VIAVI

Replace Your Old Analyzer with the VSE-1100

The innovative new VSE-1100 Video Spectrum Expert analyzer is now available with packages starting at less than $9k. Contact your sales representative for all our special offers including trade-ins and promotions.

Fast—Easy—High Performance

Unlike analog-based spectrum analyzers, the VSE-1100 is purpose-built for digital cable networks. It accurately measures MER up to 44 dB at headends, hub sites, nodes, and any part of the network with fully loaded spectrum and tilt conditions. Accurate MER measurement with deep range in real-world conditions assures the highest quality of service—and, it gets you ready for DOCSIS 3.1, where high MER is critical to enable higher-order OFDM modulation.

Key Features and Benefits

- **VSE-1100 RapidScan™** gives you the big-picture view. You can compare power levels, MER, and ingress under-the-carrier across the full range of adjacent channels. The VSE-1100 display highlights QAM-level modulation and MER levels to make potential issues stand out.

- **AutoChannel™** content-intelligent tuning, with automatic up and downstream channel-plan building and video program detection, simplifies instrument configuration, speeds problem identification, and shortens repair times. For example, when a customer complains about tiling on a particular program, the tech must first determine which signal is carrying that program to analyze signal quality. For example, when a technician types "ESPN", AutoChannel automatically links the QAM signal to the channel program, avoiding a time-consuming search for the right QAM signal to troubleshoot.

- **Hyper-Spectrum™** real-time spectrum analyzer (upstream) — real-time, overlapping FFT analysis with hyperspeed ensures that no transient interference will go undetected, revealing noise/interference vs. upstream QAM signals.

- **MACTrak™** — MACTrak Local is an upstream packet and return path troubleshooting tool for both the headend/hub and the field.

- **NoiseTrak™** — impulse noise and ingress can be very difficult and time consuming to troubleshoot, as a technician uses subjective discernment to determine which leg of the return path contains the noise source. The innovative VSE-1100 dual-input NoiseTrak mode enables simultaneous viewing of spectrum and demodulated signals from both legs with an objective analysis to expose the problem leg. This unique test capability dramatically shortens repair times.

- **Remote Access via WiFi/Ethernet** — run tests from any network-accessible location, even when the measurement engine is positioned in a remote network location.

- **MPEG Analysis** — get insight into the actual customer experience with MPEG transport stream analysis.

- **Performance Scan** – Perform regularly scheduled complete tests and file the results with a quicker, more automated test process and with only one instrument for both RF and MPEG, and more simplified reporting.

- **DOCSIS 3.1 OFDM Channel Analysis** – clearly identifies OFDM signal in the scan, and provides simpler and more accurate measurement and alignment

- **Long-Term TimeTrak™ Measurements** – captures intermittent events over as much as 25 hours, with a rolling window and remote accessibility for troubleshooting, including level, MER, and DQI
- **Referenced Spectrum** – Troubleshoot RF issues, tracking and comparing levels from test point to test point
- **Enhanced Video Analysis** – Test both Ethernet MPEG streams and RF sources, and identify programs (names) in tracking issues when the tech only knows which program has an issue.
- **Extended Frequency Range** – With an 1,800 MHz frequency range, the VSE-1100 is now ready for any expansion plans that include expanding beyond the 1,100 MHz limit.

VSE Package Feature Matrix	SA	US	DS	Base
RapidScan	1 Channel		✓	✓
AutoChannel			✓	✓
Hyper-Spectrum real-time spectrum analyzer	✓	✓	✓	✓
MACTrak		✓		✓
NoiseTrak		✓		✓
Remote access (via WiFi/Ethernet)	✓	✓	✓	✓
MPEG analysis (via RF or Ethernet)			Optional	Optional
Performance Scan			✓	✓
Long-Term TimeTrak	✓		✓	✓
OFDM	1 channel		✓	✓
Spectrum Referencing	✓	✓	✓	✓
SA = Spectrum Analyzer Model	US = Upstream Model		DS = Downstream Model	Base = Base Model

Self-configuring

No more wasted days just setting up the analyzer to make measurements, or relearning the setup process just to make a few channel lineup changes. The VSE configures itself. It learns the channel plan – not only enough to make measurements, but enough to show you where things are not quite right.

- View Programs
- Compare and Contrast
  - Physical (RF) vs. Logical (virtual)
- VSE highlights differences
- Flexible sort/filter/level

With VSE-1100 you don't need to be an expert to test MPEG and the Video/App Layer (1% or less of the technicians can do this today). VSE helps technicians get quickly up to speed, and to easily get the information they need to solve problems.

For more information about the VSE-1100 and related products, solutions, and options, visit the VSE-1100 page or contact your Viavi representative.

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