

Application

The AC21 is a broadband omnidirectional dipole antenna for cellular services, covering systems such as 3G, 4G and wireless LAN. The antenna is available in two lengths, 0.3m and 1.25m. Three mounting options are available, mast/bulkhead mount, P bayonet thread mount and BI thread mount. It is a high quality antenna with a durable construction and a beautiful finish for installation on all kind of vessels.

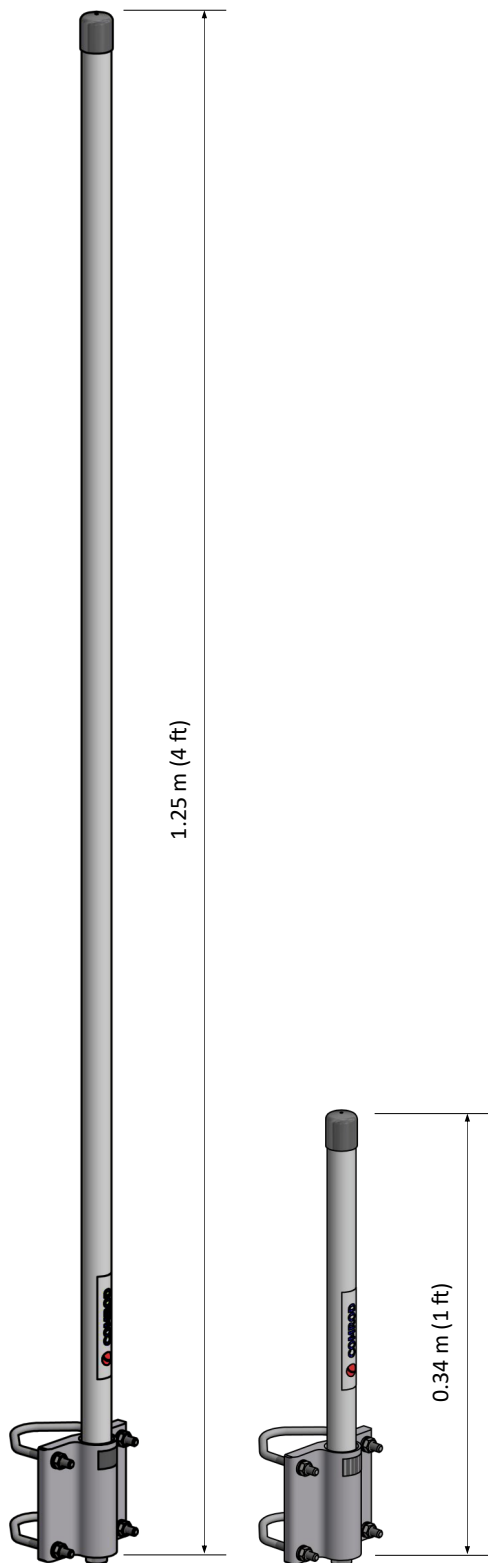
Electrical specifications

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

Mechanical specifications

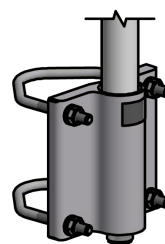
Design	Dipole with a coaxial sleeve to suppress cable radiation. Radiating elements completely enclosed in polyurethane foam within a fiberglass tube.	
Height	AC21M1: 0.34 m	AC21M4: 1.2 m
Weight	AC21M1: 0.5 kg	AC21M4: 0.9 kg
Wind rating	55 m/s = 125 mph	
Finish	Polyurethane lacquer, white	
Temperature range	-40°C, +50°C;+ -28 °F, +122°F	

