

DVISm™



Patent Pending

DVISm
(front view)

MPEG-2 / H.264 SD / HD Mini Digital Video Insertion System (DVISm)

Features

- Dynamic PID monitoring engine prevents outages of pass through and inserted programs due to PSI changes introduced by DAC/DNCS or EdgeQAMs
- “One-click” configuration download and upload for fast and easy bulk configuration management
- Enhanced graphical interface includes step-by-step feedback during QAM tuning process
- RF bypass switch bypasses deletion filter and restores original QAM in case of power failure or unit reboot
- Cost-effectively insert locally generated MDU content (e.g. security camera or localized advertising) in digital format (MPEG-2/H.264, SD/HD, QAM/IP)
- Ideal for spectrum reclamation or MDUs provisioned with digital-only set-top boxes (DTAs)
- Scalable wall mount solution: up to 6 SD (or 3 HD) programs can be multiplexed onto a QAM channel
- Satisfy any digital insertion methodology: blank QAM from headend, locally deleted QAM at MDU, and underutilized QAM (add/drop) from headend - see functional application diagram
- Integrated QAM channel deletion filter (filter is optional)
- Fully integrated audio/video encoders, demodulator, multiplexer and QAM modulator/RF upconverter
- Hot-swappable 1 and 2-channel encoder cards, QAM demodulator card and IP output card
- Possibility of mixing HD and SD encoder cards within the same chassis
- Allows users to deliver up to 6 SD (or 3 HD) baseband A/V inputs (e.g. security camera or local content) via multiplexed MPEG-2/H.264/QAM to the MDU in a cost-effective and efficient manner; field-scalable with plug-in 1 or 2-channel encoder cards
- HTTP-based GUI allows for easy set-up and control without the need for proprietary software installation
- Remote access and SNMP monitoring available via integrated RJ45 Ethernet interface
- MDU hardened wall mount enclosure with lockable front door
- Very flexible and easy expandable - all features are in one box with front access to all modules and connections
- Includes the following operational modes (set through GUI): IP output only, IP+QAM output simultaneously, and QAM output only (please see appropriate data sheet for IP/QAM specs)



DVISm (open view)



DVISm (closed view)



