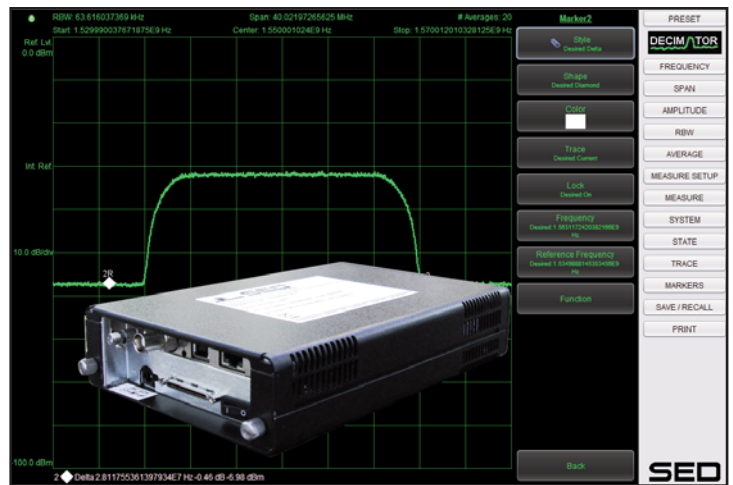


SED

Portable Decimator

SED's Portable Decimator is a second generation spectrum measurement and analysis product providing high-end performance at a low price. It is conveniently packaged for use by field technologists or it can be installed in a teleport or earth station. It is a small hand-held enclosure easily transported in a typical laptop case. The external power supply can be connected to any AC power source worldwide. The powerful GUI is available using any standard web browser.



The Portable Decimator can be easily transported anywhere, providing an instant L-band spectrum analyzer in conjunction with a laptop and any web browser. It can also be installed in any facility with a single L-band port to monitor.

It uses state of the art digital technology and Fast Fourier Transformations to make quick and accurate measurements. With a very low noise floor and large dynamic range, it is well-suited to measurement of any type of satellite carrier, including very small carriers, beacon signals and for carrier monitoring applications. Decimator accepts all L-band signals from 950 to 2,150 MHz and input power levels ranging from -110 to +5 dBm. RBW varies from 4 Hz to 500 kHz. The Decimator can be connected to an external 10 MHz reference for improved frequency accuracy and stability. All data communications with the Decimator occurs via its built-in Ethernet port.

The Decimator'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.

When installed in a facility, the Portable Decimator provides network access to all 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.

Features

Overview

- Covers full L-band from 950 to 2,150 MHz
- External 10 MHz or internal reference
- Web browser control
- Small hand-held enclosure
- Connects to AC power worldwide

Physical Interfaces:

RF Inputs:	SMA, 50 ohms
Control:	RJ-45
Reference:	BNC, 50 ohms
AC Power:	IEC 60320
Mechanical:	1.7"H x 5.5"W x 8"D

Certifications:

EMC/EMI:	EN 61000-6-2, EN 61000-6-4
Safety:	EN 61010-1



For further information on this innovative product please contact:

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Specifications

RF (L-Band) Input:

Input Frequency Range:	950 MHz to 2,150 MHz
Useable Dynamic Range:	-110 to +5 dBm (aggregate)
Noise Floor:	-145 dBm/Hz typical at minimum attenuation -115 dBm with RBW=1 kHz
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

Measurements:

Amplitude Accuracy:	± 1.0 dB (0 to 55°C) ¹
Frequency Accuracy:	± 2.6 ppm (internal) ± 10 Hz (external)
Frequency Resolution:	4 Hz
Resolution Bandwidth:	4 Hz to 508.928 kHz ²
Spurious:	
DC Offset:	< -55 dBc (typical)
Images:	< -55 dBc (typical)
Aliasing:	< -45 dBc (typical)
Single Measurement Span:	16 kHz to 52 MHz
Multiple Measurement Span:	52 MHz to 1200 MHz
Averaging:	up to 100 averages
Measurement Speed ³ :	
8192 Point FFT, 52 MHz span :	2.11 seconds
1024 Point FFT, 3.5 MHz span:	0.190 seconds

Other Specifications:

Reference Input:	10 MHz, -5 dBm to +13. dBm
Control Interface:	TCP/IP API, SNMP, HTTP
Power Requirements:	100-240 VAC, 50/60/63 Hz, 15W
Operational Temperature Range:	0 to 55°C

Notes:

1. Measurement conditions: 10 averages, input level between -8 dBm and -68 dBm, 3 sigma
2. Resolution bandwidths auto or manual adjustable. Available bandwidth limited by span, decimation rate and window type.
3. Expected rates with 2 MHz to 52 MHz span, 10 averages, 50% overlap using API.
4. All specification at 25°C unless otherwise noted and are subject to change without notice.