

AT2500HM™ Series

Rackmount CATV/QAM Spectrum Analyzer
Data Sheet



AT2500HMx spectrum analyzer

The AT2500HM series rack-mounted headend spectrum analyzer is a versatile and cost effective remote headend measurement solution that provides "real-time" visibility and full control of RF network performance at remote locations.

The AT2500HM series analyzer is a 1.5 GHz rack-mount RF spectrum analyzer designed specifically for CATV applications. Functions include basic spectrum analysis, automated tools for testing and preventative maintenance, QAM analysis, real-time remote control capability and FCC proof of performance testing. The AT2500HM is typically installed in a head-end or hub site and is used with optional Sunrise Telecom software making performance monitoring easy and practical, even for multiple locations.

The AT2500HMQ contains all the features of the AT2500HM but includes a Digital Power Measurements Mode, a Constellation display mode, Stats mode, Equalizer, Frequency Response, Group Delay and an all inclusive QAM Impairments analysis mode for 64QAM and 256QAM.

KEY FEATURES

- 1.5 GHz high sensitivity spectrum analyzer
- 16, 64 and 256 QAM demodulation, MER capability up to 40dB
- Fast 2 ms scanning of 500 data points on a selected span
- Remote testing and monitoring of both analog and digital downstream and upstream signals using realWORX, WinRemote II and WinCOM II software applications
- Easy networking for remote control and automated operation
- Supports up to 16 × AT1601/1602 RF switches for a total of 256 ports. Built-in automatic pre-selector filter increases the dynamic range of the instrument

BENEFITS

- The only spectrum analyzer built specifically for cable.
- RF monitoring and remote control capabilities at any time, from any location.
- Remote monitoring reduces downtime and expensive costs of sending staff to remote sites for routine network monitoring.
- Detects RF signal impairments before they turn into customer complaints.
- Characterizes return path for VoIP with 16 QAM demodulator (requires CM1000 with USG module)

APPLICATIONS

- The most useful troubleshooting tool for the RF spectrum is a spectrum analyzer. The AT2500HMQ is a full featured rack mounted spectrum analyzer focused at the needs of the CATV industry. With its wide frequency control (0 to 1.5 GHz), multiple RBW setting (10, 30, 300 & 1000 kHz), multiple VBW (10, 100 & 1000 kHz) and high dynamic range (70 dB) the AT2500 is able to tackle any problem in the RF portion of the HFC network.
- The AT2500HMQ's unique set of measurements which include digital power, constellation and QIA will help you analyze and repair those 'hard to find' digital problems with ease.
- The AT2500HM series analyzer can be controlled by the realWORX performance monitoring software for upstream or downstream monitoring applications.
- WinRemote II adds remote control capability to any of the AT2500 series analyzers. View Spectrum Analyzer, Digital Channel Power, QAM Analyzer, Statistical QAM Performance Graph, Adaptive Equalizer View, Frequency Response and Group Delay.
- Finding intermittent digital problems is made easy using the Stats mode in the AT2500HMQ. The Stats mode allows you to monitor MER and Pre and Post BER over time.
- Characterization of the return path can be challenging. Using the AT2500HMQ in conjunction with the CM1000-USG allows a technician to inject a QAM 16 signal into the RF network and use the analyzer to display the resulting impairments. Impairments like laser clipping and group delay can be easily viewed on the analyzer. Many RF return problems may not be obvious using conventional measurements and may only appear under specific conditions. In the return path, knowing the system performance with respect to the system headroom will help evaluate the amount of tolerance available before the customer is affected.

PHYSICAL PROPERTIES

Dimensions

Size: 482 × 133 × 355 (mm) (19"W × 5.25"H × 14"D),
3 RU (Rack Units) High

Weight: 7 kg (15.5 pounds)

Power: 100V/250V, 50/60 Hz, 16 VDC, 4.06 A

STANDARD ACCESSORIES

User Manual

WinCom II data management software

Battery charger

Serial cable for PC connection

Null Modem cable for PC to AT2500HM connection

Calibration Certificate

ORDERING INFORMATION

AT2500HM 1.5 GHz Headend Rackmount CATV Spectrum Analyzer
Includes 1.5 GHz Rackmount CATV spectrum analyzer, baseband video output, battery charger, and user manual

AT2500HMQ 1.5 GHz Headend Rackmount QAM/CATV Spectrum Analyzer
Includes 1.5 GHz rackmount QAM and CATV spectrum analyzer, baseband video output, battery charger, and user manual

OPTIONS

AT2Q6-8 64/256 QAM RQ+ Euro/Annex A/B/C, Dual
6 - 8 MHz bandwidth

AT2Q-ASI MPEG Transport stream output, ASI formatted
BNC connector