Ordering Information

Part Number	Description
DVISM*CE	Digital Audio/video Insertion Unit QAM Out with * MPEG-2 SD A/V Baseband Inputs (* = Number of Inputs, ie. 1, 2, 3, 4, 5 or 6), NTSC/AC-3 Dolby®.
DVISM*CEM	Digital Audio/video Insertion Unit QAM Out with * MPEG-2 SD A/V Baseband Inputs (* = Number of Inputs, ie. 1, 2, 3, 4, 5 or 6), PAL/MPEG-1 Layer II.
DVISM*CECD⁽¹⁾	Digital Audio/video Insertion Unit QAM Out with * MPEG-2 SD A/V Baseband Inputs (* = Number of Inputs, ie. 1, 2, 3, 4, 5 or 6), NTSC/AC-3 Dolby and Channel Deletion Filter.
DVISM*CECDM⁽¹⁾	Digital Audio/video Insertion Unit QAM Out with * MPEG-2 SD A/V Baseband Inputs (* = Number of Inputs, ie. 1, 2, 3, 4, 5 or 6), PAL/MPEG-1 Layer II and Channel Deletion Filter.
DVISM*CEQMB	Digital Audio/video Insertion Unit QAM Out with * MPEG-2 SD A/V Baseband Inputs (* = Number of Inputs, ie. 1, 2, 3 or 4), NTSC/AC-3 Dolby and QAM-B Demodulator Card.
DVISM*CEQMA	Digital Audio/video Insertion Unit QAM Out with * MPEG-2 SD A/V Baseband Inputs (* = Number of Inputs, ie. 1, 2, 3 or 4), NTSC/AC-3 Dolby and QAM-A/C Demodulator Card.
DVISM*CEQMBM	Digital Audio/video Insertion Unit QAM Out with * MPEG-2 SD A/V Baseband Inputs (* = Number of Inputs, ie. 1, 2, 3 or 4), PAL/MPEG-1 Layer II and QAM-B Demodulator Card.
DVISM*CEQMAM	Digital Audio/video Insertion Unit QAM Out with * MPEG-2 SD A/V Baseband Inputs (* = Number of Inputs, ie. 1, 2, 3 or 4), PAL/MPEG-1 Layer II and QAM-A/C Demodulator Card.
DVISM*CEQMBCD⁽¹⁾	Digital Audio/video Insertion Unit QAM Out with * MPEG-2 SD A/V Baseband Inputs (* = Number of Inputs, ie. 1, 2, 3 or 4), NTSC/AC-3 Dolby, QAM-B Demodulator Card and Channel Deletion Filter.
DVISM*CEQMACD⁽¹⁾	Digital Audio/video Insertion Unit QAM Out with * MPEG-2 SD A/V Baseband Inputs (* = Number of Inputs, ie. 1, 2, 3 or 4), NTSC/AC-3 Dolby, QAM-A/C Demodulator Card and Channel Deletion Filter.
DVISM*CEQMBCDM⁽¹⁾	Digital Audio/video Insertion Unit QAM Out with * MPEG-2 SD A/V Baseband Inputs (* = Number of Inputs, ie. 1, 2, 3 or 4), PAL/MPEG-1 Layer II, QAM-B Demodulator Card and Channel Deletion Filter.
DVISM*CEQMACDM⁽¹⁾	Digital Audio/video Insertion Unit QAM Out with * MPEG-2 SD A/V Baseband Inputs (* = Number of Inputs, ie. 1, 2, 3 or 4), PAL/MPEG-1 Layer II, QAM-A/C Demodulator Card and Channel Deletion Filter.
DVISM*CEH	Digital Audio/video Insertion Unit QAM Out with * MPEG-2/H.264 SD/HD DV1HDA Cards Installed (* = Number of Cards, ie. 1, 2 or 3).
DVISM*CECDH⁽¹⁾	Digital Audio/video Insertion Unit QAM Out with * MPEG-2/H.264 SD/HD DV1HDA Cards Installed (* = Number of Cards, ie. 1, 2 or 3) and Channel Deletion Filter.
DVISM*CEQMBH	Digital Audio/video Insertion Unit QAM Out with * MPEG-2/H.264 SD/HD DV1HDA Cards Installed (* = Number of Cards, ie. 1 or 2) and QAM-B Demodulator Card.
DVISM*CEQMAH	Digital Audio/video Insertion Unit QAM Out with * MPEG-2/H.264 SD/HD DV1HDA Cards Installed (* = Number of Cards, ie. 1 or 2) and QAM-A/C Demodulator Card.
DVISM*CEQMBCDH⁽¹⁾	Digital Audio/video Insertion Unit QAM Out with * MPEG-2/H.264 SD/HD DV1HDA Cards Installed (* = Number of Cards, ie. 1 or 2), QAM-B Demodulator Card and Channel Deletion Filter.
DVISM*CEQMACDH⁽¹⁾	Digital Audio/video Insertion Unit QAM Out with * MPEG-2/H.264 SD/HD DV1HDA Cards Installed (* = Number of Cards, ie. 1 or 2), QAM-A/C Demodulator Card and Channel Deletion Filter.
DVISMCD⁽¹⁾	Separate Channel Deletion Filter.
DVISMBASE	DVISM QAM Out Base Unit/chassis (no plug-in cards or Channel Deletion Filter installed).
DV1CE	Separate 1-channel MPEG-2 SD Encoder Plug-in Card (1 Video + 2 Audio Inputs), NTSC/AC-3 Dolby.
DV1CEM	Separate 1-channel MPEG-2 SD Encoder Plug-in Card (1 Video + 2 Audio Inputs), PAL/MPEG-1 Layer II.
DV2CE	Separate 2-channel MPEG-2 SD Encoder Plug-in Card (2 Video + 4 Audio Inputs), NTSC/AC-3 Dolby.
DV2CEM	Separate 2-channel MPEG-2 SD Encoder Plug-in Card (2 Video + 4 Audio Inputs), PAL/MPEG-1 Layer II.
DV1HDA	Separate 1-channel MPEG-2/H.264 SD/HD Encoder Plug-in Card (Component/VGA).
DV1HDMI	Separate 1-channel HDMI® Encoder Plug-in Card.
DV2DA	Separate Baseband Audio/video Distribution Amplifier (2-way split).
DVDMQMB	Separate QAM-B Demodulator Plug-in Card (Add/drop functionality).
DVDMQMAC	Separate QAM-A/C Demodulator Plug-in Card (Add/drop functionality).
DVGIGE	Separate Gigabit Ethernet Output Plug-in Card SFP/RJ45.
DVFAN	Replacement/spare Fan for DVISM.
DVISMRRB	Mounting Brackets for Mounting DVISM to 19" Rack.
DVMPWRSUP	Replacement/spare Power Supply for DVISM.

NOTES:

(1) See Filter Ordering Information on page 9.

