Videotek®

Test & Measurement Solutions

Handheld Test Monitors

Harris offers a complete line of handheld solutions for video, audio, transport streams, RF and optical fiber test and measurement.

SD-STAR™ — Analog and SD-SDI monitor and generator and embedded audio; selectable oscilloscope functionality on analog input

HD-STAR® — HD-SDI and SD-SDI monitor and generator with embedded audio

GEN-STAR™ — HD-SDI and SD-SDI generator with embedded audio and genlock capabilities; video-to-audio lip sync test signal (V2A)

ASI-STAR™ — Transport stream monitoring with PSIP table information and ETR 290 priority 1 alarms; record and playout of ASI transport streams

VSB-STAR™ — Measures RF modulated signals for 8VSB, 64 QAM, 256 QAM digital signals and NTSC analog signals

Optical Fiber Testing

Videotek optical fiber test tools provide you with convenience and affordability. Whether you're at the station or covering a big game, these handy units provide accurate physical layer verification and reliable monitoring of your single- and multi-mode fiber networks.

OFI-20B — Optical fiber identifier

OPM-15A/B — Optical power meter

SLS-21A-03/SLS-25B-03 — Stabilized laser source

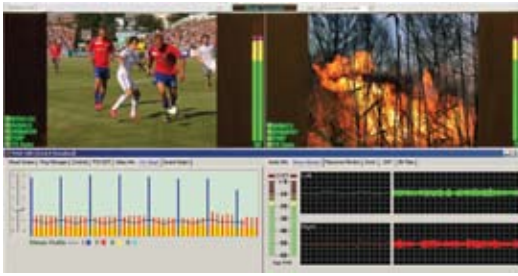
OLT-20A — Optical loss tester

VLS-20A — Visible laser source

OTM-20A/C — Optical test meter

PalmOTDR-20A/C — Optical time domain reflectometer

Monitoring and Analysis of Multiple Compressed Streams



MSA Series

The new Multi-Source Analyzer (MSA) Series from Harris offers a range of solutions that couple confidence monitoring with full testing for compressed video conformance, audio level, data services and ETR-290 on any terrestrial broadcast, cable headend, satellite or telco network. With two base platforms available (MSA-100 and MSA-300), customers can select the I/O configuration, channel capacity and system redundancy that meet their specific needs. Both solutions are offered in space-efficient 1RU packages.

The MSA Series delivers awareness of system information and ancillary data, with the ability to provide the conformance results in an intuitive GUI interface, along with one or more mosaic displays that provide real-time full-motion video decode and audio level analysis. A variety of physical input formats are supported, along with all major compression standards, a wide array of transport and streaming protocols, and the ability to simultaneously handle a large number of channels in real time.

MSA-100* — EL platform, standard with one codec and four SD PIPs, providing full conformance testing and traffic status monitoring

MSA-300* — HE platform, standard with one codec and eight SD PIPs, providing full conformance testing and traffic status monitoring

* Number of PIPs and/or shadow testing varies depending on codec type, picture resolution and bit rate.

Options

MSA-CODEC-MPEG2 — MPEG-1 (ISO 11172-2) and MPEG-2 (ISO 13818-2)

MSA-CODEC-MPEG4 — MPEG-4, Part 2

MSA-CODEC-H264 — MPEG-4, Part 10

MSA-CODEC-VC1 — SMPTE 412M

MSA-ADD-4PIPs-Plus-Txt — Add block of four SD or two HD PIPs with full testing and text

MSA-ADD-4Shdw-C-Plus-Txt — Add block of four SD or two HD shadow C-testing plus text

MSA-ADD-DVB-ASI — Quad-input ASI board

MSA-ADD-DVB-RF — RF board option (DVB-S/S2 | DVB-T | QAM 64/256 | 8-VSB)

MSA-ADD-HDD — Extra HDD for HE platform

MSA-ADD-PSU — Redundant PSU for HE platform

MSA-ADD-RVS — Remote view server (low/high res)

