



## Seminar

Measuring &  
analysis in  
next generation  
CATV networks

Woensdag  
24 september

Heynen  
Houthalen

## Measuring & Analysis in next generation CATV networks. Seminar op 24 september 2008 bij Heynen in Houthalen.

Met de roll-out van digitale TV, de groei naar HD en de komst van DOCSIS® 3.0 neemt de complexiteit in CATV netwerken toe. En als gevolg hiervan stijgt de behoefte aan tools die in deze complexiteit overzicht en ondersteuning bieden.

Dit seminar georganiseerd door Heynen in samenwerking met Sunrise Telecom brengt u een goed overzicht. Een aantal nieuwigheden en de technologieën worden uitvoerig gepresenteerd en uitgelegd aan de hand van praktische demonstraties.

Voor Sunrise Telecom betekent dit de Benelux launch van een serie apparaten die gericht zijn op de Europese markt. Het wordt meteen ook een sneak-preview voor de opvolging van de CaLan sweep.

Deelname aan het seminar is gratis.

### Programma

#### 9h – 9h15 Registratie en koffie

#### 9h15 – 9h30 Introductie van Heynen en de Heynen ServiceDesk

Heynen neemt steeds vaker beheerstaken van klanten over. Dit om de beschikbaarheid en levensduur van de tools te vergroten. Beheerstaken zijn onder andere calibraties, uitvoeren van updates/upgrades, remote access, vervangende units en onderhoud aan hardware. Heynen heeft deze beheerstaken ondergebracht in de ServiceDesk.

#### 9h30 – 10h Presentatie en demo van de nieuwe CM2000E en diens mogelijkheden

Multi-functional test set with unprecedented ease-of-use reduces installation and troubleshooting times for DOCSIS® networks

The CM2000E™ is a powerful cable modem network analyzer that sets a new standard for testing high-speed data, VoIP telephony, and digital and analog video services.



The unit's comprehensive set of customizable test functions speeds installations and reduces repair time, while increasing quality of service (QoS).

A range of automated test suites ensures consistency of tests performed, pass/fail limits, and results.

The CM2000E provides a large 6.4" full VGA, color touch screen with excellent visibility in bright sunlight, a field replaceable 4+ hour battery pack, tuning from 5 to 1000 MHz, integrated cooling to allow continuous use. All this in a handsome weatherproof rugged package.

#### 10h – 10h30 Spectrum Analyser AT-2500

The World's Only Spectrum Analyzer with Combined CATV, QAM AND Video Measurement Capabilities

The AT2500RQv 1.5 GHz spectrum analyzer is a high performance, lightweight, battery powered analyzer designed for CATV headend and field portable applications. The AT2500RQv provides the measurement power required for the latest multi-standard 16/64/256 QAM digital technologies, simplifying the worldwide transition from analog to digital testing. With a variety of modular and PC software options, the AT2500R series analyzer can be customized to specific CATV measurement requirements, giving you the flexibility to meet all your broadband test needs.

The AT2500RQv is the only analyzer designed specifically for cable TV applications. No other analyzer combines a full featured spectrum analyzer with a full CATV measurement package, time domain measurement module and optional QAM analyzer and video demodulation modules.

#### 10h30 – 11h Theorie en Uitleg, een blik op de toekomst

- DOCSIS® technology
- Laser Clipping and White Paper on Laser Clipping
- MER, modulation error ratio
- Home certification test after modem installation

#### 11h – 11h15 Koffie

### 11h15 – 11h35 Sweepttechnologie en System-management

Whether for routine maintenance or new interactive network installations, CaLan products offer a range of solutions. These products cover the entire 5 MHz to 1 GHz frequency range with exceptional speed, like+ 60 channels of visual and aural carriers in less than 2 seconds

### 11h35 – 12h30 Integratie en reporting van alle meetsystemen. RealWorx - RealGates

Performance Verification System - RealWORX WEB allows operators to confidently roll out RF-sensitive new services like VoIP, HDTV, High-Speed Internet and Video-on-Demand

The realWORX WEB Performance Verification System allows operators to monitor return ingress levels, analog signal performance, as well as QAM performance and statistics from many nodes using any browser interface. RealWORX WEB is running from a central server and can be scaled to meet any size monitoring system requirement.

RealWORX WEB compares RF performance against user-set limits and activates an alarm when signal impairments are detected. The system sends alarm notifications by email or cell-phone, and can report to the NOC via SNMP trap.

### 12h30 – 13h30 Lunchbuffet aangeboden door Sunrise Telecom en Heynen

### 13h30 – 14h QOS-Info komende uit de CMTS info – VOIP Health – Throughput speed, etc

The Auspice® OpsLogic® solution suite offers Communications Service Providers intelligent monitoring of their IP-based services' critical network elements. Customizable correlation engines utilize business logic to synthesize collected data and determine actionable resolution of problems that arise with service delivery. OpsLogic also supports multi-vendor environments and diverse network infrastructures, providing a comprehensive and proactive view of potential service-disrupting issues.

Scalable OpsLogic® solutions combine proactive service monitoring, alarm and event correlation, and performance thresholds to deliver an integrated view of your network for operations technicians, customer service representatives, and field service personnel. Information can be consolidated at the market level or drilled down for a per-subscriber view to empower your staff with the appropriate level of visibility to QoS degradations or service outages. Our automation tools enable repeatable best practices to increase efficiencies and standardize your operational methods and procedures.

### 14h : Afsluiting van het officiële gedeelte

### Tot ca 17h : tijd voor specifieke vragen en tests aan onze demo-opstellingen

De specialisten van Sunrise Telecom en de medewerkers van Heynen blijven de ganse namiddag voor U beschikbaar en tonen U graag volgende demos.

EXPO 1 Broadband	EXPO 2 Antenne Meetontvangers	EXPO 3 Access Testing
CM2000 (cable modem analyser) CM2800 (analyser & sweep) AT2500 (spectrum analyser) 3010R (Calan Sweep) AT1600 (Broadband Multiplexer) RealWorx	KWS AMA300/301 KWS Varos 307	TV90 TDR for CATV TV220 High end TDR for CATV Tempo DM310 Digital multimeter Tempo Netcat Cable Tester Tempo Toners & probes Optical power meters & sources

### EXPO 4 Overzicht Application Management & Application Monitoring

Inschrijving en info :

Bel 011-60 09 09 of stuur een mail naar [marijke.verslegers@heyne.be](mailto:marijke.verslegers@heyne.be) of [david.agresti@heyne.be](mailto:david.agresti@heyne.be)

We rekenen stellig op uw aanwezigheid en sturen U onmiddellijk een bevestiging na uw registratie.

Heynen nv,  
 Jos Jorissen, Directeur (Tel 0475-44 55 66)