



iMet-1600

1680MHz Tracking Antenna / Receiver

Drive System

Azimuth rotation	Continuous
Azimuth transfer	Slip rings
Elevation rotation	-5° to +91.5°
Motor drive	DC, harmonic gears
Maximum slew rate	25°/second
Azimuth resolution	0.01°
Elevation resolution	0.01°

Radiosonde Compatibility

Type	RDF or GPS
Antenna polarization	Vertical
Models	BAT-16, iMet-2, iMet-54

Operating Parameters

Type	Portable
Environment	All weather
Antenna weight	110 kg
Material	Aluminium
Height (fully extended)	3.0 m
Swing diameter	2.0 m
Power	18 - 32 VDC
Current draw	3 A quiescent, 18 A max (< 4 s)
Operating temperature	-40 to +60 °C
Operating humidity range	0 to 100 %RH
Environment	MIL-STD 810F
EMI	MIL-STD 461E
Data protocol	RS-422

Antenna

Type	Automatic tracking radiotheodolite
Frequency	1668.4 - 1700 MHz
Dish type	Aluminium parabolic grid
Dish diameter	1.2 m
Tracking beam width	8.4°
Antenna gain	21.6 dBi
Slant range	> 250 km*

Receiver

Type	Digital, superheterodyne
Bandwidth	Selectable (50 - 1000kHz)
Frequency control	Synthesized with AFC
Demodulation	FM, AM, FSK
Sensitivity (12dB SINAD)	-113 dBm

Scanner

Type	Solid state sequential lobe scan
Polarization	Vertical

Key Features

- Mil-spec compliance
- Dual tracking mode provides reliability even under conditions of GPS/GNSS jamming and spoofing
- May be dismantled for ease of transport
- Quick deployment
- Resistant to radiosonde signal jamming
- Encrypted radiosonde data transmission
- Extensive Built-in-Test capabilities for fault isolation and maintenance

With the ability to track radiosondes using both RDF or GPS techniques, this antenna has been designed to provide military users with upper-air met data under all operating conditions. The antenna complies with all mil-spec standards ensuring excellent reliability and trouble-free system integration.

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



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