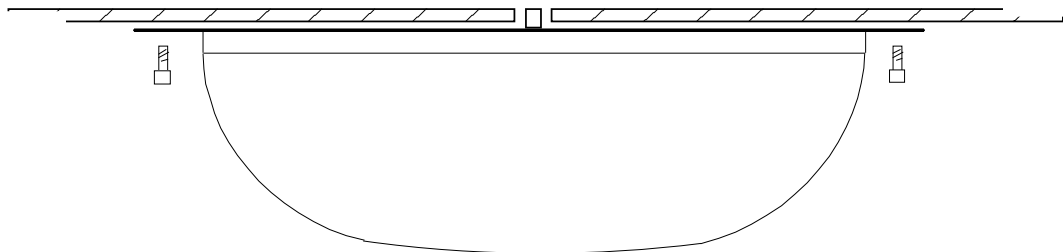




## Type CMGP

### Low Profile Disguise VHF or UHF Radome Enclosed Antenna System



The Moonraker type CMGP is designed to provide efficient VHF or UHF communications where visual impact or covert requirements restrict the use of standard antenna systems. Shopping centres, hospitals, airports, railway stations and hotels are typical locations for these antennas.

Housed within a disguise radome the antenna closely resembles a standard ceiling/flush mounted light fitting. It blends well with other fittings found in modern buildings.

The antenna is ground independent and therefore does not require a metal ground plane/ceiling etc., for correct operation. It is DC grounded for protection from static and other like forms of interference. It may be supplied tuned to any frequency in the range with a bandwidth better than 1 MHz (VHF) or 15 MHz (UHF) at the specified frequency.

Mounting is simplified by the extended base flange with positions marked for screw holes placed equally around its perimeter. Cable entry is via a connector in the base of the housing, allowing the cable to enter directly through the ceiling behind the base.

## Specifications

<b>Colour</b>	Standard is White	
<b>Frequency Range</b>	VHF 148-174 MHz	UHF 400-500 MHz
<b>Bandwidth</b>	Greater than 1 MHz at 1.5:1 SWR, 2.5 MHz at 2.0:1 SWR	15 MHz at 1.5:1 SWR, 30 MHz at 2.0:1 SWR
<b>Gain</b>	Unity	Unity
<b>Power</b>	50w CW	50w CW
<b>Polarisation</b>	Vertical	Vertical
<b>Radiation Pattern</b>	Omnidirectional	Omnidirectional
<b>Impedance</b>	50Ω (nominal)	50Ω (nominal)
<b>Connection</b>	BNC socket protruding from flat base (cable entry through mounting surface /ceiling (other connectors to order)	
<b>Radome</b>	White ABS plastic 360mm (diameter) x 115mm (height) (14.2 x 4.5 in)	
<b>Mountings</b>	Via screws through base flange 395mm (15.5 ins) diameter	
<b>Weight (Antenna)</b>	1.1kg (2.42 lbs)	
<b>Packed Weight</b>	2 kg (4.4 lbs) approx	

Specifications subject to change – Issued 07/13



Moonraker Australia Pty. Ltd. ABN 70 162 868 475  
Tasmanian Technopark, Dowsing Point, Tasmania, Australia 7010

Website: [www.moonraker.com.au](http://www.moonraker.com.au) Tel: 61 (0)3 6273 1533 Fax: 61 (0)3 6273 1749 Email: radiocom@moonraker.com.au





## TYPE CMGP INSTALLATION INSTRUCTIONS

### Mounting

The antenna is designed to provide omni-directional VHF or UHF coverage when mounted against a ceiling looking down over the area of coverage.

1. Select a position clear of metallic objects such as light fittings, air-conditioning ducts, etc.
2. The surface on which the antenna is mounted must be flat and non-conducting. This type of antenna may suffer from de-tuning if mounted against a large conducting surface such as a metal ceiling or plate.
3. To allow freedom of placement of the mounting screws, 8 equally spaced hole positions are marked around the edge of the mounting flange. It is recommended that 4 of these positions be used and drilled for the mounting screws.
4. After locating the mounting position, drill a hole large enough to allow the coaxial connector to pass through the ceiling/mounting surface.
5. Connect the coaxial cable via a connector to that on the antenna and, as a precaution, tape or seal the connection against moisture ingress, vibration, etc.
6. Fasten the antenna to the ceiling, taking care not to over tighten the screws.

### Important Factors

1. The antenna is sealed against ingress from insects and vermin
2. There are no field serviceable parts inside and it is not designed to be opened.
3. The antenna is factory pre-tuned to the specified frequency. Mounting close to conducting surfaces and nearby metal objects may result in de-tuning the antenna. This is particularly relevant to VHF versions.



Specifications subject to change – Issued 07/13

Moonraker Australia Pty. Ltd. ABN 70 162 868 475  
Tasmanian Technopark, Dowsing Point, Tasmania, Australia 7010

Website: [www.moonraker.com.au](http://www.moonraker.com.au) Tel: 61 (0)3 6273 1533 Fax: 61 (0)3 6273 1749 Email: radiocom@moonraker.com.au

