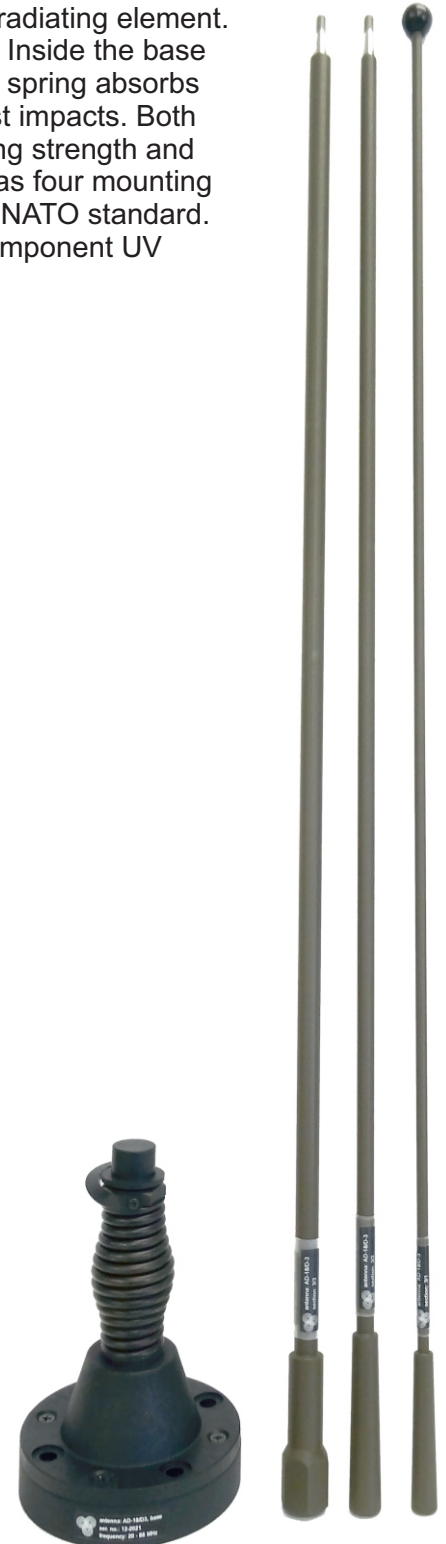


The antenna AD-18/D3 is a wideband mobile VHF antenna for a frequency range from 20 to 88 MHz, mainly intended for use in heavy-duty mobile applications. The antenna is composed of four main parts: antenna base, lower, middle and upper radiating element. The antenna base is made of aluminum and durable plastic materials. Inside the base are the matching circuitry and (optional) GPS antenna. Stainless steel spring absorbs the shocks and the vibrations, in addition, protects the antenna against impacts. Both radiating elements are made of composite materials 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.

<b>ELECTRICAL SPECS.:</b>	
Frequency range	20 - 88 MHz
Impedance	50 ohms
VSWR	< 3.5
Gain	See diagram
Polarization	Linear Vertical
Radiation Pattern	Omnidirectional
Maximum power	100 W CW
Connector	N female
<b>ELECTRICAL SPECS - GPS:</b>	
Frequency range	L1: 1575.42 +/- 10 MHz or L1/L2 1575.42 / 1227.60 MHz
Impedance	50 ohms
VSWR	< 2
Polarization	RHC
LNA Gain / 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
<b>MECHANICAL SPECS:</b>	
Design	Monopole 20 - 88 MHz
Height	3400 mm
Weight	3,1 kg
Max. high voltage rating	16 kV
Wind rating	45 m/s (160 km/h)
Color	MIL Green
<b>ENVIRONMENTAL SPECS:</b>	
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
Contamination by Fluids	MIL-STD-810G, Method 504.1, Procedure II (Fuels, Hydraulic Oils and Lubricating Oils acc. to the Table 504.1-I.)
Oak-beam test	20 hits on 100 mm oak beam at speed 25 km/h
EMP Protection	MIL-STD 461E RS105

