



# iMet-3100M

## 403MHz Military Antenna / Receiver

### System Overview

Radiosonde Compatibility	iMet1, iMet-2, iMet-4, iMet-50, iMet-54
Frequency	400.15 - 406 MHz
Operating mode	Mobile or fixed installation
Operating Environment	All weather
System architecture	Digital
Field Installation	< 15 minutes
MTBF	> 2400 hours
Useful life	> 10 years
Sounding Software Compatibility	D-Met, iMetOS-II

### Operating Parameters

Power	24 VDC nominal (18 - 32 VDC), 3A
Temperature	-40 to +55 °C
Environment	MIL-STD 810F
EMI	MIL-STD 461E
Antenna weight	< 5.5 kg (complete)
Total Length	85 cm

### Installation Options

Antenna	Tripod or vehicle mount
Optional tripod	1.1 to 2.3 m fully extended
Carrying cases for:	Tripod, antenna, PC, cables
Cable (single) Data/Power	30 m

*Meeting the ruggedised requirements for military usage, this antenna offers mobile (tripod) or vehicle mounting antenna options. Compliance with all mil-spec standards ensures excellent reliability and trouble-free system integration*

*Specifications subject to change without notice  
\* Subject to balloon dimensions and atmospheric conditions*

### 403MHz Antenna

Antenna type	Centerfed coaxial dipole
Construction	Aluminium / fibreglass composite
Polarization	Vertical
Radiation pattern	Omnidirectional
Gain	1 dBi
Max slant range	> 250 km*
Max altitude	> 40 km*

### Receiver

Type	Superheterodyne
Frequency control	Synthesized with AFC
Bandwidth	15kHz
Modulation	FM, FSK, GFSK
Sensitivity	-118 dBm

### Computer Requirements

Type	Any current PC
Operating system	Windows
Data protocol	RS-232 or RS-422
Ruggedised Option	Toughbook

### Key Features

- Combined antenna/receiver with single data cable interface
- Integrated GNSS providing accurate station location
- Rugged, all-weather operations, includes built-in heaters
- Small size, rugged and light weight
- Antenna can be dismounted from base for ease of transport
- EMI/EMC compliance
- Compatible with all 403MHz InterMet radiosondes
- Compatible with D-Met and iMetOS-II sounding software



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