



# **RUGGED ANTENNA SYSTEMS**

MARINTEC are Importers of Antenna systems from COMROD COMMUNICATION GROUP (Norway). Please find pricing below for our most popular stocked Maritime COMROD products...

(For pricing on all other COMROD models, please contact MARINTEC)



Please refer to the following pages for product specifications and dimensions...



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# Marine 1.25m VHF Dipole, Mast/Wall Mount

Comrod's AV7M is a high quality dipole antenna designed Marine VHF radio telephone service. It features a beautiful finish for installation on all kinds of vessels. The durable construction means it is especially well suited for commercial applications.

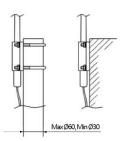












### **Electrical specification**

Design

Height

Weight

Finish

Wind rating

Temperature range Water Proofing

Frequency range	156-162 MHz, VSWR < 1.5:1 145-165 MHz, VSWR < 2:1	
Nominal impedance	50 ohm	
Power rating	100 W	
Gain	2 dbi	
Pattern	Horizontal plane: Omnidirectional Vertical plane: See reverse page	
Polarization	Vertical	
Connector	UHF female is standard	
DC-grounded	Yes	

1.25 m (4 ft)

1 kg, including U-bolts

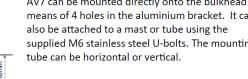
55 m/s = 125 mph

### **Mounting**

AV7 can be mounted directly onto the bulkhead by means of 4 holes in the aluminium bracket. It can supplied M6 stainless steel U-bolts. The mounting

Suitable cable: RG8, RG213 or similar.







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Polyurethane lacquer, white

-55 °C, +71 °C; -67 °F, +160 °F

Centre-fed coaxial dipole. Radiating elements completely enclosed in

Mounting bracket in aluminium.

polyurethane foam within a fibreglass tube.

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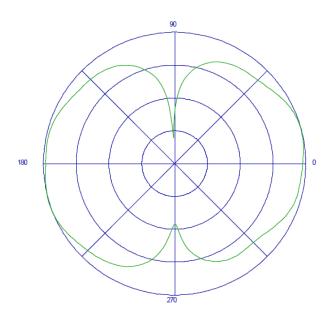
IP67



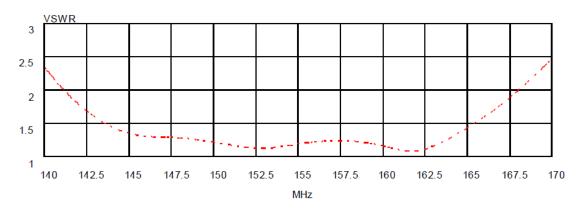




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Vertical Radiation Pattern f=160MHz 40 dB dynamic range, 10dB/div



Standing Wave Ratio

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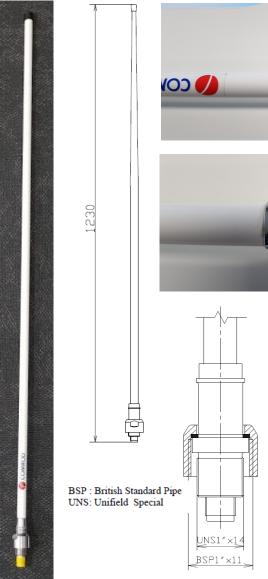






# Marine 1.23m VHF Dipole, P Mount 1"x11

Comrod's The AV15 is a high quality dipole antenna designed Marine VHF radio telephone service and may be installed on all kinds of vessels, from pleasure crafts to ocean liners. It does not require a ground plane.









### **Electrical specifications:**

Frequency range	155-162 MHz, VSWR < 1.5 : 1 144-165 MHz, VSWR < 2 : 1	
Nominal impedance	50 ohm	
Power rating	100 W	
Gain	2 dbi	
Pattern	Horizontal plane: Omnidirectional Vertical plane: See reverse side	
Polarization	Vertical	
Connector	UHF female	
DC-grounded	Yes	

### Mechanical specifications:

Design	Centerfed coaxial dipole. Radiating elements completely enclosed in polyurethane foam within a fiberglass tube.
Height	1.23m
Weight	0.5 kg
Wind rating	55  m/s = 125  mph
Finish	Polyurethane lacquer, white
Temperature range	-55 °C, +55 °C; -67 °F, +131°F
Water Proofing	IP67

### Mounting:

The AV15 is fitted with UNS1"x14 male femules and BSP1" x 11 nut. Adapter for UNS1"x14 female femules is available (see reverse page). Can be used with all standard mounting accessories.

