MOONRAKER

UHF ANTENNA SYSTEMS

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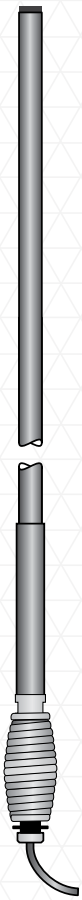
CL3-SM

VEHICLE MOUNTED 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 1/2λ 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 a high degree of strength and long operational life.

It can be supplied for side mounting or with a rugged multi - angled swing down mount. Connection is via a PL259 UHF connector and 6m UHF coaxial cable.

Includes a stainless steel spring base and fastening bolt for vehicle mounting. Also available as a matched pair with the Moonraker CEL-SM Mobile Phone antenna.

Key features:

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

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	Radiating Element : 25.4mm Spring : 54mm	
Wind Survival	Radome is designed to withstand up to 200 km/h	
Temperature	-50 to +55˚C 100% humidity	
Connection	PL259 UHF connector ; 6m coaxial cable	
Mounting (see illustration)	Stainless Steel Spring base with Ø1/2" fastening bolt	
Weight	Unpacked: 1.7kg Packed: 3kg	
Warranty	12 months	

CL3-SM INSTALLATION INSTRUCTIONS ▼

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.

CONTACT DETAILS ▼

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Moonraker products represent the pinnacle of antenna design. With over 45 years' experience supplying Defence, Commercial and Recreational industries. Moonraker antennas are individually tuned and manufactured to our stringent extreme marine quality standards that ensure maximum performance and service life.

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