



TCA 3-7-1663 Contract for Montrose Coastguard Rescue Station (CRS) Fit Out Works

VHF ANTENNA AND CABLING INSTALLATION – ADDITIONAL INFORMATION

The following information is for the hardware the successful supplier will need to purchase to install the VHF antenna and cabling to the office for the site:



NFSC21301
N Type Clamp Jack RG213

Materials & Plating
Shell/Body - Brass, Nickel Plated
Conductor - Bronze, Gold Plated
Insulator - PTFE

Electrical Characteristics
Impedance - 50 ohm
Frequency Range Max. - DC - 3GHz
Dielectric Withstanding Voltage - 2500V (RMS)
Contact Resistance - Centre $\leq 1\text{m}\Omega$, Outer $\leq 1\text{m}\Omega$
Insulation Resistance - $\geq 5000\text{m}\Omega$

Mechanical Characteristics
Mating - 5/8"-24UNEF-2A
Durability - ≥ 500 cycles

Environmental Characteristics
Temperature Range: - 55°C to +155°C

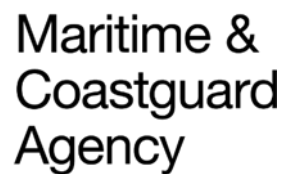




GCA Technical Data

GCA Data Sheet





GCA

N Type Clamp Plug RG213

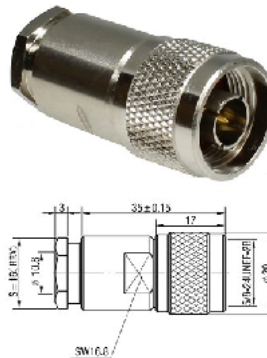
GCA Technical Data

Shell/Body - Brass, Nickel Plated
Conductor - Brass, Gold Plated
Insulator - PTFE

Electrical Characteristics
 Impedance - 50 ohm
 Frequency Range Max. - DC - 3GHz
 Dielectric Withstanding Voltage - 2500V (RMS)
 Contact Resistance - Centre 1mΩ, Outer 1mΩ
 Insulation Resistance - 5000mΩ

Mating - N: 5/8-24UNEF-2B
Durability - 500 cycles

Environmental Characteristics
Temperature Range: - 55°C to +155°C





Maritime & Coastguard Agency

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RG213

50 Ohm Coaxial

Physical Characteristics

Conductor:	Tinned Copper
Size:	7/0.75mm
Dielectric:	Solid PE (Ø7.25mm)
Screening:	Copper Clad Aluminium Wire Braid (95%)
Outer Sheath:	PVC
Sheath Colours:	Black Ø10.30
EN50575 CPR Class:	Fls
Weight:	166kg/KM

Electrical Characteristics

Conductor DC Resistance:	6.13 (Ω/km)
Rated Temperature:	80°C
Rated Voltage:	300V
Insulation Resistance:	>1000 (MΩ/km)
Nominal Capacitance:	<110pF/M (±10%)
Velocity Factor:	66.7%
Nominal Impedance:	50Ω

Attenuation

@20°C (dB/100M)	
1MHz	0.72
10MHz	7.00
100MHz	7.20



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7050158



Centre fed dipole 140 - 175 MHz

DESCRIPTION

- > A VHF Center Fed Dipole antenna for PMR/Trunked Radio, Broadcast and VHF Aircraft Band applications.
- > Multiple dipoles can be mounted on a tower and connected with a phasing harness to form a high gain, stacked array.
- > Produced to the highest quality standards, these robust antenna designs will ensure reliable operation in harsh environmental conditions.
- > Former Jaybeam brand product.



SPECIFICATIONS

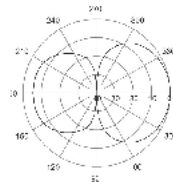
Electrical	
Model	7050158
Frequency	140 - 175 MHz
Max. Input Power	150 W
Polarisation	Linear (Vertical or Horizontal)
3 dB Beamwidth, E-Plane	80 °
3 dB Beamwidth, H-Plane	Omn - will depend on mounting distance from mast.
Impedance	50 Ω
Gain	0 dBS (omni - will depend on mounting distance from mast)
VSWR	< 1.5:1
Antistatic Protection	All metal parts DC-grounded (Connector shows a DC-short)

Mechanical	
Connection(s)	N(f) on 3m RG213/U cable
Materials	Boom, 32 mm dia. aluminium elements, 19.1 mm dia. aluminium balun, fully moulded enclosure
Dimensions	1370 x 850 x 110 mm / 53.93 x 33.46 x 4.33 in.
Wind Load	115 N (180 km/h)
Weight	Approx. 2.2 kg / 4.85 lb.
Mounting Bracket	3202078/68 + 3201079/00 (Ordered Separately)
Alternate Mounting Bracket	0900912/00, 0302032/68, or 0300064/00 + U-Bolts to match mounting pipe diameter (Ordered Separately)

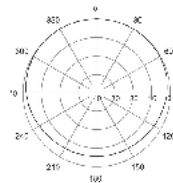
ORDERING

Model	Product No.	Frequency
Centre fed dipole	7050158	140 - 175 MHz
Accessories		
Galvanised steel crossover bracket 32/50 mm	0900912/00	
Pressed steel cross clamp 2" x 1-1/4" (JBL73)	0302032/68	
Cast aluminium cross clamp, circular	0300064/00	
M6 x 50 mm (2") U-Bolts (1 Pair)	4884036/00	
M8 x 75 mm (3") U-Bolts (1 Pair)	4884076/00	
Fixed nutset / coupler clamp (cross clamp)	3202078/68	
Increasing sleeve	3201079/00	

TYPICAL RADIATION PATTERN (E-PLANE - 158 MHz)



TYPICAL RADIATION PATTERN (H-PLANE - 158 MHz)



PROCOM A/S reserves the right to amend specifications without prior notice



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