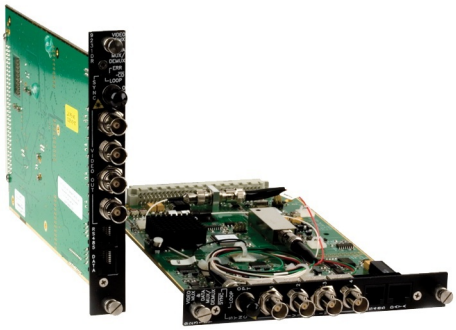
Features

- 4-channel video and data transmitters and receivers
- Uncompressed 10-bit digital video
- Very high quality video ≥67 dBW SNR
- 3 data channels, 1 user-configurable
- Rack-mount version
- Network Management System (NMS) compatible



9741D Series

Four-channel video with three duplex data channels

Description

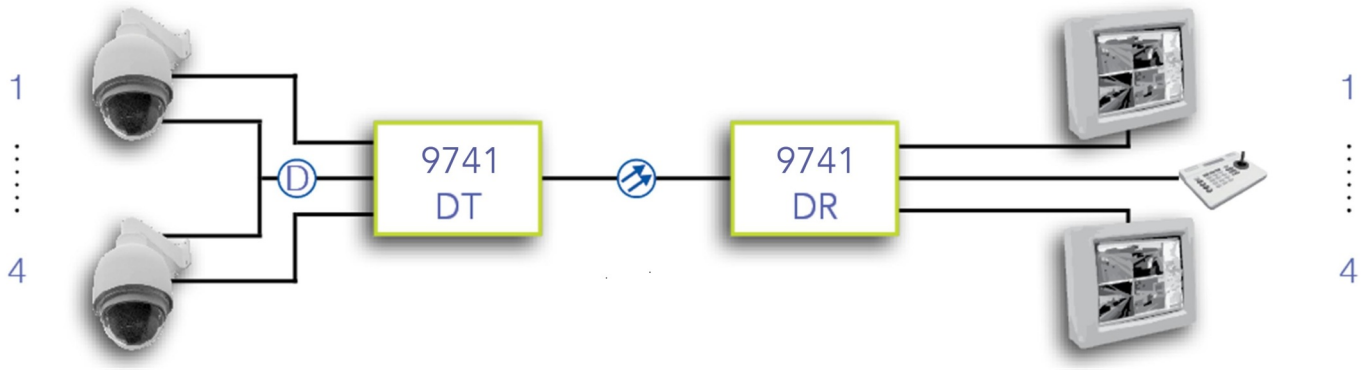
The Optelecom® 9741D models digitise and transport four video signals and three duplex data channels over one optical fiber. The use of 10-bit video sampling provides extremely high video quality. The RS-232, user-configurable RS-422/RS-485 Manchester 2-wire, and RS-485 2-wire ports add capability to this basic four-channel transport card.

The wide operating temperature range of these units makes the 9741D series well-suited for environmentally harsh applications such as traffic monitoring, video surveillance in city centres, and federal and critical infrastructures.

The 9741D series comes as a rack-mount version, suitable for a 9002 or 9008 power supply cabinet, or as a stand-alone unit. The 9741D series modules are managed with the Optelecom® Network Management System (NMS).

To create a stand-alone version of the 9741D rack-mount card, use the 9003-2 mini chassis.

Technical Specifications
9741D Series



Video	
Number of channels	4
Video format	NTSC, PAL
Input/output level	1 Vpp (±3 dB)
Bandwidth	6 MHz (-3 dB)
Sampling resolution	10-bit
Differential gain	<2%
Differential phase	<1°
Signal-to-noise ratio	≥67 dBW
Connector type	ST
Group delay	<7 ns
Video sampling rate	56 MHz

Data	
Number of channels	3 (duplex)
Data port	
Connector type	RJ-45
Data type (bit/sampling rate)	1-channel RS-232 (DC-115.2 kbps / 1.5 MHz) 1-channel switch selectable RS-422, RS-485-4W, and RS-485-2W (DC-256 kbps / 3 MHz) or Manchester
RS-485 port	
Connector type	RJ-12
Data type	1-channel RS-485-2W (DC to 256 kbps / 3 MHz)

Management	
LED status indicators	Full-duplex link (green), local (red) or remote (yellow) synchronisation error
Management system	9900 Network Management System (NMS) compatible

Power requirements	
Voltage	5.7 to 6.4 VDC
Power consumption	
TX	550 mA at 6 VDC (3.3 W)
RX	500 mA at 6 VDC (3 W)
Rack-mount units	9002 or 9003-2 power supply chassis

Technical Specifications
9741D Series

Environmental	
Operating temperature	-40 °C to +74 °C (-40 °F to +165 °F)
Storage temperature	-55 °C to +85 °C (-67 °F to +185 °F)
Relative humidity	<95% with no condensation
MTBF (Mean Time Between Failures)	>100,000 hours
Safety and EMC	IEC/EN 60950-1, IEC/EN 60825-1, IEC 60825-2, EN 55024, EN 50130-4, EN 61000-6-2, EN 55022, FCC part 15

Mechanical	
Housing	Rack-mount units
Dimensions (h x w x d)	154.9 x 20.3 x 218.4 mm (6.1 x 0.8 x 8.6 in)
Weight	272 g (0.6 lbs)

Optical

	9741DT/DR-MMH TX/RX	**9741DT/DR-SM** TX/RX
Fiber type	1x MMH (62.5 µm)	1x SM (9 µm))
Output wavelength	1310 nm / 1550 nm	1310 nm / 1550 nm
Output power	-4 dBm / -7 dBm	-4 dBm / -7 dBm
Input sensitivity	-30 dBm / -22 dBm	-30 dBm / -27 dBm
System link budget	18 dB at 1310 nm	23 dB at 1310 nm
Fiber length (range)*	7 km	57 km
Connector type	ST (others optional)	ST (others optional)

*Due to fiber bandwidth, the maximum transmission distance may be limited to 4 km for MMH.

Ordering Information

Models	Description	Fiber type
9741DT-MM-ST	4-channel digital video transmitter with 2-way data	1x MM
9741DR-MM-ST	4-channel digital video receiver with 2-way data	1x MM
9741DT-SM-ST	4-channel digital video transmitter with 2-way data	1x SM
9741DR-SM-ST	4-channel digital video receiver with 2-way data	1x SM

The quality management system used in the development, production, sales, and support of this product is ISO 9001:2008 certified by LRQA.