VIAVI

OneExpert™ CATV with DOCSIS 3.1

A full-featured handheld for simpler, faster installation and service testing

OneExpert CATV is an innovative signal analysis meter that greatly simplifies and automates cable installation and service test processes. It turns every tech into an expert, testing faster than ever, maximizing ROI. Unprecedented speed enables testing all the signals in the same time it used to take to measure only a few. Test results display clearly, with failures visibly noted and next troubleshooting steps offered via the built-in Session Expert.

Guarantee DOCSIS 3.1 Service Performance

Whether you are currently rolling out DOCSIS 3.1 services or simply increasing the number of bonded signals in your DOCSIS 3.0 implementation, it is important to be able to test the full range of services to ensure that your customers (especially premium service customers) are having a satisfactory experience. Measuring power levels alone is not enough to ensure proper service. Technicians need to test throughput to Gigabit speeds, codeword errors, ranging, registration and the extended channel bonding (32x8) with regular QAM carriers as well as bonding with DOCSIS 3.1 OFDM carriers to verify service level and performance.

Importance of Profile Analysis

- Profiles enable maximum network efficiency and capacity to provide the best overall quality of experience across varying network conditions

- Testing the viability of all profiles provides quick assessment of network performance to any given test point

- Techs can identify profile and service degradations and then troubleshoot and repair wiring or drop problems to provide the best possible service

Benefits

- Enable consistent, thorough testing with speed, simplicity, and power

- Increase deployment speed and quality with physical and service layer testing

- Lower total cost of ownership with reliable, future-proof instrument

- No down-time with simple field upgradeability

Features

- Industry-first DOCSIS 3.1 service testing

- Fast downstream scanning including MER/BER

- Simultaneous ingress and downstream testing

- Automated channel plan identification

- WiFi and Gigabit Ethernet capable

- Dual diplexers support 42/85 MHz networks
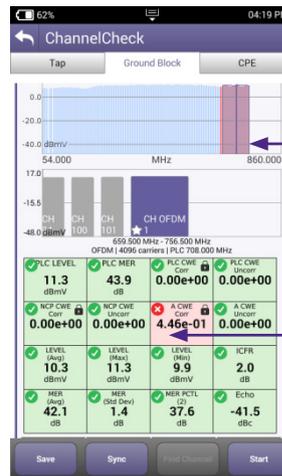
Applications

- Guarantee DOCSIS 3.1 service performance with OFDM, D3.1 profile analysis, and bonding with 32x8 QAM carriers

- Verify WiFi in 2.4 and 5 GHz networks

- Turn up business services

- Test Gigabit Ethernet DOCSIS services

Fast, Simple, Powerful

- OneCheck — comprehensive and automated ingress, downstream, and DOCSIS testing with Session Expert to help troubleshoot quickly

- Channel Check — real-time analysis and powerful troubleshooting of downstream carriers, enabling analysis of OFDM carriers including multiple downstream profiles; a quick way to check all levels and signal performance

- DOCSIS Check — real-time analysis of DOCSIS services, showing only DOCSIS carriers to let techs focus on high-speed data services with deep-dive info to troubleshoot and analyze downstream and upstream carriers including OFDM and channel bonding
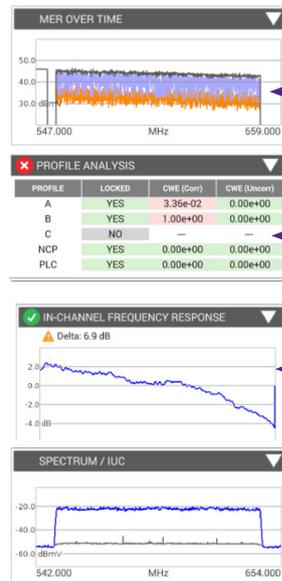
Lower Total Cost of Ownership

- DOCSIS 3.1 service testing built-in and available now or as a software upgrade later

- Dual diplexers 42/85MHz, ready for plant expansion

- Full 3-year warranty

- Long-life field-replaceable battery

- Longer calibration cycle (18+ months)

- Modular architecture for flexibility

- Instantaneous channel plans eliminate supervisor and management burdens

- Includes 3-year StrataSync asset and data management to reduce operating costs

Identify an downstream OFDM carrier in the lineup to simplify analysis

Downstream scan measurement eliminates the learning curve— it is the same as DOCSIS 3.0 scan, but shows OFDM signal

Overall OFDM carrier performance metrics including best and worst case; simple pass/fail indications

MER over entire OFDM channel provides insight into why higher-tier profiles are failing

Analysis of different available profiles and which profiles can be supported at test location simplifies performance verification and troubleshooting

In-Channel Response identifies roll-off and excessive ripple that may cause profiles to fail

Spectrum and ingress under the carrier identifies portions of carrier where degradation may occur