



# Model CLU3SS

Omni-directional Mast Mount  
Collinear - 1.7 metres tall

Specify 1.5% bandwidth  
UHF Range 400 – 520 MHz  
5.1 dBi Gain

N-type Female connector located at  
base of the mount tube

- Mounts to a mast using 2 EB1-SS or 1 x UB3-SS (available separately).
- 100 watts maximum input power.

## INSTALLATION GUIDE

[www.zcg.com.au](http://www.zcg.com.au)

### ANTENNA DESCRIPTION

The CLU3SS UHF mast mount collinear antenna is constructed from a stainless steel mount section and a fibreglass radome to ensure long term survival in the harsh environment and will deliver reliable performance for many years.

Standing 1.7 metres tall, the antenna delivers a 360° omnidirectional radiation pattern with 5.1 dBi gain.

The N-type Female connector located at the base of the mount tube is rated for up to 100 watts input power.

A detailed specification sheet is available to download from [www.zcg.com.au](http://www.zcg.com.au)

### TUNING

The antenna has been tuned in the factory for the 1.5% bandwidth you specified within the UHF frequency range 400-520MHz.

VSWR has been optimised to better than 1.5:1.

This tuning cannot be altered

### SELECTING THE MOUNTING POSITION

To achieve best performance from your antenna, these are the important principles you should consider when selecting the mounting point:

1. **Mount the antenna in as high a place as possible.**
2. **Mount the antenna as far away from other antennas and metallic objects as possible to avoid interference and distortion of the radiation pattern. At least 350 mm side clearance is desirable, preferably more.**
3. **For optimum performance the antenna must be in a vertical position, not at an angle.**

For mounting to a mast, 2x EB1-SS stainless steel parallel clamps or 1x UB3-SS are recommended and will suit a round mast between 20-50mm in diameter.



EB1-SS  
2 units recommended

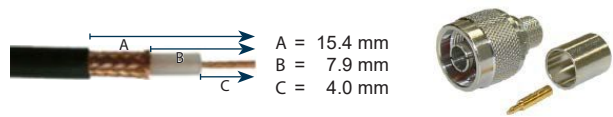


UB3-SS  
1 unit recommended

### PREPARE THE FEEDER CABLE

RG213 is recommended for use as a feeder cable. To reduce signal loss, the cable should be kept to the shortest length necessary.

The NM-7937 N-type Male crimp connector is available to fit RG213 cable. The proper trim dimensions are :



Attach the N-type Male connector to the antenna's N-type Female connector located at the base of the mount tube.

Route the feeder cable to your radio. Ensure that the cable is not stretched excessively and there are no sharp kinks.

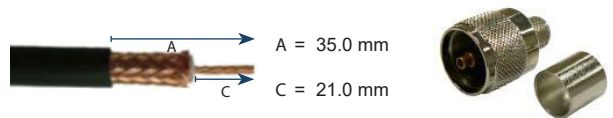
**If using cable ties, then we highly recommend the stainless steel type for the harsh marine environment.**

Do not pull the cable ties so tight as to crush the cable. A damaged feeder cable is a cause of high VSWR and reduced performance.

### CONNECT YOUR RADIO

Cut the cable to the shortest length necessary, prior to fitting the appropriate connector for your marine UHF radio. Usually this will be a UHF male. There are various UHF male connectors available for RG213 cable.

If using our UM-7910 UHF male crimp connector for RG213, carefully strip the end of the coaxial cable as shown in the diagram.



### SEALING CONNECTIONS

**It is vital that all connections be well sealed with at least two layers of self-amalgamating tape to prevent ingress of moisture. PVC or electrical tape will not be adequate.**

Attach the connector to your radio.

**Installation is now complete.**

### MAINTENANCE

This antenna has been designed for high reliability and low maintenance. We recommend that you conduct a routine annual mechanical inspection of the antenna, feeder cable and connections.