

ANTENNA GPS ATTIVA AD ALTA SELETTIVITÀ



Caratteristiche Principali - Key Features

- » Costruzione Impermeabile
Weatherproof housing
- » Facilità e rapidità di installazione
Easy and quick Installation
- » Migliore Immunità in presenza di forti campi RF
Improved Filtering for harsh RF jamming environments
- » Comprovata affidabilità e robustezza
Proven extra rugged and reliable
- » Range Esteso di tensione di ingresso da 3 a 5Vdc o 12 Vdc
Wide Input Range 3 to 5 Vdc or 12 Vdc
- » Connettori N
N Connector

HIGH SELECTIVITY GPS ACTIVE ANTENNA

ELAF GPS is a ruggedized GPS antenna, operating on the L1 (1572.42MHz) signal band transmitted by the GPS satellite constellation, specifically designed to provide optimum signal quality in areas characterized by a strong presence of unwanted RF jamming interferences.

The design of the ELAF GPS antenna provides a perfect solution for roof-top, fixed-site installations, where the ability to withstand to extreme environmental conditions is a determining factor for the overall system's operativity.

The rugged and weatherproof construction, make it a reliable choice when exposure to shock, vibrations, extreme temperature, rain, ice and snow are expected.

The careful choice of materials (Aluminium and Stainless Steel) and construction details, allows to achieve a standard quality level of absolute excellence, with a failure ratio close to zero.

The mounting system is optimized for quick and simple operations on clamped masts both vertically or horizontally. The antenna can be used with any GPS receiver or module, capable of supplying a voltage of 3 to 5 volts with minimum variations in the low-noise amplifier gain.

Supplied as an option, the ELSE250 is a device that interposed between the antenna and receiver, offers improved protection to induced surge voltages caused by nearby lightnings.

ELSE250MF CON CONNETTORE / WITH CONNECTOR

Opzioni - Options

- » ELSE250 Protezione Scariche Elettriche
ELSE250 Lightning protection
- » Cavo d'antenna coassiale a bassa perdita, 50 Ohm
Low loss coaxial antenna cable, 50 Ohm



Generali / Physical

Installazione / <i>Installation:</i>	Montaggio esterno / <i>Outdoor mounting</i>
Temperatura di funzionamento / <i>Operative temperature:</i>	Da -40°C a +80°C
Umidità relativa / <i>Relative humidity:</i>	95%
Altezza antenna+mast / <i>Antenna+mast heighth:</i>	320mm
Diametro antenna+ fissaggio / <i>Antenna+mounting base diameter:</i>	86mm
Peso totale (antenna + palo + fissaggio) / <i>Total weight (antenna + mast + mounting base):</i>	800g.
Diam. tubo di ancoraggio vert. o orizz. / <i>Mast diameter vert. or horiz.:</i>	da 30mm a 38mm
Connettore di uscita / <i>Output connector:</i>	Tipo N Femmina / <i>Type Nf</i>
Tensione di alimentazione / <i>Supply voltage:</i>	Da 3 a 5 Vd.c. / <i>3 to 5 Vdc</i>
Corrente di assorbimento / <i>Current absorption:</i>	20mA Max

Specifiche elettriche antenna / Electrical

Centro frequenza / <i>Center frequency:</i>	1575.42MHz +/-3MHz
Larghezza di banda / <i>Bandwidth:</i>	2MHz
Guadagno assoluto / <i>Total gain:</i>	2dBi@ Elevaz. 90° / 2dBi@ Elevation angle 90° 4dBi@ Elevaz. 25° / 4dBi@ Elevation angle 25° 6dBi@ Elevaz.15° / 6dBi@ Elevation angle 15°
Polarizzazione / <i>Polarization:</i>	Circolare destrorsa / <i>Right Hand Circular (R.H.C.P)</i>
WSWR:	2.1Max @ Centro frequenza / <i>2.1Max @ Center Freq.</i>
Impedenza caratteristica / <i>Typ. Impedence:</i>	50 Ohm

Specifiche elettriche amplificatore basso rumore / Low Noise Amplifier Specifications

Frequenza di funzionamento / <i>Operating frequency:</i>	1575.42 MHz +/-1023MHz
Guadagno assoluto / <i>Absolute gain:</i>	28dB (4.5V Temp. amb. / 28dB (4.5 V Amb. Temp.) 26dB (3.3V Temp. amb. / 26dB (3.3 V Amb. Temp.)
Figura di rumore / <i>Noise Figure:</i>	2.0dB (4.5V Temp. amb. / 2.0dB (4.5V Amb. Temp.) 2.2dB (3.3V Temp. amb. / 2.2dB (3.3V Amb. Temp.)
Larghezza di banda / <i>Bandwidth:</i>	2 MHz min.
Reiezione banda / <i>Out of Band Rejection:</i>	50.0 dB min. @1475.42 MHz 45.0 dB min. @1525.42 MHz 45.0 dB min. @1625.42 MHz 50.0 dB min. @1675.42 MHz 50.0 dB min. @1676-2000 MHz
Impedenza di uscita / <i>Output Impedence:</i>	50 Ohm

ELSE250 Protezione Scariche Elettriche (OPZIONALE) / (Option) ELSE250 Lightning protection

Impedenza nominale / <i>Nominal impedence:</i>	50 Ohm
Campo di frequenza / <i>Frequency Range:</i>	3GHz
WSWR:	1:1.5 Max
Perdita di inserzione / <i>Insertion loss:</i>	0.3dB
Tensione di intervento / <i>Impulse Breakdown Voltage:</i>	1000V 5KV/uS Max
Resistenza di isolamento / <i>Isolation Resistance:</i>	10.000 MOhm
Corrente impulso di scarica / <i>Max Withstanding Current:</i>	5000A 8/20uS
Potenza massima / <i>Max Power:</i>	200W
Tensione di rottura / <i>Breakdown Voltage:</i>	90Vdc
Connettori In – Out / <i>In – Out connectors:</i>	N femmina – N maschio / <i>N female – N male</i>
Dimensioni / <i>Dimensions:</i>	86x45x20 mm