

Videotek[®] TVM/VTM/AVM 3 Gb/s Module



PRELIMINARY

TVM/VTM/AVM-OPT 3GB Module

The TVM/VTM/AVM-OPT 3GB module is designed for engineers ready to upgrade to the latest technology — 3 Gb/s. This dual-input module has all the features available in the HD (1.485 Gb/s) and SD (270 Mb/s) dual-input modules plus the 3 Gb/s formats 1080p 50/59.94 and 60. The revolutionary approach in the design of this product has resulted in the first T&M input module of its kind to include 1080p test signals as well as critical video evaluation. This product is truly self-contained and extremely convenient in any sized system.



simultaneous display of four 3 Gb/s input waveform or vector with thumbnail picture!

In addition to providing your video test and measurement features, Videotek[®] Test and Measurement now provides an internal signal source to create the "one solution" to your test and measurement needs.

The internal generator provides an SDI signal at the most popular frame rates from SD through 3 Gb/s for quick, self-contained verification of system signal paths. Test patterns include color bars with motion, SMPTE color bars and pathological check field with embedded audio for all supported formats - 1 kHz at -18 dBFS or -20 dBFS for up to 4 audio groups. Monitoring and alarms for Video Payload Identification add an extra level of confidence checking to the extensive monitoring capabilities of the TVM/VTM/AVM series of video and audio test and measurement instruments.

A single instrument that has your essential needs in mind.



The TVM/VTM/AVM-OPT 3GB input module supports all SDI formats from SD through 1080p/60 and includes Dual Link. This powerful combination provides monitoring of both links simultaneously, from two inputs! A second TVM/VTM/AVM-OPT 3GB input module can be installed in an AVM, VTM with OPT 40, or TVM-950 to provide

Specifications

Specifications are subject to change.

INPUTS	Two active-looping inputs accepting standard-definition 270 Mb/s (SMPTE 259M-C), high-definition 1.485 Gb/s (SMPTE 292M), dual-link (2x 1.485 Gb/s SMPTE 372M) or 2.97 Gb/s (SMPTE 424M) signals. All SMPTE 425M level A formats are supported, including -1080p 60 -1080p 59.94 -1080p 50 Additionally, SMPTE 425M Level B dual-link formats are supported, including 10-bit 4:2:2 at high frame rates, 12-bit 4:4:4 RGB and 12-bit 4:4:4 YCbCr.									
Data Rates	270 Mb/s, 1.485 Gb/s, and 2.97 Gb/s									
Connectors	Four BNC, active looping									
Level	800 mV nominal									
Input Return Loss	<table border="0"> <tr> <td>5 MHz – 270 MHz:</td> <td>-25 dB</td> </tr> <tr> <td>270 MHz – 1.485 GHz:</td> <td>-15 dB</td> </tr> <tr> <td>1.485 GHz – 2.97 GHz:</td> <td>-10 dB</td> </tr> </table>		5 MHz – 270 MHz:	-25 dB	270 MHz – 1.485 GHz:	-15 dB	1.485 GHz – 2.97 GHz:	-10 dB		
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SIGNAL SOURCE

Test Patterns

SMPTE color bars
Pathological checkfield
Color bars with motion

Supported Formats and Sampling Structures

625/50 – 4:2:2 YCbCr 10-bit
525/59.94 – 4:2:2 YCbCr 10-bit
720p/50 – 4:2:2 YCbCr 10-bit
720p/59.94 – 4:2:2 YCbCr 10-bit
1080i/50 – 4:2:2 YCbCr 10-bit
1080i/59.94 – 4:2:2 YCbCr 10-bit
1080p/50 – 4:2:2 YCbCr 10-bit
1080p/59.94 – 4:2:2 YCbCr 10-bit

Ancillary Data Insertion

Embedded Audio for all supported formats
-One, two or four groups
-1 kHz constant tone
-Selectable levels
-20 dBFS
-18 dBFS

SMPTE 352M Video Payload ID ancillary packet enabled or disabled

ORDERING GUIDE

The OPT 3GB is available pre-configured or as an add-on to the AVM-717, TVM-950, VTM-3100 PKG and VTM-4100 PKG.

AVM-717-3GB	AVM-717 with 3 Gb/s video and audio option 3TL
TVM-950-3GB	TVM-950 with 3 Gb/s video in place of HD/SD
VTM-4100 PKG-3	VTM-4100 PKG with OPT 40 graphics upgrade and 3Gb/s video in place of HD/SD. Includes multiple input and Dual Link support.
TVM-OPT 3GB	3 Gb/s input option added to a TVM-950 or AVM-717 at time of order
TVM-OPT 3GB-F	3 Gb/s input option added to a TVM-950 or AVM-717 as a field upgrade
VTM-OPT 3GB	3 Gb/s input option added to a VTM-3100 PKG or VTM-4100 PKG at time of order, requires VTM-OPT 40
VTM-OPT 3GB-F	3 Gb/s input option added to a VTM-3100 PKG or VTM-4100 PKG as a field upgrade, requires VTM-OPT 40
VTM-3GB KIT-F	3 Gb/s input module and OPT 40 graphics engine as a field upgrade for a VTM-3100 PKG or a VTM-4100 PKG that currently has an OPT 10 graphics engine

For more information please visit www.broadcast.harris.com/videtok.

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