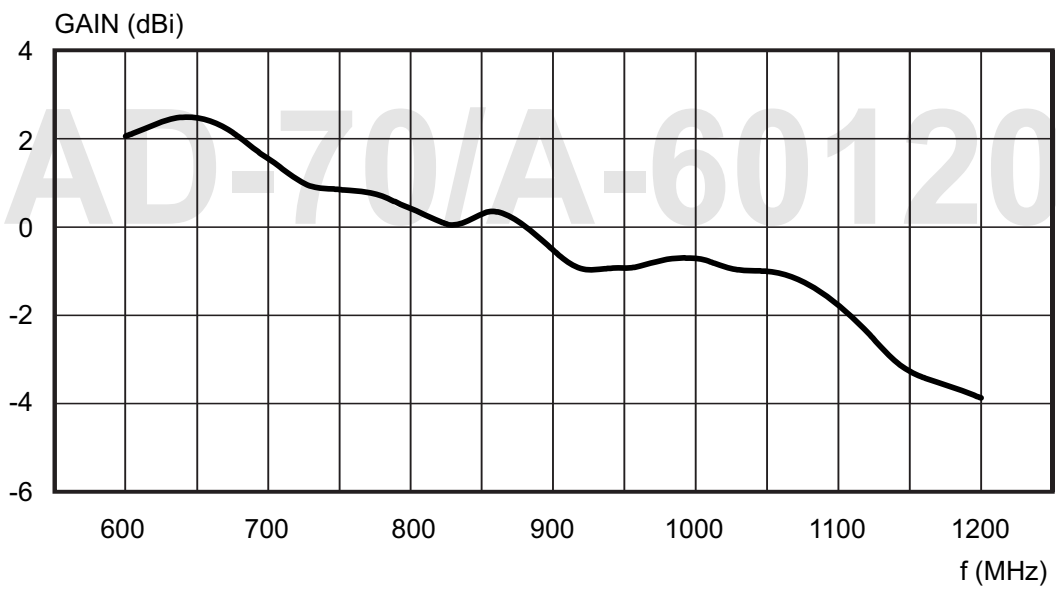
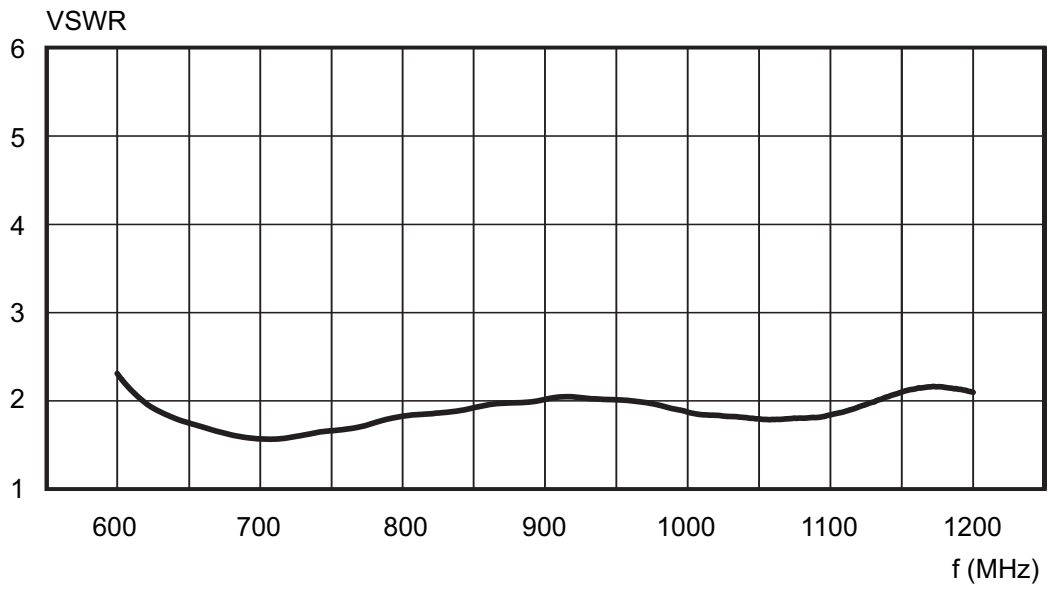
Option 3:
Plate base: AD-70/A-60120-U