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Specifications

DVISM

BASE PLATFORM	
CHASSIS OVERVIEW	
DIMENSIONS	13.5"H x 14.5"W x 8.75"D (34.29H x 36.83W x 22.23D cm), Wall Mount, Lockable Front Door
WEIGHT (Max)	23.5 lbs (10.7 kg)
EXPANSION CARD SLOTS	Three
ENCODED PROGRAMS	Up to 6 SD (or 3 HD) into One QAM Channel Up to 4 SD (or 2 HD) with Gigabit Ethernet Output Card Module Up to 4 SD (or 2 HD) with Demodulator Card Module Scalable (plug-in cards with one or two encoders per card)
POWER SUPPLY	IEC Connector/ 90-264 VAC, 50/60 Hz
POWER CONSUMPTION	46W
DEVICE MANAGEMENT	HTTP/SNMP Network Interface (RJ45)
OPERATING TEMPERATURE	0°C to +50°C (+32°F to +122°F)
HUMIDITY	0-95% (without condensation)
TS MULTIPLEXER	
PACKET SIZE	188 Bytes
TS SUPPORT	QBA, AF
PROGRAM NUMBER & TS NUMBER	User Settable (Program #: 1-65535; TS ID: 1-65535)
PSI / SI / PSIP INFORMATION TABLE	PAT, PMT, SDT, NIT, MGT, CVCT
SETTABLE PIDs	PMT, PCR (0x0015-0x1FFE; dec. 21-8190)
QAM MODULATOR / RF UPCONVERTER	
QAM MODULATION	ITU-T J.83 Annex A/Annex B/ Annex C
MODULATION FORMAT	16, 32, 64, 128, 256 QAM
RF QAM OUTPUT POWER AT MODULATOR OUTPUT (Max)	57.5 +/- 1.5 dBmV
RF QAM OUTPUT POWER AT RF OUT (Max)	37.5 +/- 1.5 dBmV
ATTENUATOR	0-26 dB
ATTENUATOR STEP	1.0 dB
RF QAM FREQUENCY OUTPUT RANGE	45-975 MHz
SUPPORTED CHANNEL PLANS	STANDARD, HRC, IRC
FREQUENCY STEP	250 kHz
RF QAM CHANNEL BANDWIDTH	6 MHz (Annex B) Max. 8 MHz (Annex A/C)

EXCESS BANDWIDTH	Annex B: 12% (256 QAM), 18% (64 QAM) Annex A: 15% Annex C: 13%
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BASE PLATFORM (cont'd)	
QAM MODULATOR / RF UPCONVERTER (cont'd)	
SYMBOL RATE	Annex B: Automatically Set with Selected Modulation Format 5.360537 MSymb/s - 256 QAM 5.056941 MSymb/s - 64 QAM Annex A/C: Max. 7 MSymb/s
MER EQUALIZED⁽¹⁾	> 40 dB ⁽¹⁾
FREQUENCY OFFSET	< 2ppm
SYMBOL RATE OFFSET	< +/- 50 Hz
CARRIER SUPPRESSION	> 55 dB
SIGNAL/NOISE	> 45 dB
SPURIOUS	-60 dB
TS PROCESSING	Null Packet Insertion and PCR Correction
FEC	ITU-T J.83 Annex B; DVB-C EN300429 and ITU-T J.83 Annex A/C

BASE PLATFORM		
RF INTERFACES		
RF IN		F, 75 Ω
RF IN TEST		F, 75 Ω (-20 dB)
RF OUT		F, 75 Ω
RF OUT TEST		F, 75 Ω (-20 dB)
RF IN / RF OUT PASSBAND INSERTION LOSS - TYPICAL (Max)	WITHOUT QAM CHANNEL DELETION FILTER	8.5 dB @ 1000 MHz
	WITH QAM CHANNEL DELETION FILTER	9.5 dB @ 1000 MHz
RF IN / RF OUT RETURN LOSS		> 15 dB
TO DEMODULATOR		F, 75 Ω (-10 dB)
TO CABLE MODEM		F, 75 Ω (-20 dB)
MODULATOR OUTPUT		F, 75 Ω
TO COMBINING		F, 75 Ω

NOTES:

(1) Measured with Rohde & Schwarz EFA (FW Ver 05.33).



