

# MV6

## MV6 Multiband Vertical 6 band: HF 20,17,15,12,10m + VHF 6m

**MV6** is a multi-band vertical  $1/4$  lambda Ground Plane operating in the following HAM bands: 20, 17, 15, 12, 10, and 6m. The whip consists of a central radiator for the lowest 20m band, flanked by 4 side stubs resonating on the higher bands (17,15,12,10+VHF 6m NOTE: the 6m-50MHz band is obtained with the 17m stub resonating in 3rd harmonic). Of extremely robust construction, the central whip employs 42x2mm diameter tubes at the base, and 19x1.25mm diameter at the tip, while the side stubs and ground plane radials are made of 13 and 10mm diameter telescopic tubes. The ground plane is formed by 4 horizontal radials of approx. 2.7m length, and the vertical stubs are held in position by 3 crosses, the first one connected to the base of the whip is made of CNC machined rectangular section aluminium tubes, and the other 2 of thermoplastic material, one with 4 arms in the middle part, and one with 2 arms in the upper part. The antenna is fed directly without the use of impedance adapters or transformers, which would introduce losses and limit the power that can be applied. It is equipped with a high-impedance inductance that creates a DC short circuit, grounding any disturbances caused by atmospheric events and/or electrostatic discharges. Tuning is done by adjusting the telescopic parts of the stubs and the central whip. Each frequency is independent and does not affect the other bands, except for the 17m-18MHz band, which also determines the resonance of the 6m-50MHz band. Like all of our products, it is made from the best materials available today, the telescopic tubes are made in Italy from our own AW6063-T66 alloy precision profiles, the fastening is done with robust, quality AISI-316 stainless steel clamps, and the brackets, screws, U-bolts and V-bolts are made from AISI-304 stainless steel.

**REMARK:** If used in windy areas, guying with non-conductive rope using the supplied 3 way clamp is recommended. We recommend the use of a CHOKE (not supplied) to be installed immediately below the connector to avoid possible RF feedback on the coax).

More info on our website

[www.grazioliantenne.com](http://www.grazioliantenne.com)

### Electrical data

Type	$1/4 \lambda$ Ground Plane with parallel stub
Frequency band	HF 20,17,15,12,10 + VHF 6m
Impedance	50 $\Omega$ unbalanced
Radiation	Omnidirectional
Polarization	Linear vertical
Gain (all-band typical)	0dBd - 2.15dBi
Bandwidth @ SWR 2:1	20, 17, 15, 12, 10m full band VHF 6m band is dependent on 17m band tuning
SWR @ resonance (typical)	<1.5:1
Max. Input Power	3000 Watts continuous all mode
Feed system	Direct, DC-Ground
RF connector	UHF female, PTFE insulator, gold plated pin

### Mechanical data

Constructions materials	Alloy AW6063-T66 hard drawn tube Fiberglass, Brass, PTFE, all hardware are made of SS AISI304 and AISI316
Wind surface area	0,4m <sup>2</sup> / 4,3 ft <sup>2</sup>
Wind survival (with guy rope no ice)	130 Km/h / 80 Mph
Overall Antenna height	6,75 m / 22,1 ft
Radiator length	6,2 m / 20,3 ft
Antenna net weight	8 Kg / 17,6 lbs
Mounting mast bracket	$\varnothing$ 40-54 mm / $\varnothing$ 1,57" to 2-1/8"
Package dimensions	14x14x145 cm / 5,5"x5,5"x57,1"