

The antenna AD-18/D-3512-DF is a wideband monopole VHF/UHF mobile antenna for frequency range from 30 to 512 MHz with the antenna diplexer built inside the antenna housing, enables connection of the two separate VHF and UHF radio units on the same antenna. The separate GPS antenna is built inside the antenna base as an option.

The antenna is composed of two main parts: antenna base and radiator. The antenna base is made of aluminum and durable plastic materials. Inside the base is the matching circuitry for the VHF/UHF antenna radiator together with the VHF/UHF diplexer which enables separate feed for VHF and UHF signals. Stainless steel spring above the housing absorbs the shocks and the vibrations, in addition protects the antenna against impacts. Two sections antenna radiator are made of brass tubing enclosed in strong and durable fiberglass radome tube.

The antenna base has four mounting holes equally spaced on a 4.5" (114.3 mm) circle which complies with NATO and US army standard.

The antenna radiator is painted MIL Green while the antenna base with the spring is black colour.



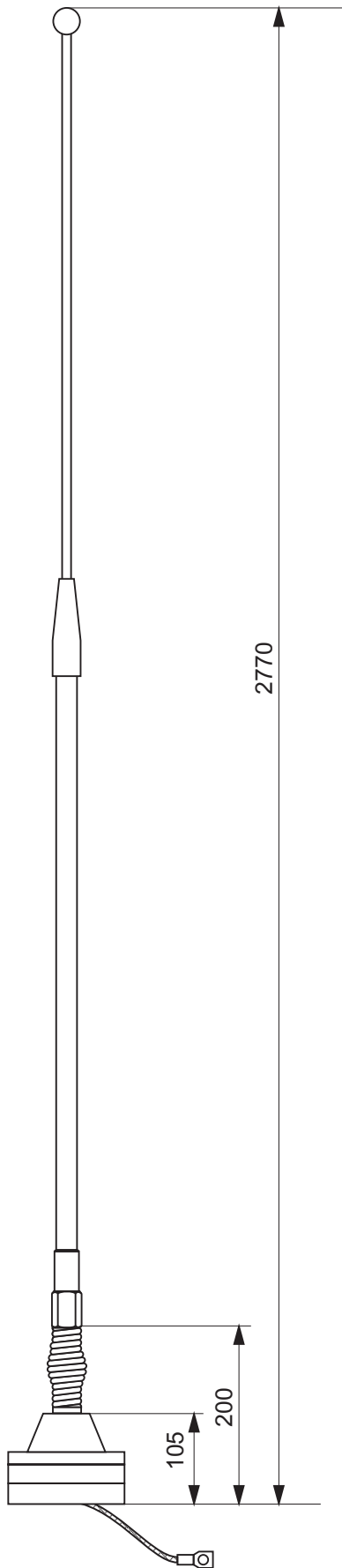
ELECTRICAL SPECIFICATIONS:	
Frequency range (MHz)	30 - 88 (VHF); 225 - 512 (UHF)
Impedance (Ohms)	50
VSWR	< 3,5
Gain (dB)	-6 ... +3 (see diagram)
Port to port isolation (dB)	> 45
Polarization	vert.
Maximum power (W)	75 CW avg.; 100 max.
Connector	N female (VHF), BNC female (UHF)
ELECTRICAL SPECIFICATIONS - GPS:	
Frequency range	1575.42 + 1227.60 MHz (L1/L2)
Impedance	50 ohm
VSWR	< 2
Polarization	RHC
Gain (LNA)	≥ 30 dB
Noise fig.	< 2 dB
Power supply	2.5 - 6.0 V DC (9 mA max.)
Connector	SMA female
MECHANICAL SPECIFICATIONS:	
Design	End fed whip (VHF), dipole (UHF), patch (GPS)
Height (m)	2.75 m
Weight (kg)	~ 4 kg
Max. high voltage rating (kV)	16 kV
Temperature range - in use (°C)	-50 ... +55 °C
Temperature range - in stock (°C)	-55 ... +75 °C
Wind rating (km/h)	160
Color	MIL Green - Black

Versions:

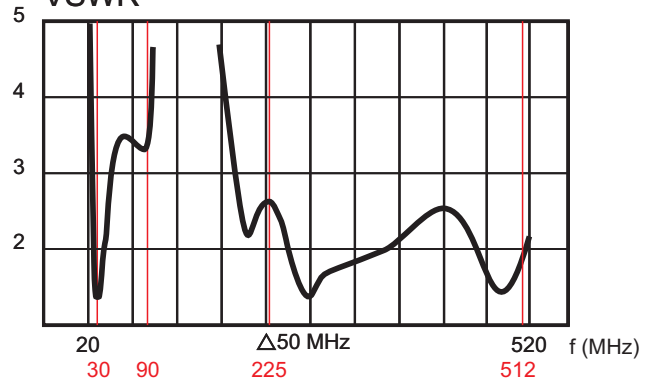
AD-18/D-3512-DF: VHF/UHF 30-88/225-512 MHz Dual-Band Dual-Feed antenna

AD-18/D-3512-DF-G: VHF/UHF 30-88/225-512 MHz Dual-Band Dual-Feed antenna with GPS L1

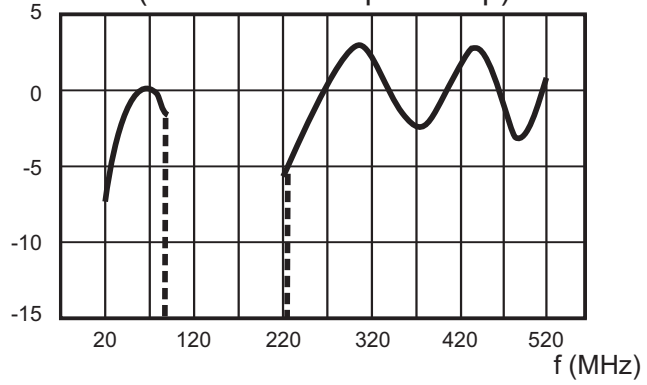
AD-18/D-3512-DF-G2: VHF/UHF 30-88/225-512 MHz Dual-Band Dual-Feed antenna with GPS L1 and L2



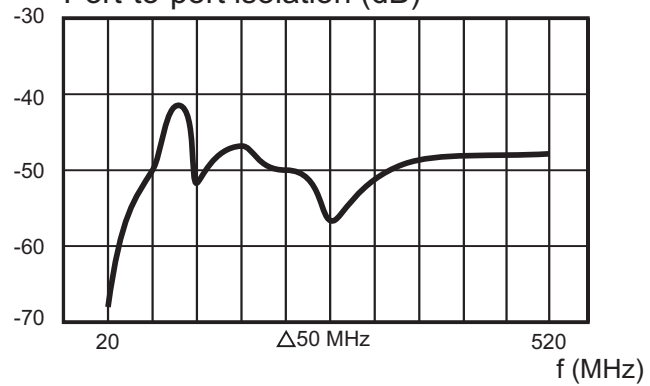
VSWR



Gain (dB to 1/4 monopole whip)



Port-to-port isolation (dB)



Bottom View