Specifications

HD Encoder Cards

	DV1HDA	DV1HDMI		
VIDEO INPUTS				
COMPONENT/HDMI				
CONNECTOR	3x RCA Female	1x HDMI Female (Type A) ⁽¹⁾		
CHROMA FORMAT	YPbPr 4:2:2			
RESOLUTIONS	480p_60 (59.94)			
	576p_50			
	720p_60 (59.94)			
	720p_50			
	1080i_60 (59.94)			
PC - VGA				
CONNECTOR	DE-15 Female, 15-Pin, 3 Rows	n/a		
CHROMA FORMAT	RGB 4:4:4	n/a		
RESOLUTIONS	640 x 480, 60 Hz			
	800 x 600, 60 Hz			
	1280 x 720, 60 Hz			
	1024 x 768, 60 Hz			
	1280 x 1024, 60 Hz			
	1366 x 768, 60 Hz			
	1400 x 1050, 60 Hz			
	1920 x 1080, 60 Hz			
AUDIO INPUTS				
ANALOG L/R				
CONNECTOR	TRS 3.5 mm Female, 2x RCA Adapter Female			
DIGITAL SPDI/F				
CONNECTOR	1x RCA (Coaxial) Female	n/a		
AUDIO STANDARD	IEC 61937:AC-3 (Pass Through)			
MAX CHANNELS	6 (5.1) Pass Through			
HDMI				
AUDIO STANDARD	n/a	PCM		
VIDEO PROCESSING				
ENCODING	MPEG-2	H.264	MPEG-2	H.264
ENCODE LEVEL	MPEG-2 HD MP @ HL	High Profile Level 5	MPEG-2 HD MP @ HL	High Profile Level 5
CHROMA	4:2:0			
BIT RATE	1-25 Mbps			

COMPONENT/HDMI VIDEO RESOLUTIONS	480p_60 (59.94)	
	576p_50	
	720p_60 (59.94)	
	720p_50	
	1080i_60 (59.94)	
1080i_50		

HD Encoder Cards

	DV1HDA	DV1HDMI		
VIDEO PROCESSING (cont'd)				
ENCODING	MPEG-2	H.264	MPEG-2	H.264
VGA RESOLUTIONS	640 x 480, 60 Hz		n/a	
	800 x 600, 60 Hz		n/a	
	1280 x 720, 60 Hz		n/a	
	1024 x 768, 60 Hz		n/a	
	1280 x 1024, 60 Hz		n/a	
	1366 x 768, 60 Hz		n/a	
	1400 x 1050, 60 Hz		n/a	
1920 x 1080, 60 Hz		n/a		
VIDEO PID SETTING	Yes (0x0015-0x1FFE; dec. 21-8190)			
VBI PROCESSING	Closed Captions (Line 21/EIA-608 captions) via Separate CVBS Connected Source			
AUDIO PROCESSING				
AUDIO ENCODER				
ENCODE STANDARD	Dolby® Digital AC-3 ATSC A/52 (2.0)			
SAMPLE RATE	48 kHz			
BIT RATE	192, 256, 384 kbps			
AUDIO PID SETTING	Yes (0x0015-0x1FFE; dec. 21-8190)			
DIGITAL AUDIO PASS THROUGH				
AC-3 (2.0/5.1) PASS THROUGH	Yes (S/PDIF)		n/a	
PHYSICAL & ENVIRONMENTAL				
DIMENSIONS	6.5"H x 0.75"W x 3.0"D (16.5H x 1.9W x 7.6D cm)		6.5"H x 0.75"W x 3.0"D (16.5H x 1.9W x 7.6D cm)	
WEIGHT	0.33 lbs (0.15 kg)		0.35 lbs (0.16 kg)	

NOTE:

(1) HDCP encrypted content is not supported.

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DV1HDA



DV1HDMI



Specifications

SD Encoder Cards

SD Encoder Cards		DV1CE / DV1CEM	DV2CE / DV2CEM
VIDEO			
INPUT	CVBS, NTSC / PAL ⁽¹⁾		
INPUT INTERFACE	1x BNC, 75 Ω	2x BNC, 75 Ω	
ENCODING FORMAT	MPEG-2, 4:2:0, MP@ML		
ENCODING BIT RATE TYPE	CBR		
VIDEO ADJUSTMENTS	Brightness, Contrast, Saturation		
VIDEO PROCESSING	TBC		
RESOLUTION	HORIZONTAL	720, 704, 544, 528, 480, 352	
	VERTICAL	480, 576	
FRAME RATE	29.97fps, 25fps ⁽¹⁾		
VIDEO ENCODING BIT RATE	1-8 Mbps		
GOP STRUCTURE	IBBP - Length 15		
VIDEO PID SETTING	Yes (0x0015-0x1FFE; dec. 21-8190)		
VBI PROCESSING	Closed Captions		
AUDIO			
INPUT	Analog, Unbalanced		
INPUT INTERFACE	2x RCA (pair L/R)	4x RCA (2x pair L/R)	
ENCODING FORMAT	Dolby Digital AC-3, MPEG-1 Layer II ⁽¹⁾		
MODES	Stereo, Mono		
SAMPLING RATE	48 kHz		
ENCODING BIT RATES	192, 256, 384 kbps		
AUDIO PID SETTING	Yes (0x0015-0x1FFE; dec. 21-8190)		