File-Based Testing

QuiC™ Media Analysis Server

Videotek QuiC™ is a fully automated, file-based test and measurement server platform. The QuiC solution allows you to verify the quality of compressed digital content five times as fast as real time for SD, and twice as fast as real time for HD. QuiC supports the quality assurance (QA) workflow by providing adjustable alarm thresholds for each analysis parameter used. Each parameter in QuiC determines whether ingested or transferred content is acceptable or unacceptable. QuiC can be operated manually using an intuitive Graphical User Interface (GUI), automatically using a "drop box" or file folder feature, or via automation using the QuiC API to place content into the analysis queue. Through the Remote View Station option, users can operate the GUI from a networked Windows PC.

MA-1200 — QuiC with LXF, MXF, GXF and QuickTime wrappers; includes an Inbox (watch folder) and internal storage

MA-1250 — QuiC with file correction and hardware I/O; provides the same features as the MA-1200, while adding audio/video I/O

Codecs

One codec comes standard, with multiple codecs to choose from:

MA-SWC-MPEG-2 — MPEG-2, IMX/CBG, Sony XDCAM
MA-SWC-DV — DV25, DVCPRO, DVCPRO50, DVCPRO HD
MA-SWC-DNX — Avid DNxHD®
MA-SWC-MPEG-4 — H.264/AVC
MA-SWC-AVC-I — AVC-Intra 50/100

Options

MA-OPT-FCT — File correction tools software package
MA-REM-VS — Remote View Station Client Software for Windows
MA-OPT-LL — Loudness monitoring, loudness evaluation per ITU BS.1770 standard
MA-SFTW-MAINT — Adds one year to software package, includes software upgrades and enhancements — 7% of list price

Compact Monitor Series

The Videotek Compact Monitor Series is a family of space-saving, efficient video and audio signal monitoring solutions that offer optional 3 Gb/s capability in two SDI inputs. Both the scope and rasterizer packages are available as portable or rack-mountable units.

CMN-41 — Compact Monitor Series multiformat on-screen monitor, HD/SD-SDI, 1RU, half rack, upgradable to 3 Gb/s

CMN-41L — Compact Monitor Series with no front panel controls

CMN-MV — Compact Monitor Series multiformat on-screen monitor with 720p 60 Hz HDSDI output, input HD/SD-SDI, 1RU, half rack, input upgradable to 3 Gb/s

CMN-91 — Compact Monitor Series multiformat signal analyzer with integral LCD, HD/SDSDI, 3RU, half rack, upgradable to 3 Gb/s

CMN-LA — Compact Monitor Series loudness analyzer

CVM-306 — Compact Monitor Series multiformat signal analyzer with integral LCD and speakers, SD & HD-SDI, 3RU, upgradable to 3G-SDI

VMM-4SNY — Integrated video and audio measurement module for Sony® LCD monitors with HD-SDI or SD-SDI video input, 1 AES input with up to 16 channels embedded and display; displays include picture, waveform, vector, gamut, audio, timing

RCU-CMS — Remote Control Panel for the VMM-4SNY video and audio measurement module and the CMN-41, CMN-91, CMN-MV and CVM-306 compact monitors

TVM Multiformat Signal Analyzers
AVM Audio and Video Monitoring System

Videotek TVM test instruments are designed with the operator in mind, incorporating traditional features and ergonomically designed controls. All models in the TVM and AVM product line feature multiformat signal analyzers with an integrated LCD display to cover any need.

TVM9100PKG — Versions available with dual HD/SD, SD only, or composite inputs; SD only software upgradable to HD/SD; options for additional SDI or ASI inputs, data analyzer, eye pattern, jitter analysis, and audio

TVM9140PKG — Versions available with dual 3 Gb/s, HD/SD, SD only, or composite inputs; SD only software upgradable to HD/SD; data analyzer standard; options for additional SDI or ASI inputs, eye pattern, jitter analysis, dual link, and audio; view up to four inputs at once with additional input module

TVM-4DG — Multiformat HD/SD-SDI waveform monitor/vectorscope; convenient half-rack scope package; displays waveform, vector, gamut, picture or the Harris Videotek patented timing

