



AD-27/DB-3512-S

The antenna AD-27/DB-3512-S is a dual-band monopole/dipole mobile antenna intended for use in heavy-duty mobile applications. The antenna is covering a frequency range from 30 to 108 MHz and from 225 to 512 MHz. Due to the special monopole design in the radiator, the ground for the VHF is not needed. That way the antenna can be also installed on a mast. The antenna is composed of two main parts: an antenna base and a radiating element. The antenna base is made of aluminum and durable plastic materials. Stainless steel spring absorbs the shocks and the vibrations, in addition, protect the antenna against impacts. The antenna base has built-in surge protection. The radiating element is made of composite materials that enable outstanding strength and roughness even in the hardest conditions of use. The antenna base has four mounting holes equally spaced on a 4.5" (114.3 mm) circle which complies with NATO standard. The antenna radiator is painted with military green (RAL-6014) two-component UV resistant paint. Other colors are available on request.

ELECTRICAL SPECS.: Frequency range Impedance VSWR Gain Polarization Radiation Pattern Maximum power Connector	30 - 108 MHz & 225 - 512 MHz 50 ohms < 3 See diagram Linear Vertical Omnidirectional 100 W CW N female
ELECTRICAL SPECS - GPS: Frequency range Impedance VSWR Polarization L1 Gain (LNA) Noise fig. Connector	L1 1575.42 +/- 40 MHz or L1/L2 1575/1227 MHz 50 ohms < 2 RHC 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 <1.5 dB SMA female
MECHANICAL SPECS: Design Height Weight Max. high voltage rating Wind rating Color	Monopole (30 - 108 MHz) & Dipole (225 - 512 MHz) 1980 mm 4 kg 16 kV 45 m/s (160 km/h) MIL Green
ENVIRONMENTAL SPECS: High Temperature - Storage High Temperature - Operating Low Temperature - Storage Low temperature - Operating Humidity Solar radiation Rain Icing/Freezing Rain Sand and Dust Vibration Shock-Transit Drop Contamination by Fluids Oak-beam test EMP Protection	MIL-STD-810G; Method 501.5; Proc. I; +75 °C for 96h MIL-STD-810G; Method 501.5; Proc. II; +65 °C for 16h MIL-STD-810G; Method 502.5; Proc. I; -55 °C for 96h MIL-STD-810G; Method 502.5; Proc. II; -40 °C for 16h MIL-STD-810G; Method 507.5; 10 cycles of 24 h; 95% MIL-STD-810G; Method 505.5; Proc. I; 3 cycles MIL-STD-810G; Method 506.5; Proc. III MIL-STD-810G; Method 521.5 MIL-STD-810G; Method 510.5; Proc. I and II MIL-STD 810G, Method 514.6; Proc. I MIL-STD-810G, Method 516.6, Procedure IV MIL-STD-810G, Method 504.1, Procedure II (Fuels, Hydraulic Oils and Lubricating Oils acc. to the Table 504.1-I.) 20 hits on 100 mm oak beam at speed 25 km/h MIL-STD 461E RS105

VERSIONS:

AD-27/DB-3512-S-N: VHF/UHF antenna with N female connector

AD-27/DB-3512-S-G-N: combined VHF/UHF (N female) and GPS L1 (SMA female) antenna

AD-27/DB-3512-S-G2-N: combined VHF/UHF (N female) and GPS L1/L2 (SMA female) antenna