Mounting Options



AC21M4

AC21M1



AC21M
Ø30-60mm Pole Mount
Bulkhead Mount

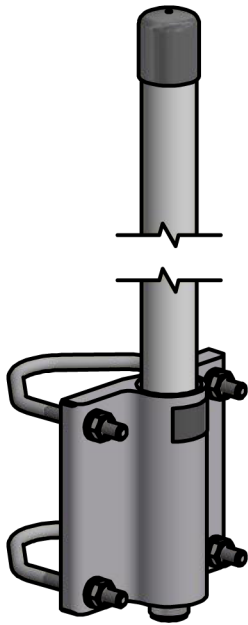


AC21P
BSP 1" x 11
Thread Mount

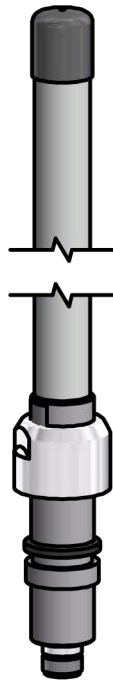


AC21BI
UNS 1" x 14
Thread Mount

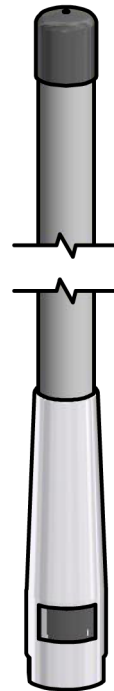
Antenna Mounting Configurations



AC21M
Ø30-60mm Pole Mount
Bulkhead Mount



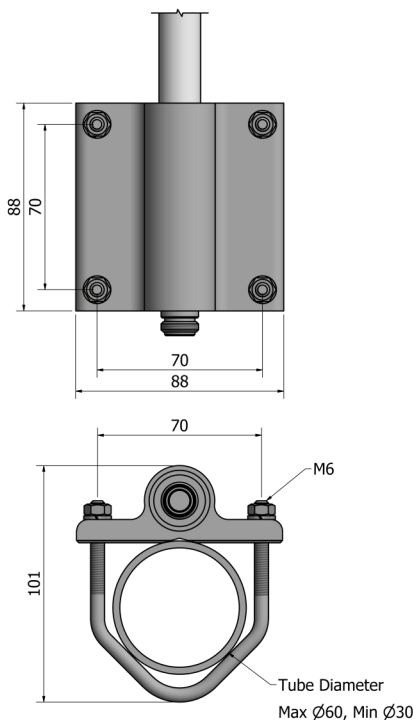
AC21P
BSP 1" x 11
Bayonet Thread Mount



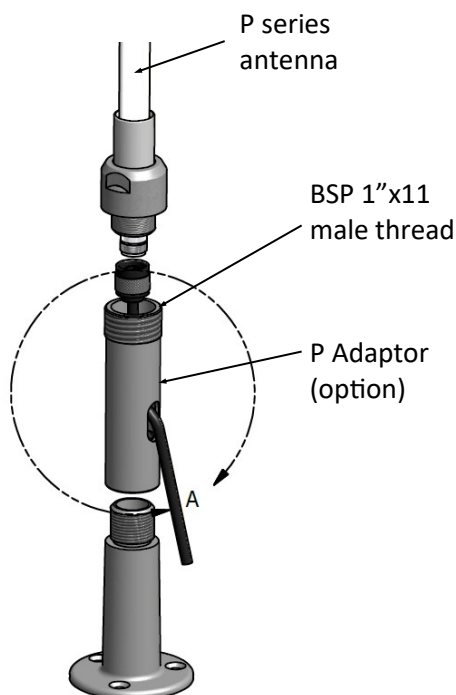
AC21BI
UNS 1" x 14
Thread Mount

Mounting Accessories

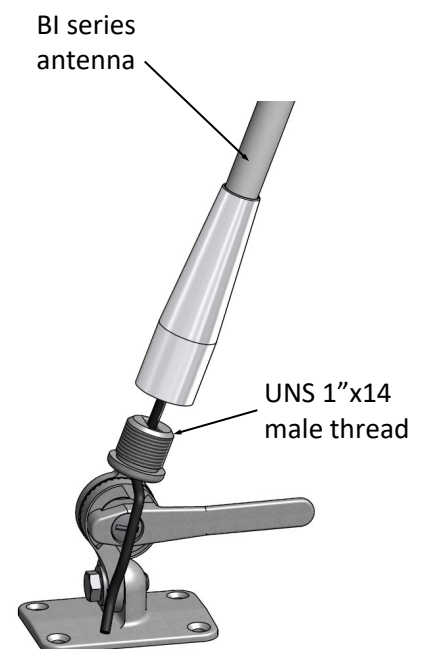
Comrod has a range of antenna mounting brackets and adaptors for P series and BI series antennas. Please visit Comrod website www.comrod.com for more details or email sales@comrod.com



Mast mount bracket
(standard on AV21M)

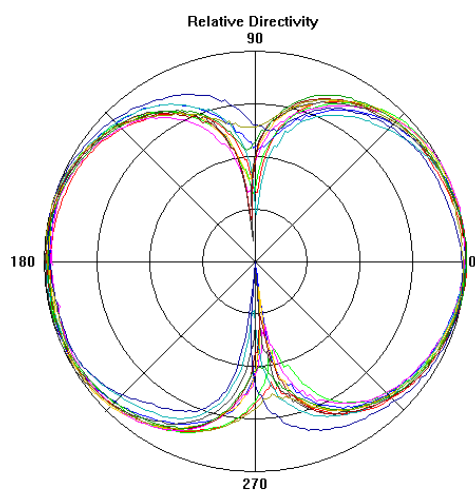


Straight mount bracket
(option)