TVM-4MA — Metadata analyzer, HD/SD-SDI; discovers, monitors and alarms on ancillary and SD VBI data; decodes selected data types; half rack, 3RU

AVM-717 — Two HD/SD-SDI video inputs; data analyzer; analog, AES and embedded audio monitoring with loudness; built-in stereo speakers; options for additional SDI or composite video or ASI inputs, jitter analysis; view up to four inputs at once with additional input module

TVM, AVM and VTM Video Options

TVM-VTM-3GB — Supports 3 Gb/s, 1.485 Gb/s (HD) and 270 Mb/s (SD) format inputs (for AVM-717, TVM9140PKG, and VTM4140PKG only)

TVM-VTM-JEM — Supports HD and SD-SDI and ASI with jitter analysis and eye pattern

TVM-VTM-EYE-H — Supports HD and SD-SDI with eye pattern

TVM-VTM-SDI-H — Supports HD and SD-SDI

TVM-VTM-SDI-S — Supports SD-SDI only (field upgradeable to HD/SD)

TVM-VTM-ACV-2 — Supports NTSC and PAL

TVM-VTM-ASI— Supports ASI/SMPTE 310 with transport stream analysis

TVM-VTM-DLK — Adds support for RGB (4:4:4) and RGB+A (4:4:4:) (for AVM-717, TVM9140PKG, and VTM4140PKG only)

VTM Multiformat On-Screen Monitors

Videotek VTM Series™ technology provides high-resolution display of picture, waveform, vector and optional audio conveniently, in either individual full screen or concurrent quadrants on any standard computer display.

VTM-2000 — Two SD-SDI and two composite video inputs; fixed-screen layout; XGA output; optional four-channel audio

VTM-2400 — Two HD/SD-SDI video inputs; fixed-screen layout; XGA output; optional four-channel audio

VTM4100PKG — Versions available with dual HD/SD, SD only, or composite inputs; SD only software upgradable to HD/SD; options for additional SDI or ASI inputs, data analyzer, eye pattern, jitter analysis, and audio

VTM4140PKG — Versions available with dual 3 Gb/s, HD/SD, SD only, or composite inputs; SD only software upgradable to HD/SD; data analyzer standard; options for additional SDI or ASI inputs, eye pattern, jitter analysis, dual link, and audio; view up to four inputs at once with additional input module

TVM, AVM and VTM Audio Options

VTM-A3-OPT 1 — Supports analog, AES and embedded (VTM-2000 and VTM-2400 only)

TVM- or VTM-A3-OPT 2 — Supports analog, AES and embedded (four AES inputs)

TVM- or VTM-A3-OPT 3 — Supports analog, AES and embedded (eight AES inputs)

TVM- or VTM-A3-OPT 5 — Supports analog, AES, embedded and Dolby® plus metadata display

TVM- or VTM-A3-OPT 3TL — Supports analog, AES and embedded (eight AES inputs); loudness monitoring with trend chart and true peak to BS.1770

TVM- or VTM-A3-OPT 5TL — Supports analog, AES, embedded and Dolby®, plus metadata display; loudness monitoring with Trend chart and True Peak to BS.1770

***TVM- or VTM-A3-OPT3TO5** — Upgrades A3-OPT 3 or A3-OPT 3TL to add full Dolby® decoding plus metadata display

***TVM- or VTM-A3-OPT V2A** — Adds lip sync timing measurement to A3-OPT 3TL or A3-OPT 5TL

* Please note these are the only audio upgrades for AVM-717; these models are also available for TVM and VTM Series.