Suitable cable: RG58, RG213 or similar.

Instead of using the adapter, the antenna can be mounted at a pipe with BSP1" x 11 male threads.

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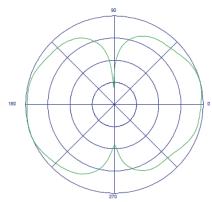
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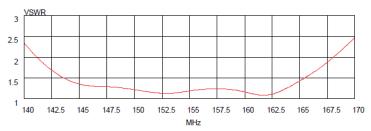


**AV15** 

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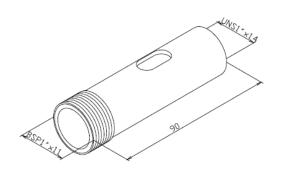
Vertical radiation diagram f= 160MHz 40dB dynamic range, 10 dB/div

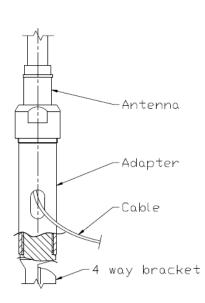


Standing wave ratio

Supplement: (optional extra)

Adapter for 4 way bracket.





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# Marine 1.4m VHF Dipole, Mast Mount

Comrod's AV6K is a high quality dipole antenna designed Marine VHF radio telephone service. It features a beautiful finish for installation on all kinds of vessels. The durable construction means it is especially well suited for commercial applications.







### **Electrical specifications**

Frequency range	156-162 MHz, VSWR < 1.5:1 153-170 MHz, VSWR < 2:1	
Nominal impedance	50 ohm	
Power rating	200 W	
Gain	2 dbi	
Pattern	Horizontal plane: Omni-directional	
	Vertical plane: Typical dipole	
Polarization	Vertical	
Connector	AV6K N female AV6K-U UHF Female	
DC-grounded	Yes	

### **Mechanical specifications**

Design	Centre-fed coaxial dipole. Radiating elements completely enclosed in polyurethane foam within a fiberglass tube. Hot dip galvanized mounting hardware.	
Height	1.4 m	
Weight	1.3 kg, ex. clamps, 2.2 kg with clamps	
Wind rating	55 m/s = 125 mph	
Moment of flexure	3.0 kpm at 55 m/s	
Finish	Polyurethane lacquer, white	
Temperature range	-55 °C, +55 °C; -67 °F, +131 °F	
Water Proofing	IP67	

### Mounting

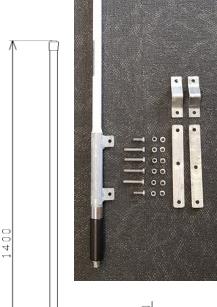
Dimensions in

The AV6K may be mounted to two welded brackets or clamped onto a mast or post. Clamps of type ATC are included. Connector is protected by a plastic tube with stuffing nut.

Suitable cable: RG8, RG213 or similar.

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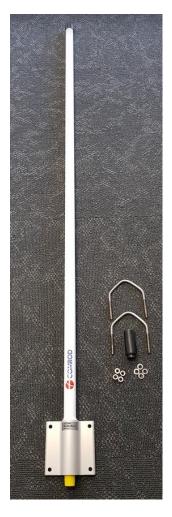




# **AC21M4**

# Marine 1.25m Multi Band Cellular and WLAN Antenna, Mast/Wall Mount

Comrod's AC21M4 is a broad band antenna for cellular phones, and it covers systems such as 3G, 4G and wireless LAN. The antenna is omnidirectional. The durable construction means it is especially well suited for commercial applications.





