VHF30512DB-DD-M

VHF/UHF mast mount whip, dual-band, dipole/dipole, GPS, 3.0 m, 30-88 MHz, 225-512 MHz





Application

Setting a new standard for elevated wideband communication, the VHF30512DB-DD-M combines two independent dipole antennas to offer a complete VHF/UHF solution.

Providing consistent communication performance across both the 30-88 MHz and 225-512 bands, the antenna is suitable for use on all elevated masts. As the antenna does not rely on any monopole element it does not require a ground plane.

This single connector antenna can be supplied with an optional diplexer to split the VHF and UHF frequencies.

A mast mount base is supplied with a Ø40 mm socket ready to interface to a Ø39.5 mm spigot.



Ø40 mm mast mount socket with single RF connector

Electrical Specifications

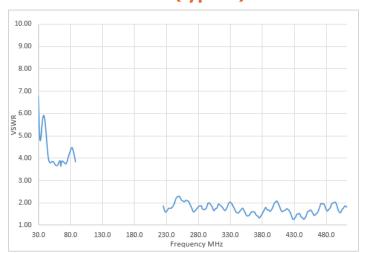
Frequency Range	30-88 MHz	225-512 MHz
Nominal VSWR	< 7 *	< 3
Nominal Impedance	50 Ohm	
Power Rating	80 W	50 W
Gain (typical)	-6 to -3 dBi	-2 to +2 dBi Average 0 dBi
Isolation	-40 dB	-40 dB
Radiation Pattern	Azimuth Omnidirectional	
Polarisation	Vertical	Vertical
Connector	TNC female	

Mechanical Specifications

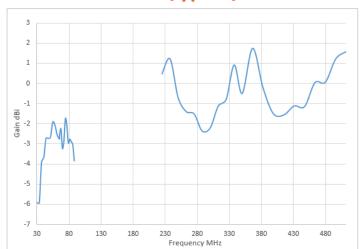
Design	Dual-dipole single connector design. Radiating elements completely enclosed in epoxy/fibreglass laminate. Metal parts plated brass and stainless steel.	
Length	Overall: 3.0 m Base: 0.4 m Lower Whip: 1.7 m Upper Whip: 0.95 m	
Weight	5 kg	
Colour	Customer specified	
Temperature Range	- 40°C to + 71°C	

^{*} See page 2 for VSWR explanation

VSWR (typical)



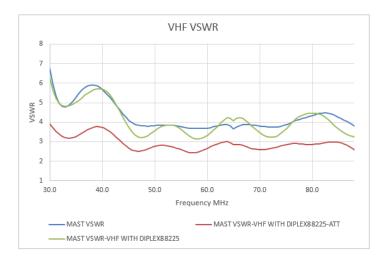
Gain (typical)

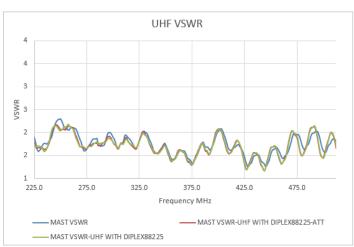


VHF30512DB-DD-M can be supplied with an optional low loss diplexer DIPLEX88225 to split the VHF and UHF frequencies. Two versions are available including DIPLEX88225-ATT which contains an attenuator for improved VHF VSWR performance. See datasheet DIPLEX 88225 for details. See plot below for typical VSWR performance.



DIPLEX-88225-ATT





The optional diplexer is placed at the bottom of the mast. A single coaxial cable is then connected between the antenna connector and the diplexer. Eylex can supply RG223/U coaxial cable in lengths of 10, 15 and 20 m. Cables are supplied with a snap hook for strain relief at the antenna connector.

October 2020

All specifications are subject to change without notice
The information contained herein is for reference only and does not constitute a warranty of performance



