

SPECTRUM MONITORING MODEL 1010



Spectrum Monitoring Model 1010

Modulation Type	Digitally modulated communication signals
Symbol Rate	Compatible with PSK, APSK, QAM and other modulation
Carrier Frequency	Various, including FDMA, TDMA, DSSS, FH, and ACM
Transmission Rate	Continuous Wave (tone)
Es/Nc	Measured from carrier
Eb/Nc	Referenced to demodulator
FEC	Convolutional (IESS-308, 309, 310, DVB-S), LDPC (DVB-S2) and others

Measurement Activity

Carrier Power	Type N, 950-2150 MHz, -55 dBm to 0 dBm (max no damage +10 dBm), 50 Ω
Center Frequency	Type N, 950-2150 MHz, 50 Ω
Carrier Frequency	Type N, 0 to +10 dBm, 50 Ω
Carrier Bandwidth	100 MHz
C/N, C/kT	250-100,000 ksps

RF Characteristics

Connector	SMA, 950-2150 MHz, 50Ω		
Resolution Bandwidth	97.66 kHz to 12 Hz		
Dynamic Range	115 dB nominal		
Minimum Carrier Level	1 kHz Carrier Bandwidth: -85 dBm, 10 kHz Carrier Bandwidth: -75 dBm, 100 kHz Carrier Bandwidth: -65 dBm, 1 MHz Carrier Bandwidth: -55 dBm, 10 MHz Carrier Bandwidth: -45 dBm		
Mode	Model 1010 & 1010x2	Model 1020	Model 1030
Instantaneous Bandwidth	100 MHz ³	200 MHz	300 MHz
Full Bandwidth Input Power	-55 to -5 dBm	-52 to -2 dBm	-50 to 0 dBm
Max Input Level	0 dBm	+3 dBm	+3 dBm

Data Interface

Network	Ethernet (RJ-45)
I/C	USB, Serial

Mechanical/Environmental

Size	W 19.00 in x D 21.00 in x H 7.00 in (W 48.26 cm x D 53.34 cm x H 17.78 cm)
Weight	39.00 lbs (17.69 kg)
Temperature	Operational 57.2° to 107.6°F (14° to 42°C)
Humidity	30 to 90%, at 95°F (35°C) non-condensing
Input Voltage	100–240 VAC, 50–60Hz

Model 1010 Options

Monitoring	Transponder Operating Point (TOPTM), Signal Under Carrier (SunCarTM), Signal Characterization, Audible and Visual Alarm, 16APSK/32APSK Recognition and Characterization, Narrow Resolution Bandwidth, Background Interference Detection
System Functionality	User Account Manager, SNMP
Hardware Solutions	L-Band Converter, Database Server, GL950 8-Port RF Switch, Removable System Drive, Hot Swappable Power Supply, Workstation with Spectrum Monitoring Client

¹ Accuracy measured with C/N = 10 dB

² Typical for C/N = 14 dB

³ 100 MHz per channel on Model 1010x2

⁴ Model 1010 height is 3.50" (8.89 cm)