SD Encoder Cards

SD Encoder Cards		DV1CE / DV1CEM	DV2CE / DV2CEM
PHYSICAL			
DIMENSIONS	6.5"H x 0.75"W x 3.0"D (16.5H x 1.9W x 7.6D cm)		
WEIGHT	0.33 lbs (0.15 kg)		

NOTES:

(1) DV1CE and DV2CE provide NTSC/Dolby Digital AC-3 encoding (29.97fps); DV1CEM and DV2CEM provide PAL/MPEG-1 Layer II encoding (25fps).

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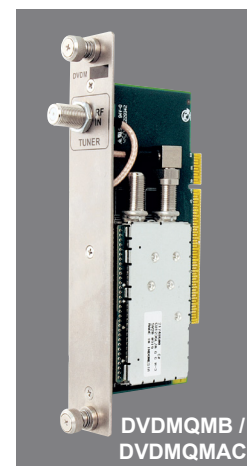
Specifications

Demodulator Plug-in Cards

Demodulator Plug-in Cards	DVDMQMB	DVDMQMAC
QAM MODULATION	QAM-B (ITU-T J.83 Annex B)	QAM-A/C (ITU-T J.83 Annex A/C)
MODULATION FORMAT	64, 256 QAM	16, 32, 64, 128, 256 QAM
INPUT INTERFACE	F, 75 Ω	
RF QAM FREQUENCY INPUT RANGE ⁽¹⁾	54-864 MHz	47-862 MHz
FREQUENCY STEP	250 kHz	
CHANNEL BANDWIDTH	6 MHz	8 MHz
RF QAM INPUT POWER INTO DVIS _m RF IN PORT	20 dBmV ± 2 dBmV	
INTERMEDIATE CENTER FREQUENCY	44 MHz	36.15 MHz
OSCILLATOR PHASE NOISE (@10 kHz)	-88 dBc (min)	
RF AGC RANGE (Typ)	45 dB	
OSCILLATOR VOLTAGE AT DEMODULATOR CARD RF INPUT (Max)	< -45 dBmV (40 MHz < f < 900 MHz)	
PHYSICAL		
DIMENSIONS	6.5"H x 0.75"W x 3.0"D (16.5H x 1.9W x 7.6D cm)	
WEIGHT	0.33 lbs (0.15 kg)	

NOTES:

(1) Extended tune range 15-975 MHz. Contact ATX for details.



Specifications

Gigabit Ethernet Card

DVGIGE

PHYSICAL	
COPPER PORTS	2x RJ45
SFP PORTS	2x SFP Cage
POWER CONSUMPTION (with 4 Active Ports)	~ 4W
DIMENSIONS	6.5"H x 0.75"W x 3.0"D (16.5H x 1.9W x 7.6D cm)
WEIGHT	0.33 lbs (0.15 kg)
BIT RATES & STANDARDS	
RJ45 PORTS	10/100/1000BASE-T & 10/100/1000BASE-TX
SFP PORTS	1000BASE-LX
IP OUTPUT CHARACTERISTICS	
TRANSPORT LAYER	UDP, RTP
STREAMING PROTOCOL	Multicast, Unicast
NETWORK	DHCP, VLAN Tagging (IEEE 802.1Q)
ENCAPSULATION	1-7 TS Packets per Ethernet Frame
TRANSMISSION	SPTS, MPTS
NULL STUFFING	OFF, ON (User Settable Limit)

