



**20-30-61**  
**NSN 5985-99-320-0320**  
**UHF SATCOM On-The-Move**  
**Antenna**  
**240 to 320 MHz**

## FEATURES

- **Magnetic base for installation on steel roofs for vehicular, shipboard and shelter installations**
- **Robust construction**
- **Hemispherical radiation pattern coverage**
- **All Weather operation**
- **200 Watts CW Power handling**
- **Designed to MIL-STD-810 environmental requirements**
- **Vehicle mount telescopic mast available**
- **Rugged Transport case available**



The 20-30-61 is a rugged UHF Satcom antenna designed for magnetic mounting on ferrous surfaces such as military vehicles operating in worldwide conditions of service.

This antenna is specifically configured to provide satellite capture through hemispherical radiation pattern coverage. As such, it is ideally suited to Satcom on-the move applications where vehicle movement over rough terrain causes rapid changes in the angle subtended from the antenna to the satellite.

The 20-30-61 comprises a wide band Quadrifilar Helix, hybrid connected such as to provide Right Hand Circular (RHC) polarization through a 180° solid angle.

The radiating element dimensions, their height above the antenna base and phasing circuits combine to optimize gain over 25 - 60° equating to low angle satellite capture. The design and general configuration of the 20-30-61 ensures performance is minimally affected by different ground planes.

This antenna is supplied with a 5 m (196 inches) low loss cable assembly with 1 fitted type N male connectors at each end.

**Cooper Antennas Ltd for non-USA customers**  
Thames Industrial Estate, Unit K, Fieldhouse Lane,  
Buckinghamshire SL7 1TB, UK  
Tel: +44 (0) 1628 482 360  
Email: sales@cooperantennas.com



**Australian Representatives**  
**ROJONE, PTY LTD.**  
Tel: 02 9829 1555  
E: sales@rojone.com.au  
www.rojone.com.au

# SPECIFICATIONS

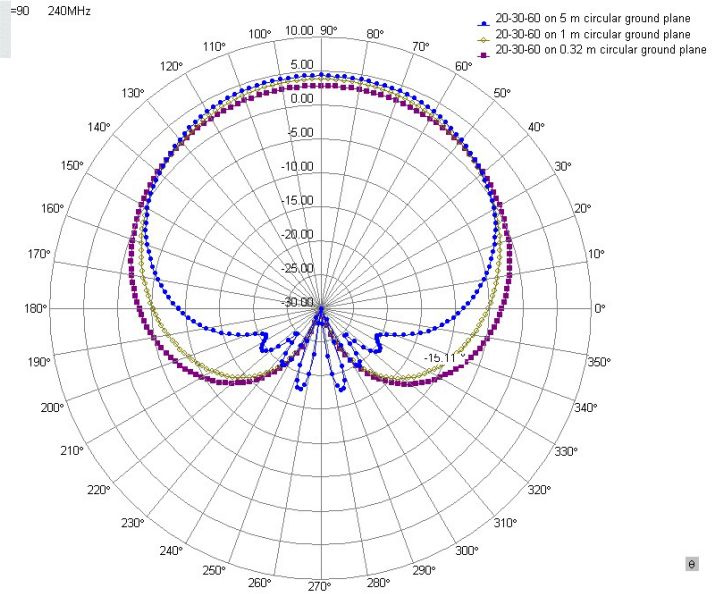
Cooper Antennas Model 20-30-61

NSN 5985-99-320-0320

UHF Satcom On-The-Move Antenna

## ELECTRICAL

<b>Frequency</b>	<b>240 - 270 MHz</b> <b>290 - 320 MHz</b>
<b>VSWR</b>	<b>≤ 1.5:1</b>
<b>Gain (Typical)</b>	
20° to 75°	≥ +2.5 dBiC
75° to 90°	≥ +4.0 dBiC
10° to 20°	≥ -1.0 dBiC
<b>Impedance (nominal)</b>	<b>50 Ohms</b>
<b>Power</b>	<b>200 Watts CW</b>
<b>Polarization</b>	<b>Right Hand Circular</b>
<b>RF Connector</b>	<b>N Female</b>



Pattern at 240 MHz

## MECHANICAL

<b>Height</b>	<b>16.2 inches (412mm)</b>
<b>Radome Diameter</b>	<b>11.25 inches</b> <b>(286mm)</b>
<b>Base Plate Diameter</b>	<b>13 inches (330mm)</b>
<b>Weight</b>	<b>17.6 lbs (8kg)</b>

## FINISH

<b>Standard</b>	<b>Light Stone 361 CARC Def-</b> <b>Stan 80-208</b>
-----------------	--

Other finish options are available

Please specify finish required when ordering

## OPTIONAL EXTRAS

**Rugged Antenna Case - Part No. 20364**  
**Vehicle Mount Telescopic Mast**  
**Part No. 20-00-60**

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.