

G6P/G6R Real Time Spectrum Analyzer





Profen Nspector G6 series is the real-time spectrum analyzer to solve the problems of satellite earth stations operators, spectrum managers, interference hunters who need to find out the interferences and keep maintaining RF networks healthy. The analyzer can capture 40 MHz real-time bandwidths with great accuracy even in harsh environments. With spurious free wide dynamic range, the RF signals in the range of from 70 MHz to 6 GHz can be measured and examined with high confidence.

Profen Nspector G6 uses state of the art digital technology and Fast Fourier Transformations to make fast and accurate measurements. With a very low noise floor and large dynamic range, it is well-suited to measure any type of satellite, cable, or terrestrial wireless carrier, including very small carriers, beacon signals and for carrier monitoring applications.

Profen Nspector G6 can be connected to an external 10 MHz reference for improved frequency accuracy and stability. All data communications with the Profen Nspector G6 occurs via its built-in Ethernet port. No additional software is required.

Profen G6 also features a powerful built-in Carrier Monitoring function that enables notification via email or SNMP of operator metrics exceeding user-defined thresholds.

Profen Nspector G6RM model with eight channels is capable of displaying RF signals from 8 different sources simultaneously, and also up to 20 carriers can be displayed on the screen.

Key Features

- 70 MHz to 6GHz frequency range
- Remote Spectrum Monitoring
- High Speed real-time spectrum Analyzer
- Captures RF Events as Short as 3 μs with 100% Probability of Intercept
- Fast Sweep and Recording
- High speed full-span sweeps (6 GHz/sec) for fast setup and discovery
- Importable and exportable user configurations
- Web based Multi-user Interface
- 2D color waterfall to examine the signal in time domain to minimize time spent on transient
- Selectable color persistence display mode
- Signal tracking with frequency mask
- Built-in Carrier Monitoring
- Zero span mode for time domain analysis

Typical Applications

- General purpose spectrum analysis
- · Radio network installation and maintenance
- Spectrum monitoring
- Spectrum management
- Interference hunting
- EMI/EMC compliance testing and troubleshooting

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TECHNICAL SPECIFICATIONS

FREQUENCY	
Frequency Range	70 MHz to 6 GHz
IF Bandwidth (in Real Time Mode)	40 MHz
IF Bandwidth (in Sweep Mode)	50 MHz
Resolution Bandwidths (RBW)	1 Hz to 960 kHz
Sweep Speed (RBW ≥30 kHz)	6 GHz/sec
AMPLITUDE	
Absolute Accuracy	±2 dB
Maximum Safe Input	+20 dBm
Range	20 dBm to Display Average Noise Level (DANL)
DISPLAY AVERAGE NOISE LEVEL	
70 MHz-1,3 GHz	-127 dBm/Hz
1,3 GHZ-4 GHz	-124 dBm/Hz
4 Ghz-6 GHz	-118 dBm/Hz
LO LEAKAGE	≤ -90 dBm
SUPERIOUS FREE DYNAMIC RANGE (SFDR)	-50 dBc (typical)
PHYSICAL INTERFACES	
RF Inputs	SMA, 50 ohms
Control	RJ45
Reference	BNC, 50 ohms
AC Power	EN/UL/IEC 62368-1
Mechanical	19" 1U (482.6 x 206 x 43,5)
CERTIFICATION	
EMC/EMI	EN 61326-1
Safety	EN 61010-1, UL 61010-1
OTHER SPECIFICATION	
Reference Input (External 10 MHz reference or	10 MHz, +5 dBm (typical)
internal reference)	
Frequency stability	-40°C to +85°C ±280 ppb
Aging (first year @+25°C)	±1.0 ppm
Control Interface	HTTP, SNMP
System Interface	Web based user Interface
Power Requirements	100-240 VAC, 50/60 Hz, 10W
Operational Temp. Range	0 to 50°C