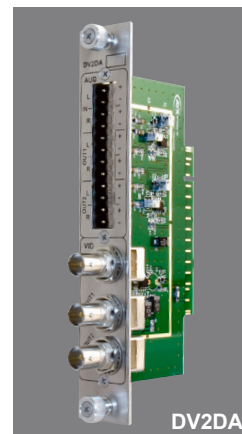


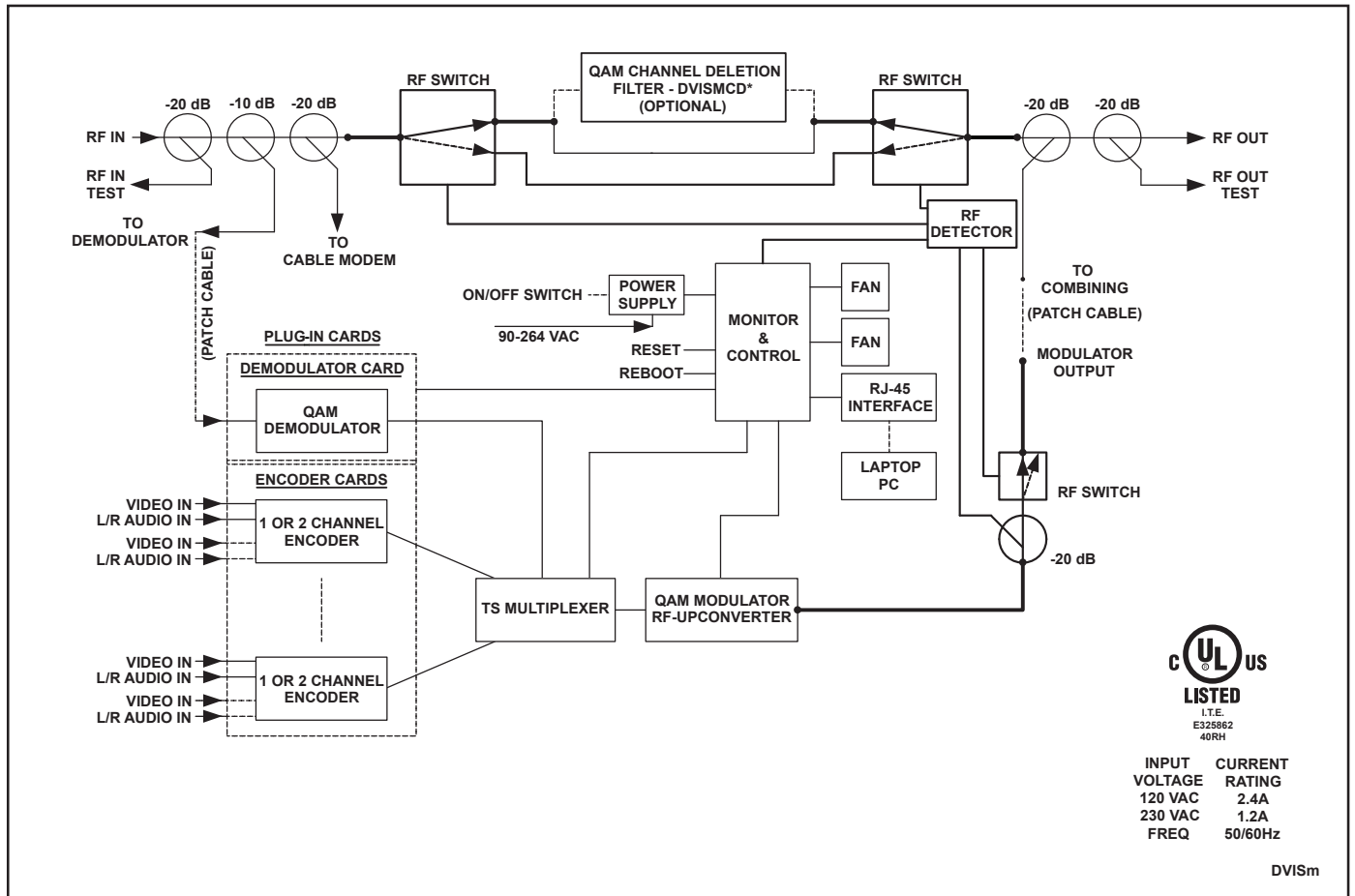
Specifications

A/V DA (2-way Split) Card

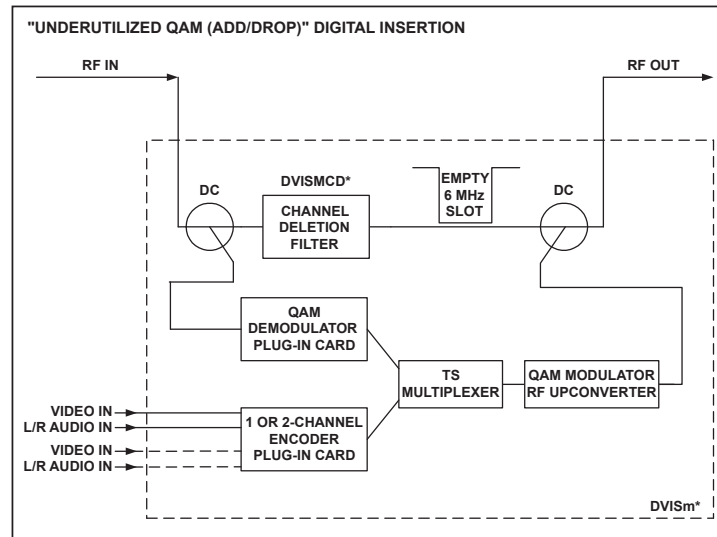
DV2DA

VIDEO	
INPUT/OUTPUT	CVBS (PAL/NTSC)
INPUT/OUTPUT INTERFACES	1x BNC (75 Ω) / 2x BNC (75 Ω)
INPUT IMPEDANCE	75 Ω
OUTPUT IMPEDANCE	75 Ω
VIDEO INSERTION LOSS (0.3-12.0 MHz)	< 0.4 dB
INPUT/OUTPUT RETURN LOSS	> 30 dB
OUTPUT TO OUTPUT ISOLATION	> 60 dB
OUTPUT TO INPUT ISOLATION	> 60 dB
VIDEO BANDWIDTH	> 10 MHz
AUDIO	
INPUT/OUTPUT	Analog Unbalanced
INPUT/OUTPUT INTERFACES	1 Pair L/R / 2 Pairs L/R (Terminal Block x6)
GAIN (1-20 kHz)	0 dB
INPUT IMPEDANCE	22 Ω
OUTPUT IMPEDANCE	200 Ω
AUDIO BANDWIDTH	50 Hz to > 20 kHz
PHYSICAL	
DIMENSIONS	6.5"H x 0.75"W x 3.0"D (16.5H x 1.9W x 7.6D cm)
WEIGHT	0.33 lbs (0.15 kg)





Functional Schematic



Application Diagram

* Please see Ordering Information



DVISMCD* - QAM Channel Deletion Filter

- Deletes a digital QAM channel and allows a new channel to be reinserted
- Wide operating bandwidth
- Temperature stable
- Low frequency vibration stable
- Exceptionally low insertion loss 8 element design



Specifications

QAM Channel Deletion Filter

QAM Channel Deletion Filter		DVISMCD*
BANDWIDTH⁽¹⁾		5-1000 MHz
CHANNEL REJECTION	BELOW 500 MHz	> 55 dB
	500 MHz to 650 MHz	> 50 dB
	ABOVE 650 MHz	> 45 dB
RETURN LOSS		> 16 dB ⁽²⁾
IMPEDANCE		75 Ω
