



**20-30-91 Series  
UHF / MUOS Satcom Antennas  
243 to 385 MHz**

**FEATURES**

- **Family of magnetic and fixed mounts**
- **Robust Construction**
- **Light Weight (2.8 lbs max)**
- **+6 dBiC Gain**
- **All Weather operation**
- **Wide Angle pattern coverage**
- **200 Watts CW Power handling**
- **Right Hand Circular Polarization**
- **Designed to meet applicable parts of MIL-STD-810 environmental requirements**



Satcom on-the-Move requires antenna pattern coverage to be as near to hemispherical as possible.

The CAL 20-30-91 series utilize a pair of quadrature connected UHF “droopy dipoles” with geometry arranged to maintain greater than 0 dBiC gain beyond a 120° cone. They are constructed of rugged fiberglass/epoxy with aluminum alloy dipole elements and base housing. The antennas are foam filled for structural integrity and prevention of moisture ingress. The magnetic mount versions are designed for quick installation and deployment on ferrous roofed vehicles and shelters and are capable of remaining securely in position atop a vehicle at highway speeds up to 80 mph and cross country speeds up to 50 mph. If a more permanent fixing is required, versions with 4 hole fixings are available enabling the antennas to be securely installed with four No 10 bolts or similar.

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# SPECIFICATIONS

## Cooper Antennas 20-30-91 Series

### UHF / MUOS Satcom Antennas

#### ELECTRICAL

<b>Frequency</b>	<b>243 - 385 MHz</b>
<b>Gain (Typical)</b>	<b>+6 dBiC</b>
<b>VSWR</b>	<b>≤ 1.5:1</b>
<b>Impedance (nominal)</b>	<b>50 Ohms</b>
<b>Power</b>	<b>200 Watts</b>
<b>Polarization</b>	<b>Right Hand Circular</b> <b>(at zenith)</b>
<b>RF Connector</b>	<b>N Female</b>
<b>Operational Temp</b>	<b>-25°C to +71°C</b>

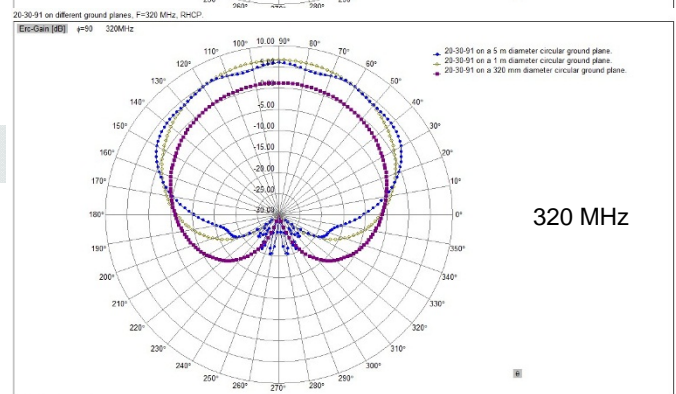
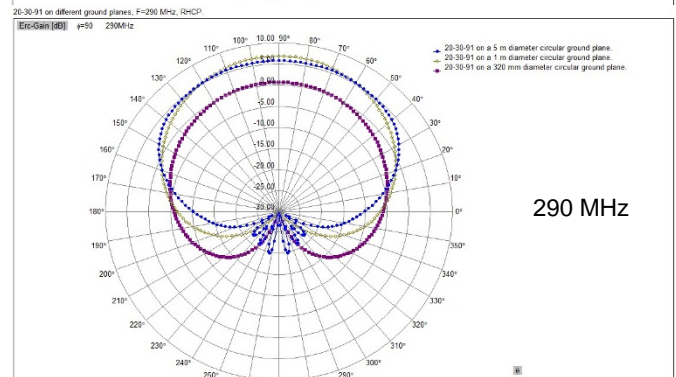
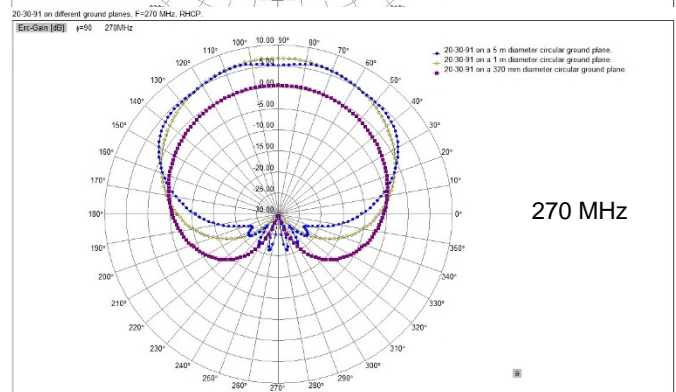
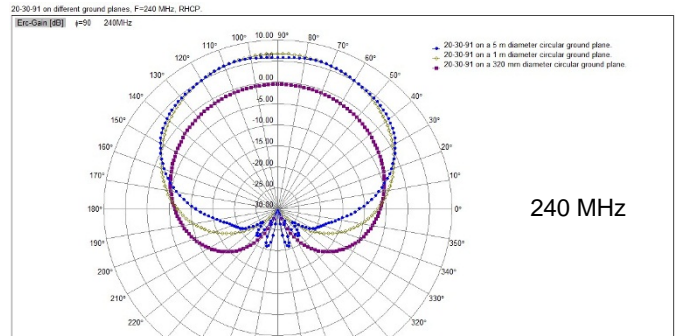
#### MECHANICAL

**Dipole Span 12.6 inches (320mm)**

- 20-30-91** 4 hole fixed, height 13 inch (330mm), weight 2 lbs (0.9kg)
- 20-30-92** 4 hole fixed, height 10 inch (254mm), installed on 2 inch (51mm) plinth, weight 1.6 lbs (0.72kg)
- 20-30-93** Magnetic Mount height 13inch (330mm) weight 2.8 lbs (1.27kg)
- 20-30-94** 4 hole CECOM plate, height 13.2 inch (335mm), weight 1.6 lbs (0.72kg)

#### FINISH

**Standard for 92, 93 : Urethane Desert Tan**  
**Standard for 91, 94 : 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.**