

Monics® 200 - Delivering Fully Featured and Cost Effective Interference Identification for HTS spot beams, Fly-Aways and Smaller Sites



Mitigating interference is becoming more difficult and complex than ever before in today's rapidly growing satellite environment. The increase in High Throughput Satellites (HTS) with potentially hundreds of spot beams per satellite, the growth of smaller and mobile antennas and existing satellite congestion create ideal conditions for more interference. This new environment drives the need to increase the number of monitoring locations and use more cost effective and intelligent monitoring devices to ensure the highest level of Quality of Service (QoS) is being delivered.

Monics® 200, a product within the Monics family of satellite carrier monitoring and interference mitigation solutions was developed to deliver advanced monitoring capabilities cost effectively for this evolving environment.

Monics 200, a self-contained and stand-alone device is ideal for key applications that need cost-effective monitoring such as HTS spot beams, fly away environments and instances where only limited monitoring is required, such as remote teleports with a small number of antennas. Monics 200 integrates with the Monics Net and Monics Enterprise platforms appearing as a typical Local Network Server (LNS) in the Monics systems.

Fully Featured RF Analytics

- Provides standard frequency and power measurements as well as Digital Signal Processor (DSP) enabled time domain measurements
- Collects RF data analytics for assessing bandwidth efficiency and effectiveness
- Provides automated monitoring, alarming, trace forwarding and essential manual spectrum analysis capabilities

Cost-Effective Monitoring

- Minimizes hardware costs with a single device that includes the capabilities of an integrated DSP measurement instrument, Local Network Server (LNS) and two port L-band switch
- Reduces operating expenses by occupying less rack space with its sub 1RU form factor



▲ Monics 200 is a fully featured and cost-effective monitoring device deployed at spot beam sites.

Maintain Quality of Service (QoS)

- Continues to run automated bandwidth monitoring even during a network outage to avoid the loss of any measurement data
- Upon network restoration, forwards measurement data automatically to the Monics Central Data Server (CDS)
- Provides easy to use web based initial configuration to enable less experienced technicians to install and replace devices in the field
- Ensures reliability with solid state drives that have no spinning hard disk or other moving parts that are susceptible to damage

Monics 200 Specifications

Device Specifications	
Typical Specifications	
Input Frequency	850 MHz to 3000 MHz
Instantaneous Bandwidth	54 Mhz
10 MHz Reference Clock Input	±3 dBm input level
Typical Operating Input Power	-60 dBm to -25 dBm
Input Power Range (CW detection)	-97dBm to +1dBm (Gain dependent)
Input Gain (Selectable)	10, 20, 30, 40, 50dB
Measurement Storage	65000 records
Measurement Speed	One 54MHz sweep per second (RBW 10KHz, VBW 100Hz)
Automatic Monitoring Plan	1
Gain Stability Over 24 hours	±0.25 dB over 24 hours at 20°C ambient
RF Connector	SMA female (50 Ohms)
External 10MHz Reference	BNC (50 Ohms)
Monics Interface Connector	RJ-45 (Ethernet)
Power Consumption Typical	16W, 26VA@120VAC
Cooling	Natural Convection
Environmental	
Operating Temperature	0°C to 50°C*
Humidity	5% to 95% non-condensing*
Mechanical	
Max Dimensions	1.5 x 7.75 x 6.25 in. (3.8 x 19.7 x 15.9 cm)
Weight	2.1 lbs (0.95Kg)
Rack Mount Kit (Optional)	Up to 2 devices per 1 RU
Power	
AC Supply	100-240V AC, 50/60Hz (with adapter kit)
DC Output (Max)	2.5 A/12V DC
* = Pending verification	