TEMPERATURE RANGE		+5°C to +35°C (+41°F to +95°F)
DIMENSIONS		1.5"H x 12.0"W x 3.0"D (3.81H x 30.48W x 7.62D cm)
WEIGHT		1.0 lbs (0.5 kg)
HUMIDITY		0-95% (without condensation)
PASSBAND INSERTION LOSS		< 1.5 dB
TYPICAL		< 1 dB
INSERTION LOSS (Digital Channels)	LOWER ADJACENT DIGITAL CHANNEL (Center Frequency)	3 dB
	UPPER ADJACENT DIGITAL CHANNEL (Center Frequency)	2 dB
INSERTION LOSS (Analog Channels)	LOWER ADJACENT ANALOG CHANNEL (Video)	1 dB
	LOWER ADJACENT ANALOG CHANNEL (Audio)	6 dB
	UPPER ADJACENT ANALOG CHANNEL (Video)	2 dB
	UPPER ADJACENT ANALOG CHANNEL (Audio)	1 dB
SURGE RATING		

NOTES:

(1) Although passband is specified to 1000 MHz, if the channel to be deleted is greater than 800 MHz, the specifications in this table may not be applicable. Consult ATX for more details.

(2) This does not apply within 20 MHz (average) from the channel being deleted.

Ordering Information

Part Number	Description
DVISM*CECD	Digital Audio/video Insertion Unit QAM Out with * MPEG-2 SD A/V Baseband Inputs (* = Number of Inputs, ie. 1, 2, 3, 4, 5 or 6), NTSC/AC-3 Dolby and Channel Deletion Filter.
DVISM*CEQMBCD	Digital Audio/video Insertion Unit QAM Out with * MPEG-2 SD A/V Baseband Inputs (* = Number of Inputs, ie. 1, 2, 3 or 4), NTSC/AC-3 Dolby, QAM-B Demodulator Card and Channel Deletion Filter.
DVISMCD	Separate Channel Deletion Filter.

