OneExpert CATV

Enhancements – Return Testing, BER, and WiFi Connectivity

The OneExpert CATV is a powerful test instrument platform for all workgroups, including DOCSIS® 3.1 performance and spectrum analysis, and forward and reverse sweep measurements.

The most advanced cable field meter, OneExpert CATV, is now equipped with even more advanced testing features. New features in release 3.4 firmware support return path testing, home and drop testing, and data management.

Return Path Testing

Ingress Expert - A clean return path is critical to high speed data performance in HFC networks. Return path noise and ingress issues are a primary concern in cable networks, and technicians spend much time testing and troubleshooting, and need a tool that helps them see clearly when there are problems for quicker find and fix. The Ingress Expert mode offers HyperSpectrum speed, which ensures that techs will not miss any transient ingress or impulse noise, and persistence “heat mapping” that enables seeing ingress or noise events that occur within the active service spectrum. The analyzer spans can be set to 42, 65, 85, 110, or 204 MHz, and the mode has easily configurable persistence and trace settings to optimize the tech’s ability to see troublesome ingress and impulse noise.

Return signal generator with loopback can be configured to generate up to 8 return band test signals (CW or QAM) for measuring/aligning component or network gain/loss. The loopback test includes the ability to normalize, and provides a graph and a table for easy interpretation of the results. The meter can be set to transmit only, receive only, or to transmit and receive with loopback.

OFDM-A upstream signal analysis is now a part of extensive DOCSIS 3.1 testing in DOCSIS Check and DOCSIS Expert modes.

Key Benefits

- Clear view of impact to service carriers with ingress Expert with HyperSpectrum™
- See what you’ve been missing with a persistence “heat map” that enables view of ingress or impulse noise within carrier occupied spectrum
- Faster return testing and alignment with a built-in multi-frequency return signal generator with loop-back
Ingress Expert Trace Definition

![Ingress Expert Trace Definition](image)

TDR of Drop in OneCheck

TDR graphs for the drop side tests in the OneCheck mode can be seen in the Session Expert section of test results, and “unique home” metadata is included in the information uploaded to StrataSync. These features further extend the completeness of information collected about the physical performance at the time of installation.

Extended BER Analysis for Headends and Hubs

BER measurements can now be configured with extended dwell time to test to 1.0E-9 in the Channel Check and OneCheck modes, for those applications that permit the time and require additional confidence.

WiFi Connectivity

New WiFi connectivity allows anywhere, anytime StrataSync data syncing over WiFi. For example, a cell phone configured as a WiFi hotspot could be used to sync data (even update firmware) via StrataSync with a WiFi connection to the OneExpert unit. WiFi connectivity also enables a wider application of the browser function, PathTrak access for example, StrataSync Mobile, or operator work-flow applications.

The best cable provider field instrument just got better! Be sure to contact your local Viavi Solutions representative for a demonstration of these new features, and visit our [website](https://viavisolutions.com) for more information about the versatile, powerful OneExpert CATV platform.

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