

Features

- 2-channel video, data, audio, CC or intercom transmitters and receivers
- 9-bit uncompressed digital video
- Very high quality video ≥ 67 dBw SNR
- 100Mb/s Fast Ethernet switch
- 1 duplex high-speed (HS) port channel
- 2 duplex user-configurable option modules
- Network Management System (NMS) compatible



9292D Series

Two-channel video w/HS port, option modules, Ethernet

Description

The Optelecom® 9292D series modules digitise and transport two video channels, four 100Mb/s Fast Ethernet channels, a duplex High-Speed port data channel, and two duplex Option Module channels over one optical fiber.

The two Option Module channels provide additional transport for any combination of two data, audio, contact closure, or intercom channels on the same fiber as the video and High-Speed port channels. The High-Speed port supports duplex 1.5Mb/s RS-422 or connection to an optional Option Module Host card for transport of four or eight duplex audio, data, contact closure, or intercom signals.

Uncompressed 9-bit digitising, oversampling, and digital filtering ensure a very high transmission performance, exceeding the requirements of the EIA RS-250C short haul specification.

The wide operating temperature range of these units makes the 9292D series well-suited for environmentally harsh applications such as traffic monitoring, video surveillance in city centers, and federal and critical infrastructures.

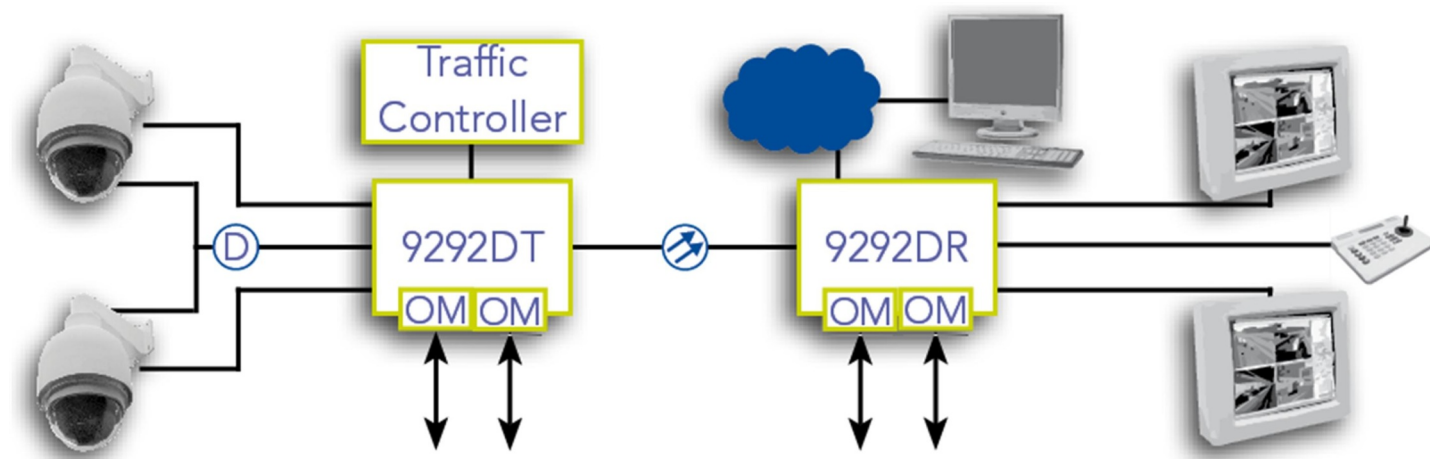
The 9292D series comes as a rack-mount version, suitable for a 9002 or 9008 power supply cabinet, or as a standalone unit. The 9292D series modules are managed with the Optelecom® Network Management System (NMS).

To create a standalone version of the 9292D rack-mount card, use the 9003-2 mini chassis.



Technical Specifications

9292D Series



Video (x4)

Video format	NTSC, PAL
Video input	1Vpp into 75Ω
Connector type	BNC
Bandwidth	5Hz to 6.5MHz (-3dB)
Differential gain	0.7%
Differential phase	0.7°
Signal-to-noise ratio	≥67dBw
Video encoding	Uncompressed 10-bit linear PCM
Video sampling rate	15MHz

Option modules

Number of free channels	2x duplex
A Module	1x audio
B Module	1x user-configurable data (RS-232, RS-422, RS-485)
C Module	1x contact closure
D or E Module	2x audio (simplex only)
GM or GR Module	2x intercom audio

For more information on Option Modules, refer to the Option Modules data sheet or contact TKH Security Solutions.

High-speed ports

Number of ports	1x duplex
Data format	RS-422 or extension port
Data rate	
Synchronous RS-422	15Mb/s
Asynchronous RS-422	≤1.5Mb/s
Extension port for:	
Option module host	9961A-C, 9962A-C
10Mb Ethernet	9971-C, 9972-C
Ethernet ports	4x 10/100 Fast Ethernet, autosensing, auto MDIX, full-duplex/half-duplex, autonegotiation, built-in 4-port unmanaged switch, RJ-45 connectors

Technical Specifications

9292D Series

Management

LED status indicators	
9292DT	Sync, not sync, loop, video present (x2)
9292DR	Sync, not sync, loop, Tx video present (x2)
Management system	9900 Network Management System (NMS)

Power requirements

9292DT	
Voltage	6VDC (chassis)
Current	650mA
9292DR	
Voltage	6VDC (chassis)
Current	700mA

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

Mechanical

9292DT	
Housing	2-slot card, 9000 series chassis
Dimensions (h x w x d)	154.9 x 40.6 x 218.4mm (6.1 x 1.6 x 8.6in)
Weight	453.6g (1.0lb)
9292DR	
Housing	2-slot card, 9000 series chassis
Dimensions (h x w x d)	154.9 x 40.6 x 218.4mm (6.1 x 1.6 x 8.6in)
Weight	453.6g (1.0lb)

Optical

	9292DT/DR-MM TX/RX	9292DT/DR-SM TX/RX	9292DT/DR-SMH TX/RX
Fiber type	MM (62.5)	SM (09)	SM (09)
Output wavelength	1310nm/1550nm	1310nm/1550nm	1550nm/1310nm
Output power	-7dBm/-7dBm	-7dBm/-7dBm	-3dBm/-3dBm
Input sensitivity	-23dBm/-30dBm	27dBm/-30dBm	27dBm/-30dBm
System link budget	16dB ¹ /16dB ¹	20dB/23dB	24dB/27dB
Fiber length (range) ²	7km ²	25km ²	68km
Connector type	ST (others optional)	ST (others optional)	ST (others optional)

¹For 50/125µm fiber, subtract 4dB.

²Range may be limited by modal and chromatic dispersion, fibre quality, and fiber bandwidth.

Technical Specifications

9292D Series

Ordering information

Models*	Description	Fiber type
9292DT(XX)/MMH-ST	2-channel digital video transmitter	1xMM
9292DR(XX)/MMH-ST	2-channel digital video receiver	1xMM
9292DT(XX)/SMH-ST	2-channel digital video transmitter	1xSM
9292DR(XX)/SMH-ST	2-channel digital video receiver	1xSM
9292DT(XX)/SM-ST	2-channel digital video transmitter	1xSM
9292DR(XX)/SM-ST	2-channel digital video receiver	1xSM



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

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