### **Electrical specifications:**

Frequency range	806-960MHz 1710-2690MHz
VSWR	See diagram, overleaf
Nominal impedance	50 ohm
Power rating	20W
Gain	See diagram, overleaf
Polarization	Vertical
Connector	N female

### Mechanical specifications:

Design	Dipole with a coaxial choking sleeve to suppress cable radiation.  Radiating elements completely enclosed in polyurethane foam within a fiberglass tube.
Height	AC21M:0.34m AC21M4: 1.2m
Weight	AC21M: 0.5 kg
Wind rating	55  m/s = 125  mph
Finish	Polyurethane lacquer, white
Temperature range	-40°C, +50°C;+ -28 °F,+122°F

# AC21M1 length = 0.34m (1')AC21M4 length = 1.2m (4')

	radiation.  Radiating elements completely enclosed in polyurethane foam within a fiberglass tube.	
Height	AC21M: 0.34m AC21M4: 1.2m	
Weight	AC21M: 0.5 kg	
Wind rating	55 m/s = 125 mph	
Finish	Polyurethane lacquer, white	
Temperature range	-40°C, +50°C;+ -28°F,+122°F	

### Communication systems covered:

3G	824-960/1710-2170MHz
4G	824-960/1710-2690MHz
TDMA, CDMA	824-897 / 1850-1990MHz
GSM 900 / 1800	860-960 / 1710-1990MHz
UMTS ,WCDMA, PCS-1900	1850-2170MHz
EDGE	860-960 / 1710-1990MHz
DECT	1880-1900MHz
WLAN 802.11b-h	2.4-2.5GHz
ZigBee	868-928MHz /2.4-2.48Gz
SMR iDEN	806-869MHz
Bluetooth	2.4-2.48GHz

### Mounting:

AC21M is easily mounted to the bulkhead by means of 4 holes in the aluminum bracket, or to a mast or tube with U-bolts. The U-bolts in stainless steel, are included.

Suitable cable: RG58, RG213 or similar.

Max 060, Min 030

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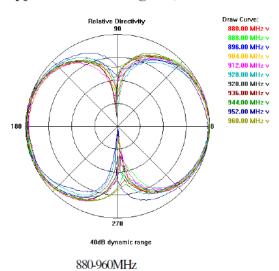


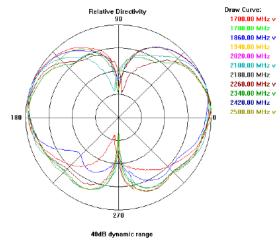




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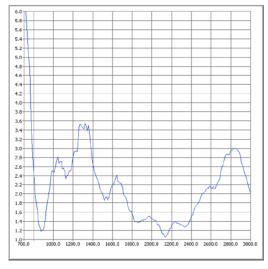
### Typical radiation diagram, Elevation:



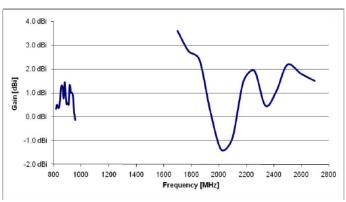


1700-2500MHz

### Typical VSWR curve



### Gain curve versus frequency



VSWR < 2 for: 820-940 and 1790-2500MHz VSWR < 2.5 for: 800-1010 and 1420-2700MHz

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### **COMROD COMMUNICATION GROUP:**

Comrod design and manufacture military antennas, marine antennas, telescopic & sectional masts, power supplies, battery chargers and specialist composite products.

Comrod Communication Group is an international company with development, production, sales & marketing of antennas and antenna systems, support masts, power supplies and battery chargers to the defence communication market.

The Group also supplies antennas and antenna systems for commercial marine, as well as composite industrial products for the offshore and defence industry.

Comrod Communication Group products are associated with innovative, high quality communication solutions and long-lasting products.

The Norwegian subsidiary, Comrod AS, is a supplier of antennas, antenna systems and power supplies, mainly for the defence market, but also for other maritime and commercial applications.

Comrod France SA, is a supplier of masts and mast systems, antennas and composite industrial products.

Comrod Sweden AB (formerly WIBE Telescopic Masts) are a world leader in the design and manufacture of crank-up aluminium telescopic masts.

The Group headquarters are located at Stavanger in South-Western Norway.



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