ORDERING NOTES:

1. Following values MUST be specified by customer at time of ordering:

- DC (Deleted Channel) = channel #, analog OR digital
- LAC (Lower Adjacent Channel) = analog OR digital
- HAC (Higher Adjacent Channel) = analog OR digital
- IC (Inserted Channel) = digital (no option as the DVISM output is digital)
- CT (Channel Table) = Standard OR HRC

EXAMPLE:

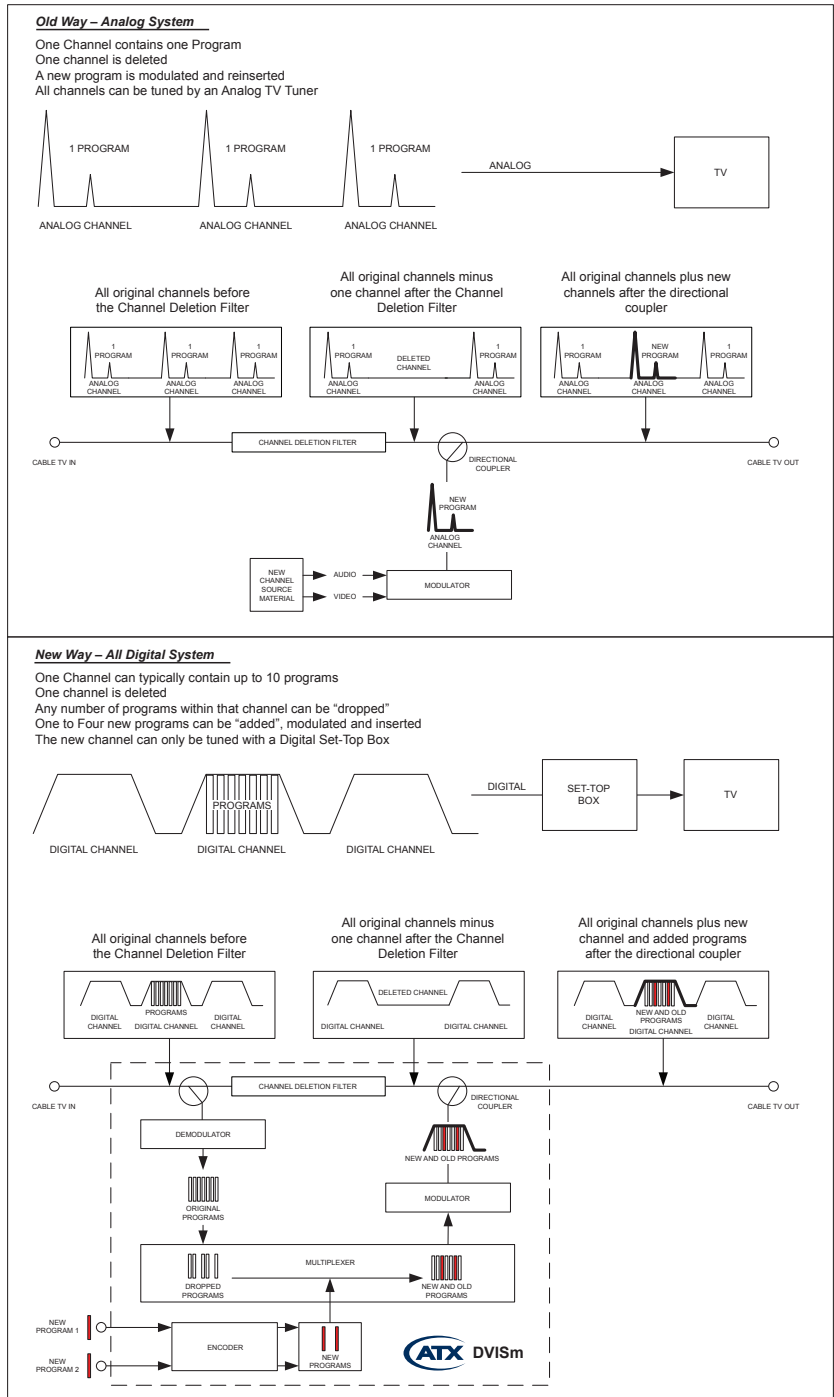
Part #: DVISM*CECD

Specified by Customer: DC=37 digital, LAC=digital, HAC=analog, IC=digital, CT=Standard

2. Customers outside North America, please specify RF channel beginning and end frequency (NOT center frequency or video/audio carrier frequencies) instead of channel numbers.

* Please see Ordering Information





Add/Drop Application Note

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