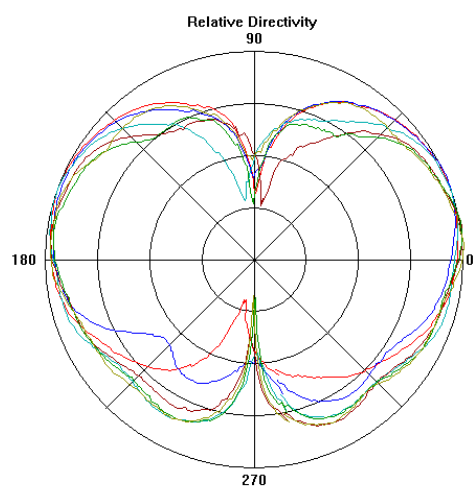
4-Way Bracket
(option)

Typical radiation diagram, Elevation



880-960 MHz

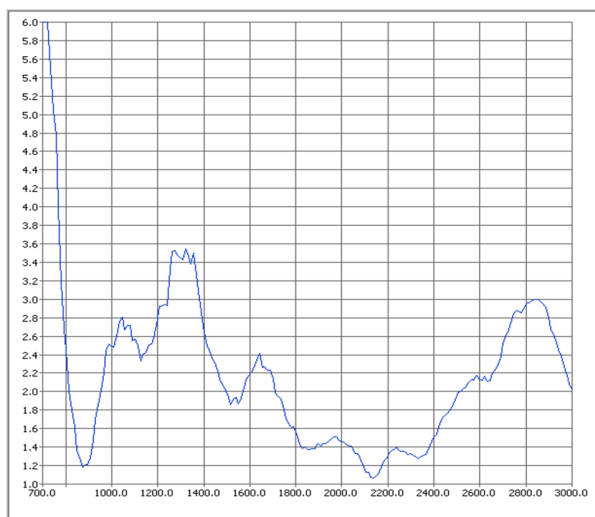
Draw Curve:
880.00 MHz ✓
888.00 MHz ✓
896.00 MHz ✓
904.00 MHz ✓
912.00 MHz ✓
920.00 MHz ✓
928.00 MHz ✓
936.00 MHz ✓
944.00 MHz ✓
952.00 MHz ✓
960.00 MHz ✓



1700-2500 MHz

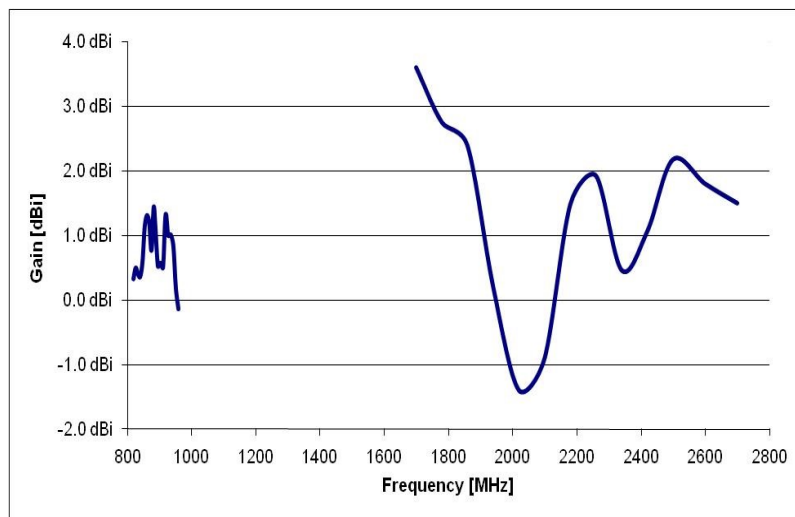
Draw Curve:
1700.00 MHz ✓
1780.00 MHz ✓
1860.00 MHz ✓
1940.00 MHz ✓
2020.00 MHz ✓
2100.00 MHz ✓
2180.00 MHz ✓
2260.00 MHz ✓
2340.00 MHz ✓
2420.00 MHz ✓
2500.00 MHz ✓

Typical VSWR curve



VSWR < 2:1 - 820-940 and 1790-2500 MHz
VSWR < 2.5:1 - 800-1010 and 1420-2700 MHz

Gain curve versus frequency



Communication systems covered

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