# RM120 / RM150

## DSNG antenna in Ku-band

- **1.2m and 1.5m reflector options**
- **SMC or carbon fibre antenna**
- **Exceptional value**
- **Up to 400W integrated 1:1 Tx power (RM120)**
- **Up to 750W integrated 1:1 Tx power (RM150)**
- **3 axis manual jog controller**
- **Full auto-pointing options (inclined orbit)**

The RM series of DSNG antennas from Holkirk are designed to excel in today's demanding DSNG environment, with excellent attention to mechanical detail and high performing materials selection, the RM series of Antennas will provide many years of continuous service in the harshest of applications.

**Compact**
The RM antenna is an ultra-compact roof mount system which encompasses the drive control, positioning hardware and BUC/HPA into the aerodynamic antenna enclosure, making the system a robust standalone subassembly ready to install onto almost any vehicle.

**Versatile**
The versatile power-payload of the RM antenna series has been designed to take low power SSPAs or high power TWTs in single thread or 1:1 redundant configurations with power levels up to 400W for the RM120 and up to 750W for the RM150.

**Options :-**

High Stability LNB
3 axis Jog-controller
Auto-Pointing controller
Inclined orbit tracking controller
RF and encoding packages

**Auto-Acquire**
The Satellite Acquisition Controller uses industry standard position transducers and a sophisticated pattern recognition algorithm to confirm and refine its heading information using visible satellites. The controller is mounted on the antenna structure with a separate power supply and control panel in a rack mount unit for mounting within the equipment area.

**Ease of use**
The system is simple to install, set up and use. Following relocation of the antenna, the system will reliably and accurately locate and lock on to the designated traffic satellite, typically in less than 3 minutes from stowed

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**Specification**

| | | RM120/SNG | RM150/SNG |
|---|---|---|---|
| **Mechanical Data** | | | |
| Antenna Width: | | 123 cm | 150 cm |
| Antenna Height: | | 127 cm | 152 cm |
| Geometry: | | Offset, dual optic | Single offset |
| Reflector Material: | | SMC | Carbon fibre |
| Weight: | | 100kg | 100kg |
| Speed: Elevation | Fast | 2°/Sec | 2°/Sec |
| | Slow | 0.5°/Sec | 0.5°/Sec |
| Azimuth | Fast | 5°/Sec | 5°/Sec |
| | Slow | 1°/Sec | 1°/Sec |
| Feed interface: | | WR 75 | WR 75 |
| Azimuth range: | | +/- 220° | +/- 220° |
| Elevation range: | | 5 to 90° | 5 to 90° |
| Polarisation range: | | +/- 95° | +/- 95° |
| Operating temperature: | | -30°C~+60°C | -30°C~+60°C |
| Wind Speed | Operational | 45mph (72kph) Gusting to 60mph (97kph) | |
| | Stowed | 100mph (161kph) | |
| **Electrical Data** | | | |
| **Receive** | | | |
| Polarisation: | | linear | linear |
| Frequency band: | | 10,7 ~ 12,75 GHz | |
| Gain @ 12.5 GHz : | | 41.8 dBi | 44 dBi |
| G/T (30° elevation) @ 12.5 GHz: | | 21 dBK | 23 dBK |
| **Transmit** | | | |
| Polarisation: | | linear orthogonal | |
| Frequency band: | | 13.75 ~ 14,5 GHz | |
| Gain @ 14.25 GHz: | | 43 dBi | 45.7 dBi |
| VSWR: | | 1.3 : 1 max | 1.3 : 1 max |
| Isolation Rx / Tx (13.75~14,5 GHz): | | 40 dB min | 40 dB min |
| Isolation Tx / Rx (10.75~12,75GHz): | | 75 dB min | 75 dB |

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