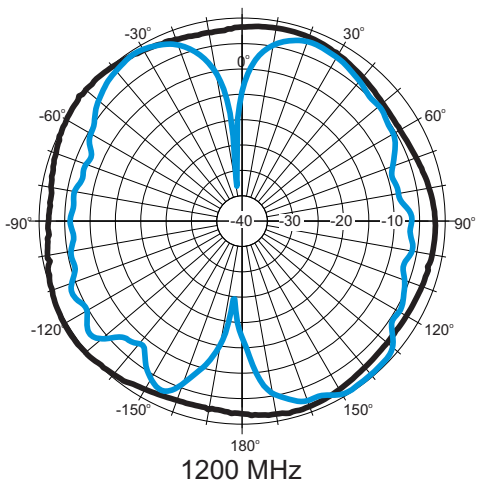
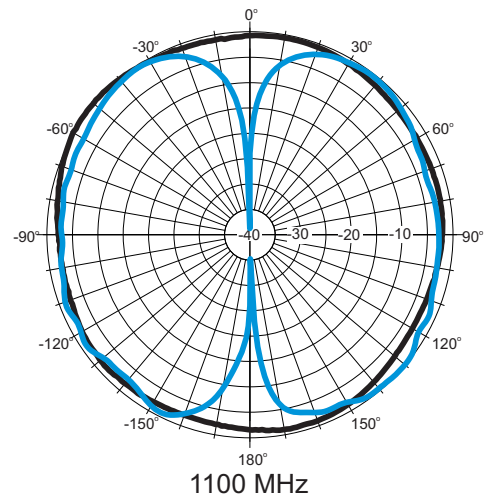
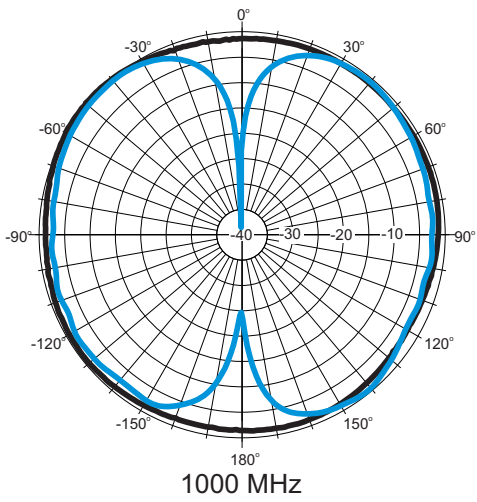
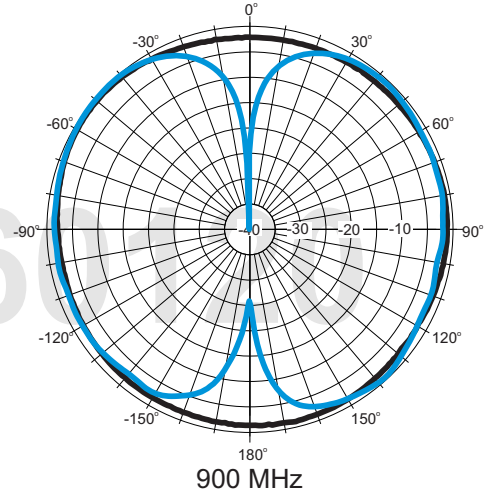
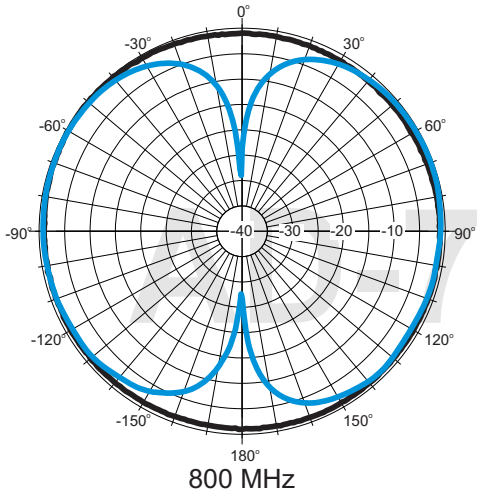
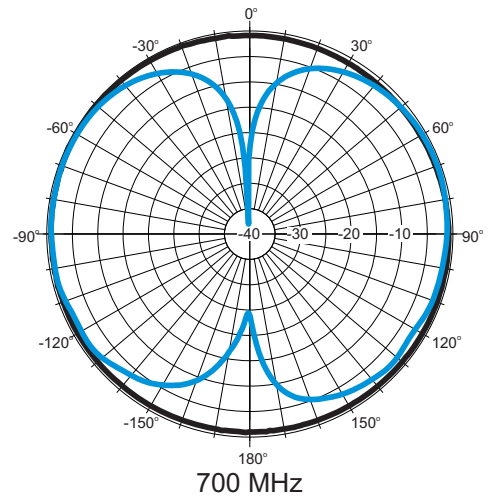
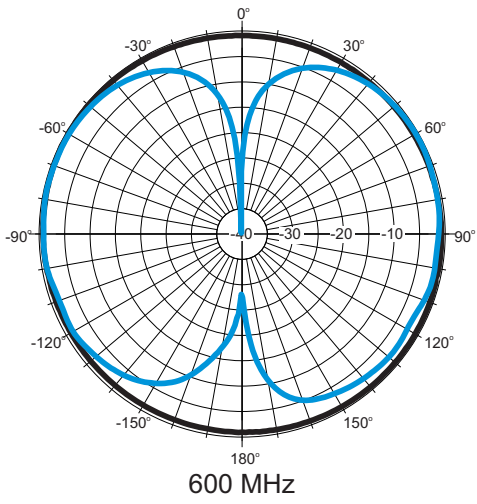


Option 2:
Mast base: AD-70/A-60120-M

VERSIONS:

- AD-70/A-60120-V-N*: UHF antenna with N female connector on vehicle base
 - AD-70/A-60120-V-G-N*: combined UHF (N female) and GPS L1 (SMA female) antenna
 - AD-70/A-60120-V-G2-N*: combined UHF (N female) and GPS L1/L2 (SMA female) antenna
 - AD-70/A-60120-M-N*: UHF antenna with N female connector on mast base
 - AD-70/A-60120-U-N*: UHF antenna with N female connector on plate base
- * N connector by default, others connectors are available on request: BNC or TNC female





RADIATION PATTERNS

E plane ———
 H plane ———