

## VIAVI PathTrak HCU 200

## INTEGRATED RETURN-PATH MONITORING MODULE

PathTrak provides superior spectrum and QAM analysis capabilities enabling the most efficient and effective monitoring and troubleshooting capabilities. Now fully supported by XPERTrak software, PathTrak is an integral part of VIAVI's overall HFC maintenance, monitoring, and troubleshooting portfolio.



- Simply the best live spectrum and QAM analyzers (mobilefriendly)
- Node ranking to fix nodes that matter the most
- Spectral and packet-based analysis capabilities, complete picture of upstream health
- Scalable solution minimizes hub space/power/cooling required
- Support field techs with VIAVI FieldView<sup>™</sup> and Field View QAM<sup>™</sup> for one-person upstream troubleshooting
- Performance history collection and reporting for trending and intermittent issue troubleshooting









## HCU 200

In addition to the best live spectrum analysis capabilities available anywhere, the HCU200 can demodulate and monitor live bursty DOCSIS® upstreams to expose linear and nonlinear impairments. The Impairment Dashboard lets you see the issues affecting RF and data performance at a glance.

You can pause measurements to review results packet by packet to identify those with codeword errors and to determine the impacted MAC addresses. MACTrack lets you see if problems are truly service-impacting so you can fix the problem rather than just fix a problem.

## SPECIFICATIONS

RF MEASUREMENTS	
Input ports	16 (F-connector or BNC) with activity indicator
Input port impedance	75 Ω
Frequency range	500 kHz to 85 MHz
Total measurement range	-50 to 60 dBmV
Operational temperature range and accuracy	±2 dB at room temperature; ±3 dB drift, 0 to 50
Spur free dynamic range	50 dB typical with 0 dBmV input
Port-to-port isolation	>65 dB
Resolution bandwidths: Standard DOCSIS Video	30, 300, 1000 160, 320, 640, 1280, 2560, and 5120 kHz Programmable to 10, 30, 100, 300, 1000 kHz
Attenuator	0 to 50 dB in 1 dB steps
Level accuracy	$\pm$ dB on signal pulses > 10 $\mu s;$ $\pm 4$ dB on signal pulses > 1 $\mu s$
Minimum noise burst measurable	<1 µs
Dwell time	Programmable from 1 µs to 100ms
Monitoring Mode	250 max points frequency resolution, scan rate depends on measurement settings
Interactive Spectrum Analyzer mode	500 points frequency resolution, up to 6 full spectrum scans per second with 20 $\mu s$ dwell time
Interactive Monitoring View mode	Up to 250 points frequency resolution, up to 6 full spectrum scans per second with 20 dwell time
Interactive QAM Analyzer mode	QAM64, QAM32, QAM16, and QPSK demodulation, level, modulation error ratio (MER), un-equalized MER, Codeword error rate, In-band channel response, group delay, ingress under the carrier, spectrum, micro refelctions, impulsenoise and constellation, live strip chart over time
Recommended input level of active signals	0 to +50 dBmV (over range indicator to prevent invalid measurement results)
GENERAL	
Enclosure	19 inch 1 RU rack mount
Display	2x16 charter back lit
Data Storage	1 GB flash memory
Ethernet	10/100 Mbps
Serial port	1 – HSM1000 control port
USB	1 – USB 2.0
Power	Dual - 48 V DC (-46 to 50 V DC)