

SUNRISE TELECOM®

AT2500RQv™

CATV/QAM/Video Spectrum Analyzer

Data Sheet



AT2500RQv spectrum analyzer

The AT2500RQv has become the industry's most complete spectrum analyzer combining QAM analysis, video demodulation, time domain measurements and FCC Proof-of Performance testing in a single instrument. Today's broadband network technicians face the challenge of keeping the cable plant operating at peak performance at all times. To diagnose and correct problems, they need to be able to quickly perform sophisticated tests and get accurate results. Designed with PC technology in mind, the Sunrise AT2500RQv is a light-weight, full featured 1.5 GHz spectrum analyzer built to withstand the rigors of field use.

KEY FEATURES

- 1.5 GHz high sensitivity spectrum analyzer
- Complete set of CATV measurements including CCN, CSO, CTB, In-Channel response, Depth of Modulation, Hum and carrier frequency.
- Complete set of NTSC Video measurements including a Vectorscope and Waveform monitor display
- Built-in automatic filter increases the dynamic range of the instrument
- 16, 64 and 256 QAM demodulation, MER capability up to 40dB
- QAM analyzer with constellation, statistics, group delay, response and impairment analysis
- Multiple trace display, detector selection and enhanced markers for added flexibility
- Easy networking for remote control and automated operation

BENEFITS

- Performs all FCC tests without service disruptions using a gated signal
- Detects RF signal impairments before they turn into customer complaints
- Integrated analog and digital measurement in one analyzer saves money on hardware and training
- Isolates difficult-to-locate impairments using enhanced trace, detector and marker capabilities
- Characterizes return path for VoIP with 16 QAM demodulator (requires CM1000 with USG module)

APPLICATIONS

- The AT2500RQv contains a Digital Power measurement mode, Constellation display mode, Stats mode, Equalizer, Frequency Response, Group Delay modes and an all inclusive QAM Impairment Analysis mode for 64 and 256QAM. This unique set of measurements helps you analysis and repair difficult digital problems with ease.
- Finding intermittent digital problems can be easy using the Stats mode in the AT2500RQv. The Stats mode allows you to monitor MER, Pre and Post BER over time.
- Characterization of the return path can be challenging. Using the AT2500RQv in conjunction with the CM1000-USG allows a technician to inject a 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.
- FCC testing is required semi-annually and the AT2500RQv helps you perform these tests in a minimum amount of time. For example, CCN, CSO and CTB measurements on a specific channel are performed with the push of one button.
- FCC Video measurements on NTSC channels are not a problem for the AT2500RQv. Measurements can be made using several common test signals placed in the vertical blanking area of the channel. Test parameter can be preprogrammed in the channel plan to insure the tests are made the same way each time the measurement button is pressed.
- The most useful troubleshooting tool for the RF spectrum is a spectrum analyzer. The AT2500RQv is a full featured 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.

PHYSICAL PROPERTIES

Size: 304.8 mm x 177.8 mm x 355.6 mm
(12"W x 7"H x 14"D)

Weight: 8.6 Kg (19.6 pounds) min. with battery

Display type: TFT Active Matrix Color LCD

Display size: 162.5 mm (6.4 inches)

STANDARD ACCESSORIES

Carrying Case

User Manual

WinCom II data management software

Power Supply 16V, 4A

Serial cable for PC connection

Null Modem Serial Cable for PC to AT2500RQ connection

Calibration Certificate

ORDERING INFORMATION

AT2500R	1.5 GHz Portable CATV/Spectrum Analyzer with CATV pack, <i>TDM measurement, internal band select filter, precision frequency counter, bband video output and WinComII software, battery charger, protective carrying case and user manual.</i>
AT2500RQ	1.5 GHz Portable CATV/QAM/Spectrum Analyzer CATV pack, <i>TDM measurement, QAM 64/256, Annex B&C digital measurement w/ QIA impairment analysis, internal band select filter, precision frequency counter, bband video output and WinCom II software, battery charger, protective carrying case, and user manual.</i>
AT2500RQv	1.5 GHz CATV/QAM/Spectrum Analyzer with Video Demod CATV pack, <i>TDM measurement, QAM 64/256, Annex B&C digital measurement with QIA impairment analysis, video measurement option, internal band select filter, precision frequency counter, bband video output and WinCom II software, battery charger, protective carrying case, and user manual.</i>

OPTIONS

AT2Q6-8	64/256 QAM RQ+ Euro/Annex A/B/C, Dual 6 - 8 MHz bandwidth (Required for Annex A)
AT2Q-ASI	MPEG Transport stream output, ASI formatted BNC connector