ARTEL VIDEO SYSTEMS

When the world is watching, you can depend on Artel.

DV6300

DV6000 VIDEO TRANSPORT MODULES

Single Channel System

The Artel DV6300 Single Channel Transport System builds on the reputation of the DV6000 Digital Transport System—the world's most widely installed multichannel fiber optic video transport system—by providing single channel transport and tributary access.

DV6300 Platform Features

- Transports a single channel of uncompressed video (with audio) via a 148.75Mbps digital signal
- Compatible with any single-wide DV6000 Product Family interface card
- Compact 1RU remote equipment shelf
- Embedded overhead channel for alarm backhaul
- Completely compatible with the DV6000, DV6408, and DV6444 Digital Transport Systems
- 1310nm, 1550nm, and CWDM wavelength optics CWDM optics
- Embedded overhead alarm channel
- Completely compatible with the DV6000, DV6408, and DV6444 Digital Transport Systems
- 1310nm, 1550nm, and CWDM wavelength optics

As the name suggests, the DV6300 Single Channel Transport System transmits or receives an individual channel of video or data that has been digitally encoded by a single timeslot DV interface card. The signal can then be transported over a point-to-point optical link between two 1RU remote equipment shelves, or to an optical tributary interface card located in a DV6000, DV6408, or DV6444 equipment shelf.

The direct optical insertion of the single channel tributaries into the multichannel signals is achieved synchronously and entirely at the digital level, thus requiring no digital to analog to digital conversion, and no external cabling. With all of these capabilities you can extend the reach of the digital transport system by eliminating baseband interfaces, thus resulting in true end-to-end broadcast quality performance. An integrated, one technology system simplifies design, installation, and maintenance, and provides a cost-effective growth path for future applications.

