VHF30512DB-DD-M

VHF/UHF Dual-Dipole Mast Antenna
30-88MHz, 225-512MHz

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. Because 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 Ø40mm socket ready to interface to a Ø39.5mm spigot.

Ø40mm mast mount socket with single RF connector

Electrical Specifications

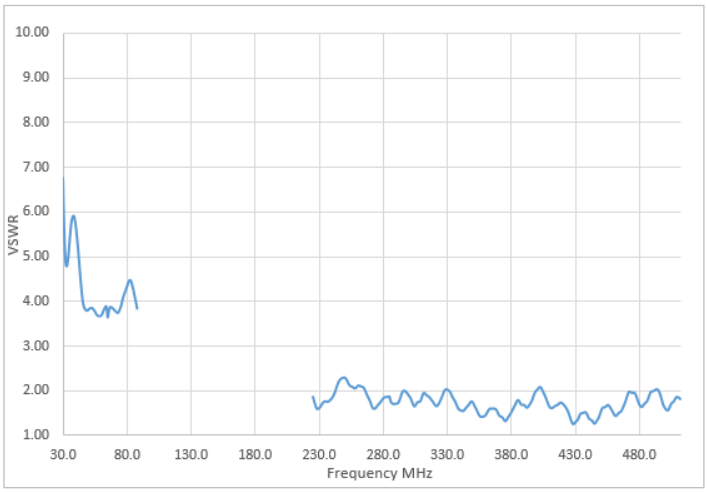
Frequency Range	30-88MHz	225-512MHz
Nominal VSWR	< 7 *	< 3
Nominal impedance	50 Ohm	
Power rating	80 W	50 W
Gain (typical)	-6 to -3 dBi	-2 to +2 dBi Average 0 dBi
Isolation	-40 dB	-40 dB
Radiation pattern	Azimuth Omnidirectional	
Polarisation	Vertical	Vertical
Connector	TNC female	

Mechanical Specifications

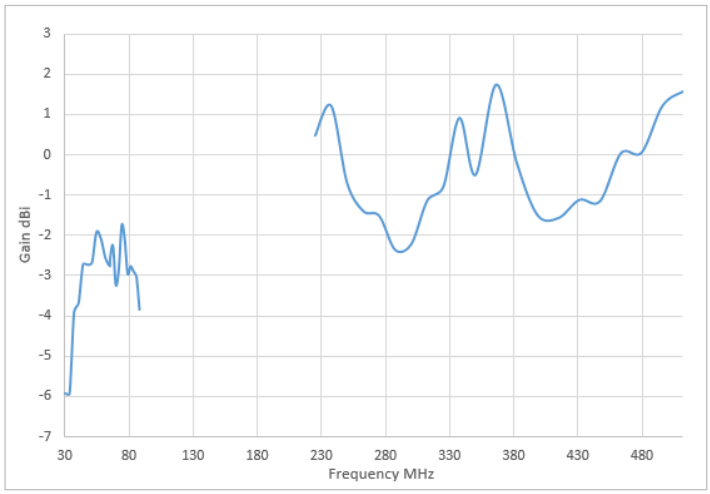
Design	Dual-dipole single connector design. Radiating elements completely enclosed in epoxy/fiberglass laminate. Metal parts plated brass and stainless steel.
Length	Overall - 3.0 m Base - 0.4 m Lower Whip - 1.7 m Upper Whip - 0.95 m
Weight	5 kg
Colour	Customer specified
Temperature range	-40°C +71°C, -40°F + 160°F

* See page 2 for VSWR explanation

VSWR (typical)

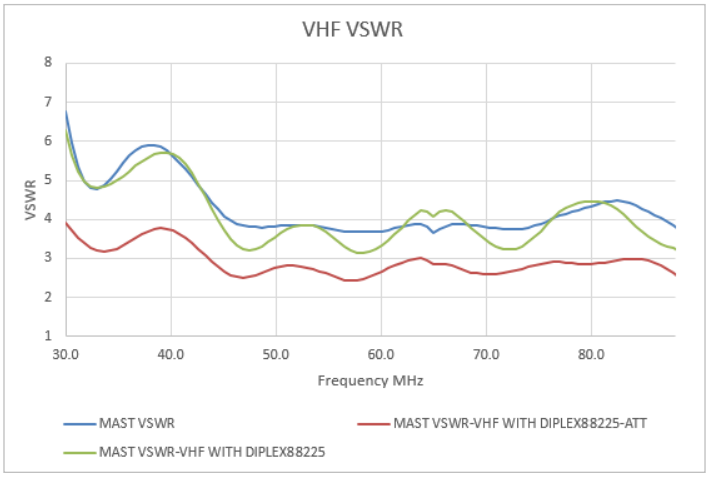


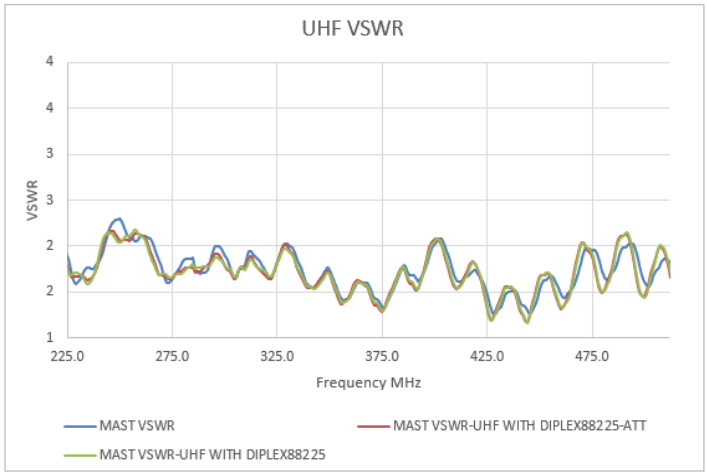
Gain (typical)



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. Comrod can supply RG223/U coaxial cable in lengths of 10, 15 and 20m. Cables are supplied with a snap hook for strain relief at the antenna connector.