



**20-50-22**  
**VHF/UHF Multiple Dipole**  
**Antenna**  
**118 to 137 & 225 to 450 MHz**

**FEATURES**

- **Rugged, lightweight construction.**
- **Low Silhouette**
- **Full VHF ATC band plus extended UHF (EPLARS).**
- **Easy masthead installation.**
- **High radiation efficiency.**
- **Twin, isolated output.**
- **Designed to MIL-STD-810G environmental for all weather operations.**
- **Suitable for fixed, transportable and mast-mounted applications.**



The 20-50-22 is a stacked pair of dipoles having proprietary feed circuitry to provide isolation and efficiency over the VHF ATC and UHF communications band. It is ideal for applications requiring co-sited antennas where mutual interference would otherwise be a problem.

Construction uses a high integrity composite cylindrical radome with internally foamed-in-place radiating elements. The antenna has a four-hole CECOM type base plate for mounting to a mast head or vehicle and the antenna elements are grounded and fully environmentally sealed.

Inherent isolation is 15 dB and can be increased by use of in-line filters (available separately).

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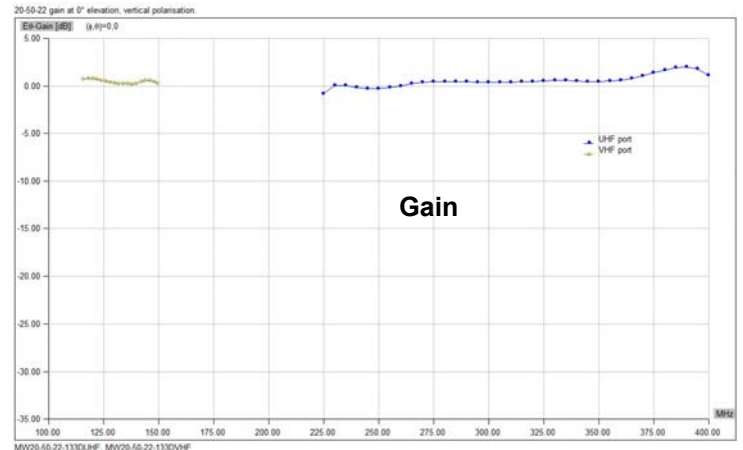
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# SPECIFICATIONS

## Cooper Antennas Model 20-50-22 VHF/UHF Multiple Dipole Antenna

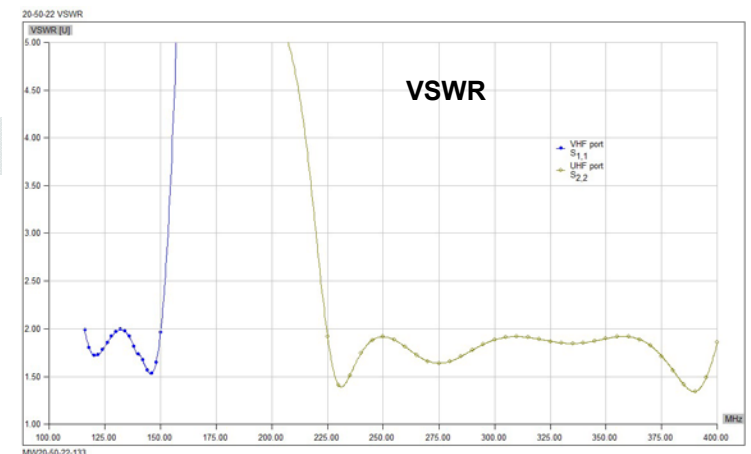
### ELECTRICAL

Frequency	118-137 MHz and 225-450 MHz
Gain typical	0 dBi
VSWR	≤ 2.25:1 max
Impedance	50 Ohms (nominal)
Power	100 Watts
Isolation	15 dB
Rad Pattern	Omni-directional within ±1dB “Doughnut” in elevation
RF Connector	1 x N Female (UHF) 1 x TNC Female (VHF)
Operating Temp	-51°C to +71°C



### MECHANICAL

Overall Height	84 inches (2134mm) max
Element dia.	3 inches (76.2 mm)
Weight (approx)	10 lbs (4.55kg)
Wind Loading	In excess of 100mph (160km/hr)



### FINISH

Urethane Lusterless Black

Other finish options are available

Please specify finish required when ordering

Note: Cooper Antennas Ltd has a policy of continuous product improvement and data herein is therefore subject to change.  
Please check with Cooper Antennas Ltd that this data sheet is at latest issue before initiating contract activity.