



Overview:

- ◆ 4 or 8 user selectable input SMA ports
- ◆ Covers all bands from 5 MHz to 3 GHz
- ◆ Built-in Carrier Monitoring
- ◆ External 10 MHz reference or internal ref.
- ◆ Web browser or API control
- ◆ SNMP status interface
- ◆ Standard 19" 1U Rack Mount Chassis
- ◆ Safety and Regulatory compliant

Model #	Feature
DCC590	8-port Signal Analyzer
DCC591	4-port Signal Analyzer

Description:

Microlab's 4/8-Port Signal Analyzer is a spectrum measurement and analysis unit in a 1U chassis with an integrated 8-port RF switching capability. It is ideal for either local or remote monitoring of multiple feeds and carriers in DAS, cable or other wireless networks.

The 4/8-port Signal Analyzer can function as an independent spectrum analyzer or can be easily integrated into a larger measurement network.

The 4 port DCC591 unit is remotely upgradeable to the 8 port DCC590.

The 4/8-Port Signal Analyzer uses state of the art digital technology and FFT to make lightning 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, wireless carrier or DAS system spectral activity, including very narrow band signals, beacon signals, interferers, spurious signals, and for carrier monitoring applications. Signal Analyzer accepts all signals from 5 MHz to 3 GHz and input power levels ranging from -110 to +5 dBm. RBW varies from 1 Hz to 15 MHz. The Signal Analyzer can be connected to an external 10 MHz reference for improved frequency accuracy and stability. All data communications with the Signal Analyzer occurs via its built-in Ethernet port. It can be installed anywhere, occupying only 1U in a standard equipment rack, allowing you to monitor up to 8 different feeds.

It is available with 50-ohm SMA connectors on the inputs. It can also be provided as a 4-Port Signal Analyzer, which is the same unit limited to 4 operational ports, allowing expansion to the other 4 ports in the future if required. No need to install additional hardware.

The 4/8-Port Signal Analyzer's powerful Graphical User Interface (GUI) is available using any standard web browser. No additional software is required. The GUI is very easy to use and operates like most traditional spectrum analyzers. It provides user-selectable colors for markers and traces, allows storage of multiple traces and provides measurement reporting. The Signal Analyzer GUI also includes two powerful applications: The built-in **Carrier Monitoring** function provides notification via email or SNMP of carrier measurements that exceed user-defined limits, offering you peace of mind that up to 100 of your carriers are operating as expected.

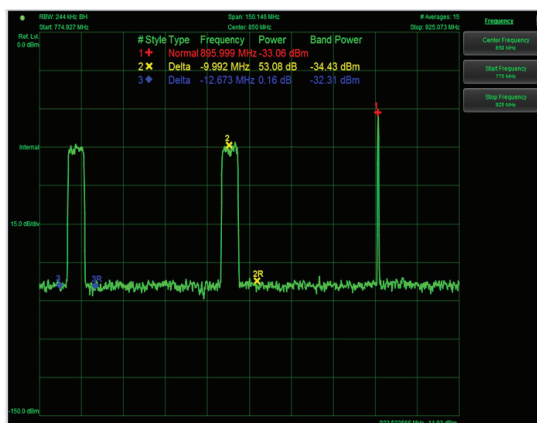
The 4/8-Port Signal Analyzer provides network access to all technical staff connected to the facility network or a corporate wide area network. This allows all technical staff the ability to monitor feeds and carriers at any time and from any location in the world using only a web browser. For integration into a larger measurement or carrier monitoring system, the 8-Port Signal Analyzer can be operated via its built-in GUI or the user can create a separate user interface using the publicly available API. An SNMP status interface is also provided. (11/14)

Physical Interfaces:

RF Inputs: 8 x SMA, 50 ohms
Control: RJ-45
Reference: BNC, 50 ohms
AC Power: IEC 60320
Mechanical: 1.75"H x 19"W x 10"D

Certifications:

EMC: EN 61326-1
FCC Title 47, Part 15
Safety: EN 61010-1
UL 61010-1
CSA22.2 No. 61010-1



Main Applet for the Signal Analyzer

DCC590/DCC591 Signal Analyzer Specifications:

PARAMETER	SPECIFICATION
Input Frequency Range	5 MHz to 3,000 MHz
Useable Dynamic Range:	-110 to +5 dBm (aggregate)
Noise Floor	-150 dBm/Hz typical at min atten
Phase Noise	-80 dBc/Hz at 1 kHz offset -95 dBc/Hz at 100 kHz offset -125 dBc/Hz at 1 MHz offset
Maximum Safe Input	+10 dBm
Input Isolation (port to port)	45 dB (min)
Input Return Loss	-15 dB (min)
Amplitude Accuracy	± 0.5 dB (at 25°C) ± 1.0 dB (0 to 40°C)
Frequency Accuracy	± 2.6 ppm (internal)
Frequency Resolution	1 Hz
Resolution Bandwidth	1 Hz to 15 MHz
Analysis Bandwidth	up to 220 MHz
Spurious	Images: < -55 dBc (typical) Aliasing: < -55 dBc (typical)
DC Offset (time domain)	< -30 dBc (typical)
Averaging	up to 255 averages
Measurement Speed	500 MHz span, 1 MHz RBW: 200 ms 200 MHz span, 30 kHz RBW: 630 ms 80 MHz span, 100 kHz RBW: 170 ms 3.5 MHz span, 8 kHz RBW: 90 ms
Reference Input	10 MHz, -5 dBm to +13 dBm
Control Interface	TCP/IP API, SNMP, HTTP
Power Requirements	120/240 VAC, 50/60 Hz, 25W (typical)
Temperature Range	0 to 40°C, Ambient