

VIAVI RPM 3000

PATHTRAK MONITORING MODUL

The RPM 3000 module is an eight port, high-speed return path spectrum analyzer optimized for the noise and ingress analysis and monitoring functions of the PathTrak Performance Monitoring System. Each of the eight ports is an independent and isolated test port. The RPM 3000 module switches automatically between the eight ports and measures spectrum performance on each individually. The measurement settings and functions of the RPM 3000 consist of all typical spectrum analyzer settings such as resolution bandwidth, video bandwidth, dwell time, span, marker control, max hold, min hold, peak search, etc.



- Demodulates bursty Docsis upstreams using MACTrak technology
- Provides real-time codeword error rate, MER and other health measurements based on subscribers' Docsis packets and preferred over CMTS data
- Scans all 8 ports 16 times per second
- 500 kHz – 85 MHz – compatible with Docsis 3.0
- Measures transient noise as short as 1 microsecond
- Optimized monitoring plans for specific reverse services applications
- Three unique features ensure that all relevant ingress is captured: Ultra fast parallel scan rate, Burst detection, Selectable dwell time

SPECIFICATIONS

TECHNICAL DATA	
Frequency range	500 kHz...85 MHz
Dynamic range	- 50 dBmV ... 60 dBmV
Resolution bandwidth	programmable to 30, 300, 1000 KHz
Spur free dynamic range	40 dB (typ)
Operational temperature range & accuracy	± 2 dB at room temperature; ± 3 dB drift, - 50°C
Docsis bandwidth	160, 320, 640, 1280, 2560, 5120 kHz
Video bandwidth	programmable 10, 30, 100, 300, 1000 KHz
Attenuator	0 ...50 dB in 1dB steps
Level accuracy	± 2 dB on Signal Pulses > 10 ms; ± 4 dB on Signal Pulses > 1 ms
Noise burst measurable	< 1 microsecond
Dwell time	programmable from 1 ms bis / to 100 ms
Monitoring mode	250 max. points Frequency Resolution, Scan Rate depends on Measurement Settings, 8-16 Scans per second for every Port
Interactive spectrum analyzer mode	500 points Frequency Resolution, up to 16 full Measurement scans/sec with 20 microseconds dwell time
Interactive QAM analyzer mode	16 QAM and QPSK demodulation, level, MER, constellation diagram, live strip chart over time
Recommended input level of active signals	0 ... 50 dB