The most popular DOCSIS Cable Modem Signal Level Meters now offer a new CM-VoIP+™ option to verify, test and troubleshoot IP telephony services. Enable your technicians to ensure that quality of voice services exceed your subscriber’s expectations, with the safety margin that you need, by analyzing MOS and R-Factor on your DOCSIS/VoIP network.

- Guarantee VoIP QoS by qualifying the upstream and downstream
- Accelerate service deployment by sectionalizing the cause of potential problems (IP network or HFC)
- Validate voice quality by emulating a VoIP call
- Dynamic QoS simplifies deployment by eliminating requirements for phone service account setup and special provisioning

CM-VoIP+™ MOS ANALYSIS OPTION FOR CM500 AND CM1000

Ensure Voice Quality Exceeds Customer Expectations
CM-VOIP+ OPTION

The CM-VoIP+™ option allows the CM500 and CM1000 to connect to
the network and establish dynamic QoS upstream and downstream UGS
service flows. The meter connects to the realMOS™ Server, transmits
and receives UDP/RTP VoIP voice data to measure the Voice Quality of
the network. Measurements, accessed directly from the Cable Modem
Check mode, include MOS (mean opinion score), R-Factor, Latency,
Jitter and Lost Packets—both upstream and downstream.

The CM transmits actual voice data over the QoS flow to the realMOS
server, which then analyzes the voice quality. The realMOS server trans-
mits voice data back to the CM for voice quality analysis. Results from
the realMOS™ Server are then transferred to the CM via a TCP/IP con-
nection. Measurements are then displayed for both the upstream and
downstream.

The CM-VoIP+™ option also provides IP QoS measurements of Latency,
Jitter and Lost packets to be analyzed over the upstream and down-
stream “best effort” data service flow.

VoIP detail screens provide detail of the requested and granted VoIP
Service Flow Data Rate and Jitter Tolerance.

• DOCSIS 1.1 BPI+ & Packet Cable™ Compatible
• MOS Voice Quality Measurements on the Upstream and Downstream
• Uses DOCSIS 1.1 QoS Flows
• Dynamic QoS—no Provisioning
• Measure MOS, R-Factor, Lost Packets, Latency and Jitter
• Compare “best effort” to QoS performance
• Uses Actual Voice UDP/RTP VoIP Frames
The realMOS server consists of two parts: PC server and the realMOS software. The realMOS server must be dedicated to CM-VoIP+ testing. It is located near the CMTS for maximum performance. Customers who prefer to buy the server from their current supplier can do so as long as this server meets the minimum requirements. Please call our Technical Support department for details.

The realMOS™ software enables the server to receive and transmit UDP/RTP voice data packets to and from the enabled CM series meter to both the upstream and downstream VoIP data paths.
FIELD-PROVEN SOLUTIONS

For detailed information on the CM-VoIP+™ option and the realMOS™ Server, visit our web-site at www.sunrisetelecom.com for the name of your local Sunrise Telecom representative or phone us at 1-800-297-9726 (Int’l calls: 1-514-725-6652).

Sunrise Telecom Broadband is a leader in digital broadband and DOCSIS test instruments for the broadband industry. As part of the Sunrise Telecom family, we leverage the strength of one of the world’s largest communications test and measurement companies.

Sunrise Telecom Broadband’s field-proven solutions include installation and maintenance instruments; portable headend analyzers; and network test systems and software. Our goal is to enable service providers to rapidly deploy television, high-speed Internet, and digital video applications.

Based on our core strength in RF testing, we have established a successful track record as a provider of leading edge solutions that incorporate innovative test methods, intuitive user interfaces, and thorough product training.

At Sunrise Telecom Broadband, we uncomplicate the cable broadband engineer’s and field technician’s day.

MINIMUM REQUIREMENTS FOR realMOS™ SERVER

- Intel® Pentium® 4 processor 521 (2.8 Ghz, 800 MHz FSB, 1M L2 cache)
- 512Mb (dual channel) shared DDR2 SDRAM at 400MHz

ORDERING INFORMATION

CM-VoIP+™ CM-VoIP+™ Option for CM500 or CM1000 Includes MOS, R-Factor, Latency, Jitter and Lost Packet measurements when used with realMOS™ Server. realMOS™ Server required.

realMOS™ Server PC Server for use with CM-VoIP+ MOS measurement option for CM500 and CM1000. (Includes realMOS™ software)

realMOS™ Software Software for use on server dedicated to CM-VoIP+ MOS measurement option for CM500 and CM1000.

UPCM-VoIP+™ Upgrade to existing CM500 or CM1000. Some models require hardware upgrades. Consult Customer Service for details and pricing.

JUST ANOTHER WAY WE’RE UNCOMPLICATING CABLE