

The antenna AD-18/CF-3108 is VHF "center-fed" type wideband mobile VHF antenna for frequency range from 30 to 108 MHz, mainly intended for use in heavy duty mobile applications. The antenna is composed of three main parts: antenna base, lower and upper radiating element. The antenna base is made of aluminum and durable plastic materials. Inside the base is 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 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. Different base plate dimensions are available on request. The antenna radiator is painted with military green (RAL-6014) two-component UV resistant paint. Other colors are available on request.

ELECTRICAL SPECS - VHF:	
Frequency range	30 - 108 MHz
Impedance	50 ohms
VSWR	< 3,5
Gain	-3 .. +1 dBi
Polarization	vert.
Maximum power	100 W CW
Connector	N female (BNC female optional)
ELECTRICAL SPECS - GPS:	
Frequency range	L1 1575.42 +/- 10 MHz or L1/L2 1575/1227 MHz
Impedance	50 ohms
VSWR	< 2
Polarization	RHC
Gain (LNA)	26 dB
Noise fig.	1.35 dB
Power supply	3 - 5 V DC (max. 10 mA)
Connector	SMA female
MECHANICAL SPECS:	
Design	Center-fed (VHF) Antenna
Height	2955 mm
Weight	3.6 kg
Max. high voltage rating	16 kV
Wind rating	45 m/s (160 km/h)
Color	MIL Green
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
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/CF-3108-N: VHF antenna with N female connector

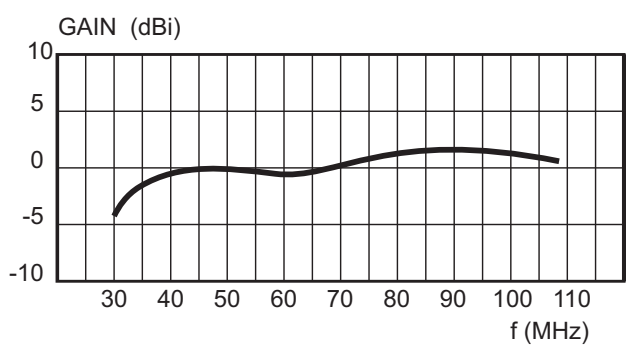
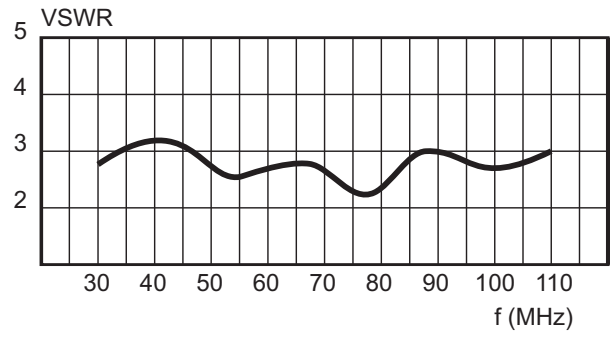
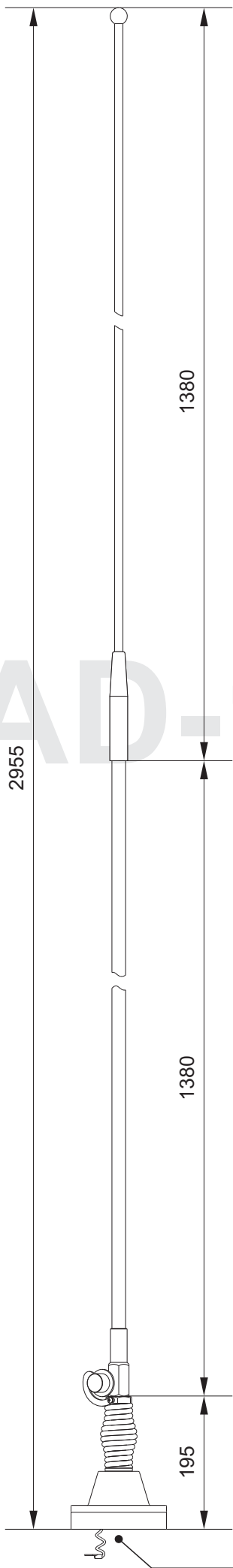
AD-18/CF-3108-G-N: combined VHF (N female) and GPS L1 (SMA female) antenna

AD-18/CF-3108-G2-N: combined VHF (N female) and GPS L1/L2 (SMA female) antenna

AD-18/CF-3108-BNC: VHF antenna with BNC female connector

AD-18/CF-3108-G-BNC: combined VHF (BNC female) and GPS L1 (SMA female) antenna

AD-18/CF-3108-G2-BNC: combined VHF (BNC female) and GPS L1/L2 (SMA female) antenna



AD-18/CF-3108

Rev. A