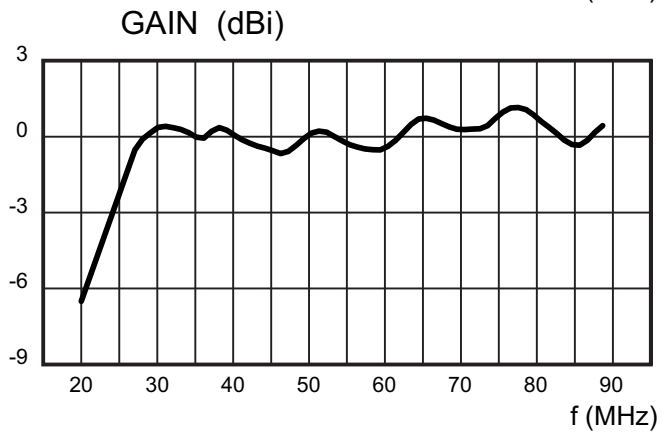
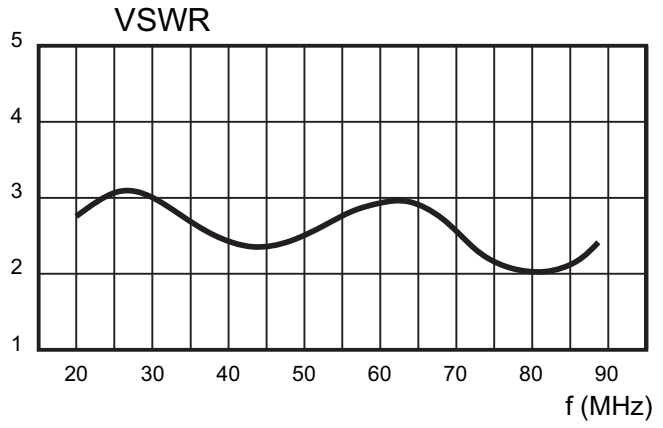
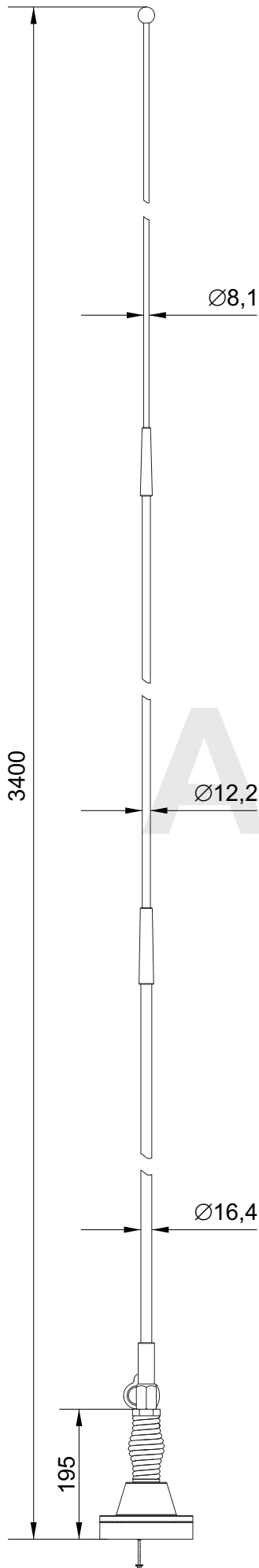

**VERSIONS:**

AD-18/D3-N: VHF antenna with N female connector

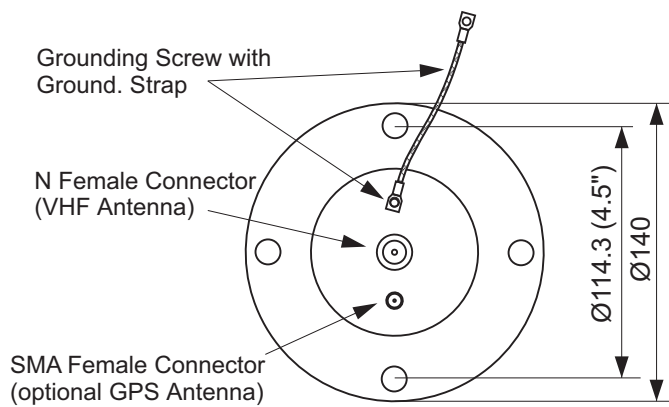
AD-18/D3-G-N: combined VHF (N female) and GPS L1 (SMA female) antenna

AD-18/D3-BNC: VHF antenna with BNC female connector

AD-18/D3-G-BNC: combined VHF (BNC female) and GPS L1 (SMA female) antenna



# AD-18/D3



ANTENNA BASE - BOTTOM VIEW

