SYSTEMWARE Europe Ltd
www.sysware-europe.com

# SWE-10-AD-18/CF-388

The antenna SWE-10-AD-18/CF-388 is VHF "center-fed" type wideband mobile VHF antenna for frequency range 30-88MHz 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 by request.

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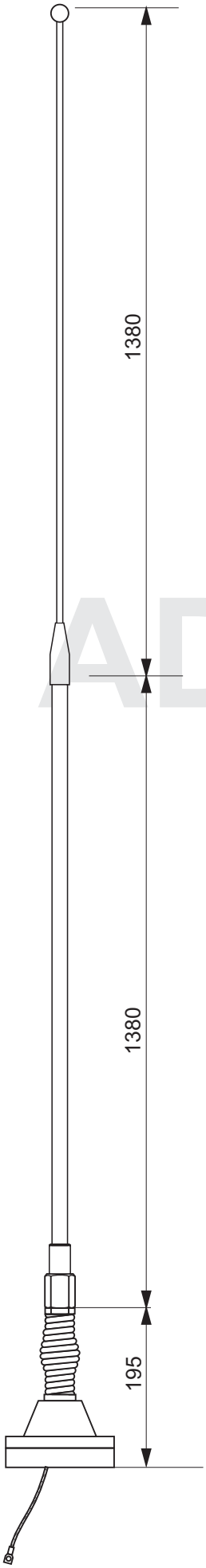
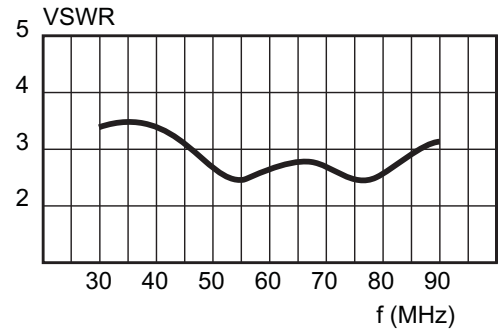
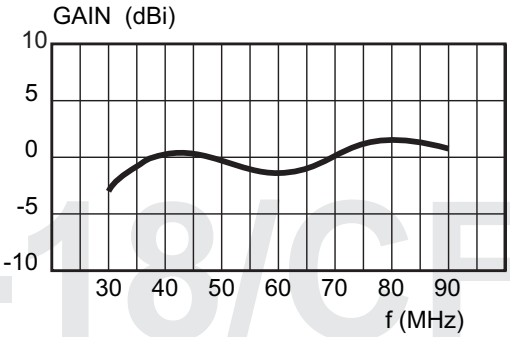
| **ELECTRICAL SPECIFICATIONS - VHF/UHF:** | |
| Frequency range | 30 - 88 MHz |
| Impedance | 50 ohms |
| VSWR | < 3,5 |
| Gain | -3 ..... +1 dBi |
| Polarization | vert. |
| Maximum power | 100 W CW |
| Connector | N female (BNC female optional) |
| **ELECTRICAL SPECIFICATIONS - GPS:** | |
| Frequency 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 SPECIFICATIONS:** | |
| Design | Center-fed (VHF); patch antenna with LNA (GPS) |
| 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 SPECIFICATIONS:** | |
| 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-388: VHF antenna**
**AD-18/CF-388G: combined VHF and GPS L1 antenna**
**AD-18/CF-388G2: combined VHF and GPS L1/L2 antenna**

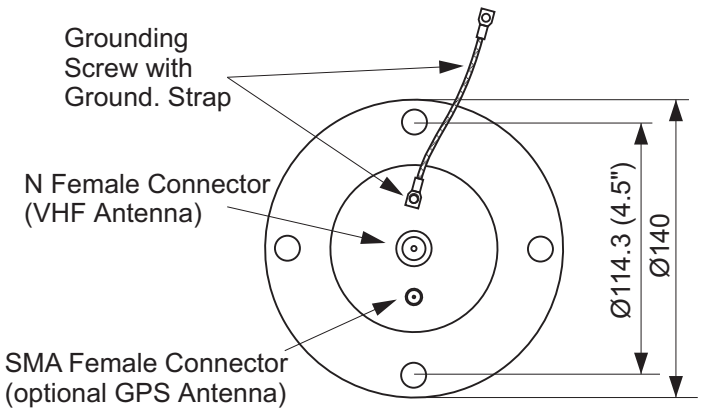
Contact email: enquiries@sysware-europe.com






ANTENNA BASE -
BOTTOM VIEW

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