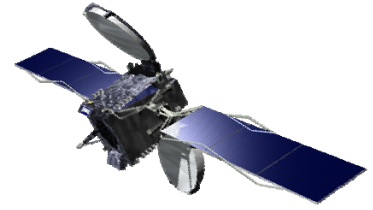


# Glowlink® MS 100 Monitoring Station



*The MS 100 is a portable monitoring station providing you regional visibility into your network operations.*

## Product Description

The MS 100 is a compact, portable spectrum monitoring station ideal for applications where access to an earth terminal signal source is not easily available. The MS 100 features a transportable, field-deployable antenna, ancillary RF electronics, and the Glowlink® Model 1000 Spectrum Monitoring System.

Requiring only power and a LAN/WAN or modem dial-up network connection, the MS 100 provides remote monitoring capabilities at standard satellite frequency bands anywhere in the satellite's downlink beam. The MS 100 provides the full set of advanced measurements and monitoring capabilities of the Model 1000 Satellite Spectrum Monitoring System, including some of the industry's most powerful carrier and satellite payload monitoring tools.

With these tools, the network operator can trouble-shoot network problems such as signal interferences and gain critical insight into ways to improve satellite utilization and ensuring overall quality of service. Refer to Model 1000 data sheet for all standard capabilities and available options.

## MS 100 Monitoring Station Features

- Provides spectrum monitoring at locations independent from ground station facilities.
- Incorporates Glowlink's Model 1000 spectrum monitoring features and capabilities.
- Available at standard satellite frequency bands
- Provides remote access and control over LAN/WAN or modem dial-up connection.
- Uses segmented antenna and tripod mounting for transportability and rapid setup and tear down.
- Operational in less than 45 minutes.



## MS 100 Options:

---

### Monitoring

- Transponder Operating Point (TOP™)
- Signal Under Carrier (SunCar™) for BPSK, QPSK, 8PSK, 16QAM
- SunCar™ for OQPSK
- Audible and Visual Alarm
- Inverted Spectrum

### System Functionality

- Cross-Pol Isolation
- Interfacility Link Calibration
- Antenna Pattern Measurement
- WebAccess™
- Email Notification
- User Account Manager
- Linux™-based Model 1000 Server Operating System

### Hardware Solutions

- Front Touch-Panel Color LCD
- 2U Rack mount chassis
- Redundant, hot swappable power supply
- Removable disk drive

Contact Glowlink to learn more about other features, capabilities and support-related services for a worry-free ownership experience.



# MS 100 Technical Specifications

## Measurement Accuracy

Carrier Power:	+/- 0.2dB <sup>1</sup>
Center Frequency:	1.5% of BW <sup>2</sup>
Carrier Frequency:	0.1% of BW + 100 Hz <sup>1</sup>
Carrier Bandwidth:	1.5% of bandwidth <sup>1</sup>
C/N, C/kT:	+/- 0.35 dB <sup>1</sup>

1. Accuracy measured with C/N = 10 dB

2. Typical for C/N = 14 dB

## Characterization Capabilities

Modulation Type*	Identifies: BPSK, QPSK, OQPSK, 8PSK, 8QAM, 16QAM, 64 QAM, Open Standard DVB-S2*, QPSK, 8PSK, 16 APSK, and 32 APSK
Symbol Rate	Measured for BPSK, QPSK, OQPSK, 8PSK, 8QAM, 16QAM, 64 QAM, 16 APSK, 32 APSK
Carrier Frequency	Carrier frequency of digital carrier
Transmission rate	Demodulator output bit rate
Es/No	Measured from carrier
Eb/No	Referenced to demodulator
FEC*	Convolutional code rates of 1/2, 3/4, 7/8 for BPSK, QPSK, OQPSK, Rate 2/3 Trellis for 8PSK, LDPC* for 16APSK, 32APS

\* Optional Capability

## Front End Characteristics

Input Frequency	70 MHz
Instantaneous BW	36 MHz (72 MHz Optional)
Resolution Bandwidth	97.66 kHz, 48.83 kHz, 24.41 kHz, 12.21 kHz, 6.10 kHz, 3.05 kHz, 1.53 kHz, 763 Hz (381 Hz, 191 Hz, 95 Hz, 48 Hz, 24 Hz, 12 Hz Optional)
Full Bandwidth Input Power	-20 to +25 dBm
Max Input Level	+30 dBm
Dynamic range	115 dB nominal
Minimum Carrier Level	1 kHz carrier BW: -65 dBm 10 kHz carrier BW: -55 dBm 100 kHz carrier BW: -45 dBm 1 MHz carrier BW: -35 dBm 10 MHz carrier BW: -25 dBm
Connector Type	50 ohm, BNC

## Control Interface

Network	Ethernet (RJ-45)
Downconverter or switch	RS232 (RS422, IEEE-488 Optional)

## Physical

19-Inch Rack mount	EIA RS-310C Standard, 4U Height (2U optional)
Power	110/220VAC ± 10%, 47-63 Hz



### Contact Us

**Glowlink Communications Technology, Inc.**  
333 Distel Circle  
Los Altos, California 94022

**Phone:** (650) 237-0223

**Fax:** (650) 237-0225

[www.glowlink.com](http://www.glowlink.com)

© 2011, Glowlink Communications Technology, Inc. As it is our intent to continuously improve our products, Glowlink reserves the right to make changes to specifications and features without notice. Glowlink and the Glowlink logo are registered trademarks of Glowlink Communications Technology, Inc. Windows XP is a registered trademark of Microsoft Corporation in the US and/or other countries. Intel and Pentium are registered trademarks of Intel Corporation in the US and/or other countries. All other trademarks are the property of their respective owners.

#### Glowlink Related Patents

With respect to the Glowlink product(s) described in this document, the following patents may apply:

United States Patent No(s): 8,004,459; 7,667,640; 7,663,547; 7,639,761; 7,466,767; 7,120,392; 6,549,75; New Zealand Patent No(s): 529266; 533787, Singapore Patent No(s): 100422; 105251, Australia Patent No(s): 2002340512; 2003213579, Europe Patent No(s): 1393472, Canada Patent No(s): 2446301, China Patent No(s): ZL02812548.7, Hong Kong Patent No(s): 1066941.

#### Other U.S. and International Patents Pending



Glowlink Communications Technology, Inc.  
Los Altos, California 94022  
[www.glowlink.com](http://www.glowlink.com)