DV6300 Single Channel System

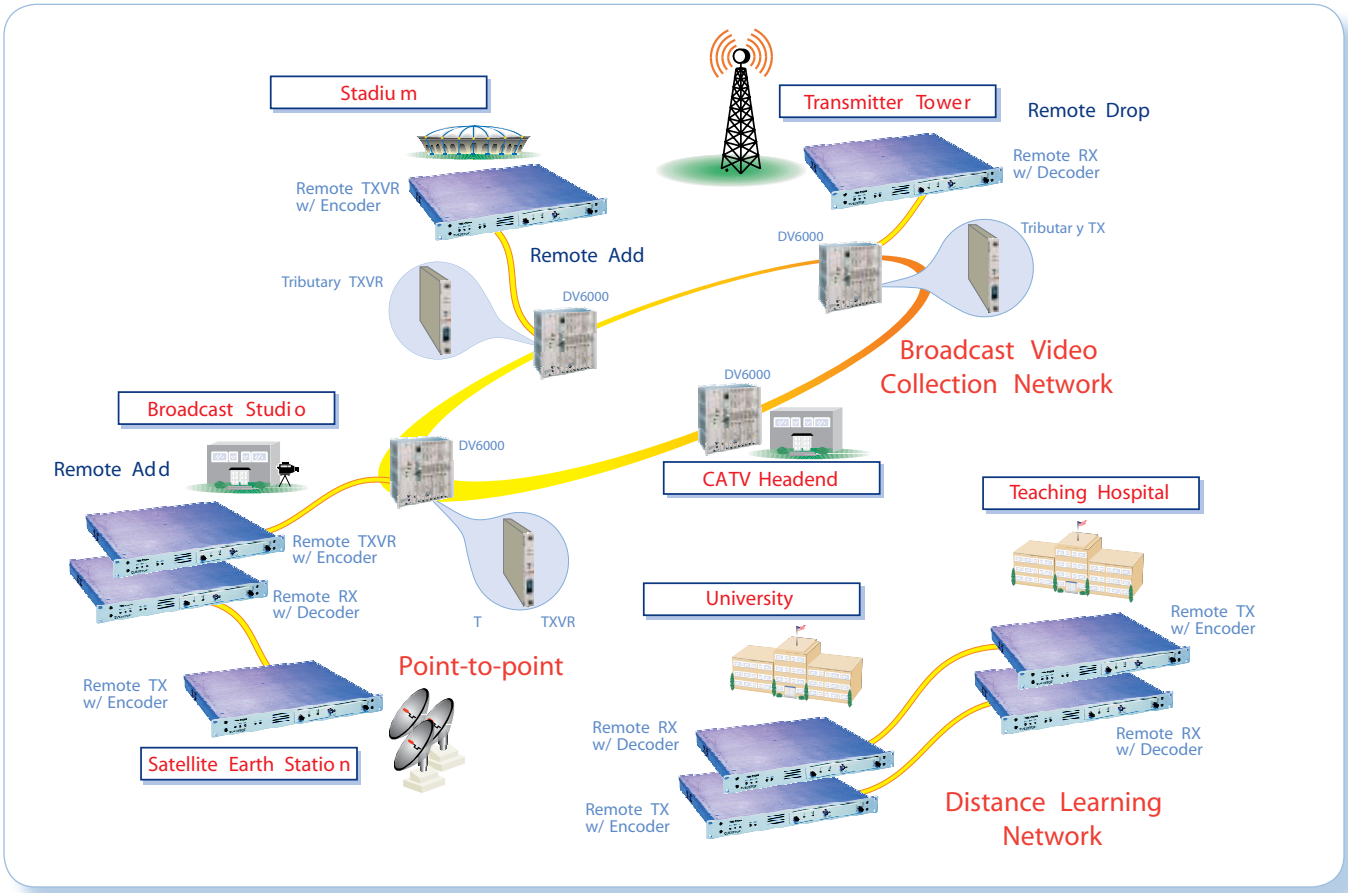
Application

Used alone or in conjunction with other DV Product Family Systems, the DV6300 adds quality and versatility to all your point-to-point and multipoint transport applications including:

- Local broadcast affiliate collection networks
- TV1 compliant transport services
- Video transfers between studio and post production facilities
- Remote venue or special event access
- Distance learning and Campus links
- CCTV and highway surveillance
- Tele-justice

DV6300 Single channel configurations include:

- Stand-alone, point-to-point transmission of a single channel over a dedicated fiber
- Remote drop of a single channel from a DV6000/DV6400 multichannel system to a remote tributary shelf
- Remote add of a single channel from a remote tributary shelf into a DV6000/DV6400 multichannel system
- Single channel optical repeat
- Single channel, single fiber bidirectional transport using WDM or CWDM



Specifications

Optical Specifications			
Bit Rate	148.75Mbps		
Wavelength	1310nm/1550nm/CWDM (1470, 1490, 1510, 1530, 1550, 1570, 1590, 1610nm)		
Optical Connectors	SC, FC, 8° angled SC, 8° angled FC		
Optical Budget			
Transmit/Receiver Units	25dB (up to 36dB depending on configuration)		
Transceiver Units	19dB		
Reflectance (Min. Opt. Return Loss) (Note1)	15dB:	DV63x1CTM, DV6312RSR, DV63x1RST, DV6312CRM, DV6311RSX, DV63yyyyRST,	
	25dB:	DV6312CXM	
Signal Levels/Dynamic Range (Note1)	**Transmit Level**	**Receive Level**	**Receiver Dynamic Range**
DV-63x1-CTM Tributary TX	–8dBm, min.	—	—
DV-6312-RSR Remote RX	—	–33dBm, min.	–6.5 to –33dBm
DV-63x1-RST Remote TX	–3dBm, min.	—	—
DV-63yyyy-RST Remote CWDM TX	3dBm, min.	—	—
DV-6312-CRM Tributary RX	—	–28dBm, min.	–13 to –28dBm
DV-6311-RSX Remote TXVR	–3dBm, min.	–25dBm, min.	–12 to –25dBm
DV-6312-CXM Tributary TXVR	–6dBm, min.	–22dBm, min.	–12 to –22dBm
Physical Specifications			
Dimensions (W x H x D)			
Remote Units	16.75 x 1.72 x 16.5in. (42.55 x 4.37 x 41.91cm) (excluding rackmount ears)		
Tributary Interfaces	8 x 1.25 x 10in. (20.32 x 3.18 x 25.4cm)		
Weight			
Remote Units	12lb (5.44kg) (17lb [7.71kg] with encoder/decoder installed)		
Tributary Interfaces	3lb (1.36kg)		
Mounting	Attached front panel brackets for 19-inch rackmounting		
Compliance	NEBS 3		
Powering Specifications			
Power Consumption	< 8W: DV6311CTM, DV6351CTM		
	< 11W: DV6312CRM, DV6312CTM		
	< 35W: DV6312RSR, DV63y1RST, DV6311RSX, DV63yyyyRST		
Power (Remote Units)	100 to 240VAC , –42.5 to –56.6VDC with A/B inputs		
Environmental Specifications			
Operating Temperature	0 to 50°C (32 to 122°F)		
Storage Temperature	–40 to 70°C (–40 to 158°F)		
Humidity	10 to 90%, noncondensing		
Air Cooling	Redundant internal fans		
General Specifications			
Video Performance	Exceeds RS-250C short haul when equipped with 10-bit video encoders and decoders (68dB min. SNR)		
System Monitoring	Artel IMI-9000 Information and Monitoring Interface		
Network Management	SNMP via IMI-9000		
Alarming Interface	(Note2) RS-485 via RJ-11(2)		
Video Connectors	BNC (Primary and Loop Thru)		
Audio Connectors	Screw Down Terminal Strip (4 Sets)		