Generators

VSG-410 — HD/SD and analog video and audio signal generator; outputs include HD, SD analog composite or tri-level sync; test signal generation, four independently configurable blackburst (video as HD, SD and analog composite or tri-level sync); vertical interval time code (VITC) and absolute time reference (DARS) AES and analog audio with independent analog audio tone channels and user-loadable test signals; also inputs GPS

VSG-201D — SD-SDI serial digital sync generator; infinite genlock, four analog blackburst outputs, digital black, digital bars and stereo analog tone

VSG-204D — SD-SDI, four analog blackburst outputs (two are separately and independently adjustable and may be locked to either NTSC or PAL); analog tone plus AES/EBU tone and embedded audio; digital black output and 10 selectable test signals; 1RU

VSG-201 — Analog color sync and pulse generator with genlock

GEN-STAR — HD-SDI and SD-SDI generator with embedded audio and genlock

VSX-11D — Multiformat automatic changeover unit

Modular Sync and Timing

MTG-3901 — NEO® master timing generator; NEO modular reference signal generator module with blackburst, tri-level sync timecode, NTP, DARS output

MTG-3901-SYS-1 — MTG-3901 system with FR-3901 frame; includes two MTG-3901-FM modules; one ACO-3901 module, FR-3901 frame with blank front panel, power supply, detachable power cord, PWRSUPPLY-MTG standalone external secondary power supply, back modules, (as required), fan module and alarm interconnect module

MTG-3901-SYS-3 — MTG-3901 system with FR-3923 Frame, includes 2 x MTG-3901-FM modules, 1 x ACO-3901 module, FR-3923 frame with blank front panel, power supply, detachable power cord, PWRSUPPLY-MTG standalone external power supply, back modules (as required), fan module, alarm interconnect module, accepts any combination of up to 9 additional NEO series module.

TSG-3901-1S — HDTV test signal generator

TSG-3901-SYS — NEO HDTV test signal generator with integrated ACO

Please visit www.broadcast.harris.com/videotek for additional models and options.

Demodulators

The Videotek name has long been recognized for its breadth of analog and digital demodulator products. The Harris Videotek demodulator product line includes:

Digital Demodulators

DDM-800 — Multichannel frequency-agile demodulator, 8VSB, 64/256 QAM demodulator to ASI output

DDM-6800+D — Digital demodulator module, 8VSB, 64/256 QAM demodulator to ASI output for the Harris 6800+™ frame system

DDM-840 — Frequency-agile digital demodulator/decoder, 8VSB, 64/256 QAM demodulator with MPEG-2 MP-ML 4:2:0 decoder

Analog NTSC Demodulators

DM-100 — 1/3RU utility demodulator

DM-145 and DM-154 — 1RU frequency-agile demodulators

Legalizers, Proc Amps, Color Correctors

DL-810 — SD-SDI legalizer, automatically legalizes SD-SDI video for RGB, encoded and vector-based limits

DL-860 — HD-SDI and SD-SDI digital legalizer automatically legalizes HD-SDI or SD-SDI video for RGB, encoded and vector-based limits

SDC-101 — Serial digital color corrector with real-time video processing

RCU-102 — Remote control unit for up to four SDC-101 units. Includes 30 ft. cable

Please visit www.broadcast.harris.com/videotek
for additional options and rackmounts.

The Latest in Video and Audio Monitoring

Television standards and formats come and go, but the broadcaster's responsibility to maintain signal quality remains constant. That's why the world's most-discriminating television program production and distribution facilities have relied on precision Harris® Videotek® test and measurement solutions for more than three decades.

The Videotek name is recognized for high-performance instruments that meet the mission-critical requirements of broadcasters around the world every day. From customizable signal analyzers, on-screen monitors and handheld test monitors, to the latest portable optical fiber tools, file-based QC servers and 3 Gb/s solutions, Harris offers a high-performance Videotek product to meet any audio or video monitoring requirement.

All Videotek systems are backed by proven performance, exceptional service and responsive support.

North America
+1 800 231 9673
Central and Latin America
+1 786 437 1960

Europe, Middle East and Africa
+44 (0) 118 964 8200
Asia, Pacific Rim
+852 2776 0628

Product Support
+1 800 800 5719

For more information, please visit www.broadcast.harris.com/videotek.

Broadcast Communications Division
25 Dyas Road | North York, ON M3B 1V7 | Tel: (416) 445 9640
www.broadcast.harris.com

BR_VIDEOTEK_0410