



CL3

UHF COLLINEAR SYSTEM FOR EXTENDED RANGE

The Type CL3 is a high gain, high strength, vertically polarised ground independent collinear antenna designed for use in the marine mobile and fixed land environments.

The internal radiating elements consist of a series fed array of $1/2\lambda$ stacked dipoles optimised for omnidirectional low angle radiation and consistent high gain across the usable frequency range.

The antenna is fully marinised, DC grounded, and is encapsulated within a heavy duty coated fibreglass radome, with a marine grade, low corrosion, tempered aluminium alloy mounting tube providing a high degree of strength. It is fully protected by a high durability epoxy based coating resistant to chemical attack, abrasion and the effects of ozone and ultra-violet radiation, which ensures and long operational life.

It can be supplied for side or base mounting or with a rugged multi - angled swing down mount. Connection is via an N type connector in the base when side mounted or via a short coaxial cable and N connector when base or swing down mounted.

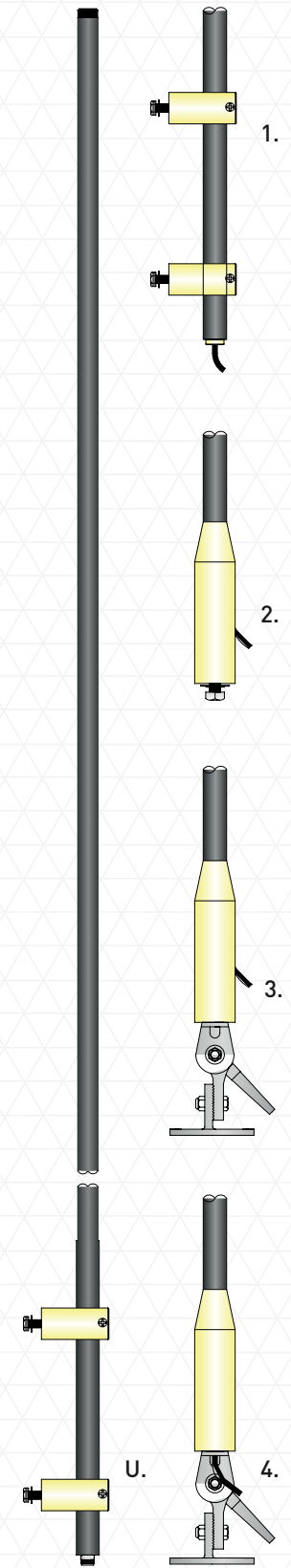
Key features:

1. Efficient
2. Durable
3. Vehicle Mounted
4. Fully Marinised
5. Long Service Life

Also available with a heavy duty stainless steel spring base version CL3-SM for vehicle mounting.

SPECIFICATIONS ▼

	STANDARD	OPTIONAL
Colour	Black	White
Frequency Range	Factory tuned within the range 390 to 520 MHz.	
Polarisation	Vertical	
Power	100 watts CW	
VSWR	<1.5:1 for 10 MHz. Bandwidth	
Gain	5+ dBi (3+ dBd.).	
Impedance	50 ohms (nominal)	
Length	1.5 Metres maximum (dependent upon frequency)	
Diameter	46mm base mounting; 25.4mm side mounting	
Connection	N type (F) connector in base (sidemount version); 5m coaxial cable with N type (m) connector base and swingdown versions.	
Mounting (see illustration)	U: Connector in base (no cable), Side mounted via insulators or clamps 1: Base fed cable with connector, Side mounted via insulators or clamps 2: Side fed cable with connector, Base mount with M12 bolt 3: Side fed cable with connector, Base mount with 1" x 14 TPI 4: Base fed cable with connector, Base mount with 1" x 14 TPI (Options 3 & 4 are compatible with standard marine swing down mounts)	
Packed Weight	3 kg	
Warranty	12 months	



Mounting:

SWINGDOWN MOUNT

1. Place the base plate (of the mount) in the desired position and use it as a template.
2. Mark the position of the mounting holes.
3. Drill 4 x 6.4mm (1/4 in) diameter holes.
4. Bolt the mount/antenna in place

M12 BASE MOUNT ADAPTOR

1. Mark the mounting position on a horizontal surface or bracket that allows a minimum of 38mm (1.5 in) diameter surface area.
2. Drill a 13mm hole in the marked position.
3. Using a 12mm stainless steel or galvanised bolt fastens the antenna down firmly.
DO NOT OVERTIGHTEN AS THREAD MAY STRIP IN NYLON BASE.

SIDE MOUNTING

1. Use heavy duty clamps or strong hose clamps.
2. Space them 300mm apart.
3. Do not over tighten.
4. Do not drill stainless steel mounting tube.

Important Factors:

1. The top 100 cm of the antenna must be in free space, well away from other objects, antennas, etc. Mounting it as high as possible will assist performance. Vertical is best.
2. The base/mounting tube section of the antenna must not be drilled or damaged.
3. Supplied cable may be shortened. It may be lengthened but performance will be degraded due to signal/coaxial losses.
4. Due to internal arrangements the antenna will exhibit an open circuit if tested with an ohm meter or DC tester.
5. When using a swingdown mount allow sufficient cable to permit the antenna to swingdown without cable strain.

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