



**20-30-29VM & 20-30-29VM/1  
UHF SATCOM Antenna  
225 to 400 MHz**

## FEATURES

- **Suitable for vehicular, shipborne and shelter installations**
- **Robust Construction**
- **Hemispherical radiation pattern coverage with separate Hi and Lo angle elements**
- **All Weather operation**
- **200 Watts CW Power handling**
- **Designed to MIL-STD-810 environmental requirements**
- **4 hole mounting plate**



The 20-30-29VM and the 20-30-29VM/1 is a combined Hi-Lo angle UHF Satcom Antenna designed for installation on military vehicle roof, shelter or housing via a 4 hole mounting plate. The only difference between 20-30-29VM and the 20-30-29VM/1 is that in the 20-30-29VM the coaxial connectors are fitted to the bottom of the antenna base and in the 20-30-29VM/1 they are fitted to the side of the base.

The antenna comprises two co-located elements; a circularly polarized cross-dipole and a linearly polarized broadband monopole. The two elements have separate RF feeds and by manual selection of either, full hemispheric pattern coverage is provided.

The Lo angle is intended for elevation angles up to about 45° and the Hi angle for approximately 45° to zenith.

Construction is from rugged fiberglass, foam-filled for structural integrity and prevention of

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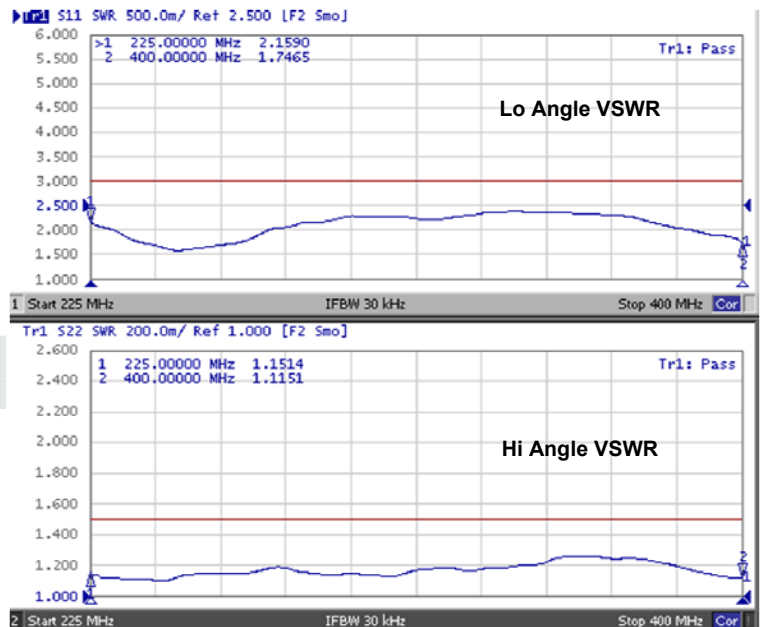
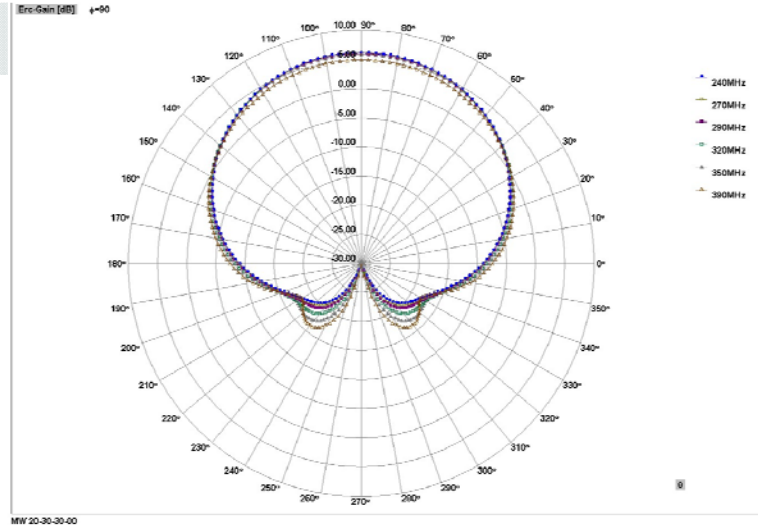
Cooper Antennas Ltd is Accredited to: ISO9001, AS9100, ISO14001 and MAA Approved

# SPECIFICATIONS

## Cooper Antennas Model 20-30-29VM & VM/1 UHF SATCOM Antenna

### ELECTRICAL

Frequency Lo Angle:	225 - 400 MHz
Frequency Hi Angle:	225 - 400 MHz
Gain Lo Angle:	+3 dBiL (Typical)
Gain Hi Angle:	+8 dBiC (Typical)
VSWR Lo Angle:	≤ 3.0:1
VSWR Hi Angle:	≤ 1.5:1
Impedance (nominal):	50 Ohms
Power:	200 Watts
Polarization Lo Angle:	Linear
Polarization Hi Angle:	Right Hand Circular (maximum at zenith)
RF Connector Lo Angle:	TNC Female
RF Connector Hi Angle:	N Female
Operational Temperature:	-54°C to +71°C



### MECHANICAL

Overall height:	12.5 inches (318mm)
Element height:	11.5 inches (292mm)
Dipole span:	20 inches (508mm)
Weight:	3 lbs (1.4kg)

### FINISH

Standard : 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.