

Spectrum Monitoring

(Model 1010)



CHARACTERIZATION, CAPABILITIES AND FEATURES

Modulation Type	Identifies PSK, APSK, QAM and other modulation
Symbol Rate	Measured symbol rate of digital carrier
Carrier Frequency	Carrier frequency or digital carrier
Transmission Rate	Carrier bit rate
Es/No	Measured from carrier
Eb/No	Referenced to demodulator
FEC	Convolutional (IESS-308, 309, 310, DVB-S), LDPC (DVB-S2) and others

MEASUREMENT ACTIVITY

Carrier Power	+/- 0.2 dB ¹
Center Frequency	+/- 0.75% of BW ²
Carrier Frequency	+/- 0.05% of BW + 100 Hz ¹
Carrier Bandwidth	+/- 0.5% ¹
C/N, C/kT	+/- 0.25 dB ¹

RF CHARACTERISTICS

Carrier Power	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		
Model	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	+3dBm

DATA INTERFACE

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

MECHANICAL/ENVIRONMENTAL

Size	W 19.0 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) ⁴
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 (TOP™), Signal Under Carrier (SunCar™), 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)