



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



33 Estmil Road, Diep River, 7800,
Cape Town, South Africa
Phone: +2721 715 1120
email: info@intermetafrica.com
www.intermetafrica.com