Notes:
1. DV6300 transmitters are available in 1310nm, 1550nm, or CWDM optical wavelength; x = 1 for 1310nm and 5 for 1550nm; yyyy = CWDM wavelength (1470, 1490, 1510, 1530, 1550, 1570, 1590, 1610nm).
2. Alarm connectivity also available from remote unit through embedded overhead channel to tributary interface cards in DV6000, DV6408, or DV6444 shelves.

Specifications subject to change without notice.

Ordering Information

Part Number	Description
DV6300 Remote Transmitters (Note1), transmit a signal to a DV6312CRM tributary receiver for a remote add (requires a 42kHz clock source) or to a DV6312RSR remote receiver for a point-to-point link	
1310nm wavelength; 110–240VAC power supply	DV6311RSTxxx01
1310nm wavelength; –48VDC power supply	DV6311RST48xxx01
1550nm wavelength; 110–240VAC power supply	DV6351RSTxxx01
1550nm wavelength; –48VDC power supply	DV6351RST48xxx01
CWDM wavelength; 110–240VAC power supply (Note2)	DV63yyyyRSTxxx
CWDM wavelength; –48VDC power supply (Note2)	DV63yyyyRST48xxx
DV6300 Remote Receivers (Note3), receive a signal from a 1310nm/1550nm DV6311CTM tributary transmitter for a remote drop or from a 1310nm/1550nm DV63x1RST remote transmitter for a point-to-point link	
110–240VAC power supply	DV6312RSRxxx01
–48VDC power supply	DV6312RSR48xxx01
DV6300 Remote Transceivers (Note1), receive the 42kHz clock signal from, and transmit a video signal to, a DV6312CXM tributary transceiver for a remote add	
1310nm wavelength; 110–220VAC power supply	DV6311RSXxxx01
1310nm wavelength; –48VDC power supply	DV6311RSX48xxx01
DV6300 Tributary Transmitters (Note4), transmit a signal to a DV6312RSR remote receiver; plugs into a DV6312RSR remote receiver to provide a single channel repeat function	
1310nm wavelength	DV6311CTMxxx
1550nm wavelength	DV6351CTMxxx
DV6300 Tributary Receiver (Note4), receives a signal from a DV63x1RST remote transmitter (requires a 42kHz clock source)	DV6312CRMxxx
DV6300 Tributary Transceiver (Note4), transmits a 1310nm 42kHz clock signal to, and receives a video signal from, a 1310nm DV6311RSX remote transceiver for a remote add	DV6312CXMxxx01

Notes:
1. Accepts any single-width DV6000 encoder.
2. yyyy equals CWDM wavelength (1470, 1490, 1510, 1530, 1550, 1570, 1590, 1610nm).
3. Accepts any single-width DV6000 decoder.
4. Plugs into a DV6000, DV6408, and DV6444 equipment shelf.
5. xxx equals connector type. FC = FC/UPC, SC = SC/UPC, ASC = SC/APC, and APC = FC/APC.
6. Packages that include DV6300 Remote TX/TXVR/RX Units and 10-bit Video, 4 Audio Encoder/Decoder interface cards are available.

ARTEL VIDEO SYSTEMS

ISO2000:9001

Artel Video Systems Corp. | 330 Codman Hill Road | Boxborough, MA 01719 USA
T: 978.263.5775 | F: 978.263.9755 | Domestic Sales: sales@artel.com
International Sales: internationalsales@artel.com | Technical Support: customercare@artel.com
www.artel.com