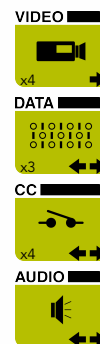## Features

- 4-channel digital video multiplexer with data and High-Speed (HS) expansion ports
- Uncompressed 10-bit digital video
- Very high quality video ≥67 dBW SNR
- No signal degradation over long distances
- 3 built-in duplex data channels
- 2 high-speed data audio expansion ports (1 simplex, 1 duplex)
- Network Management System (NMS) compatible

VIDEO
x4

DATA
x3

CC
x4

AUDIO

9762D Series
Four-channel video with seven duplex data/option channels

Description

The Optelecom® 9762D video/data transceivers use one optical fiber for simultaneous transmission of four unidirectional camera signals, three simplex data signals and four duplex option module signals. The use of 10-bit video sampling provides extremely high video quality over long distances.
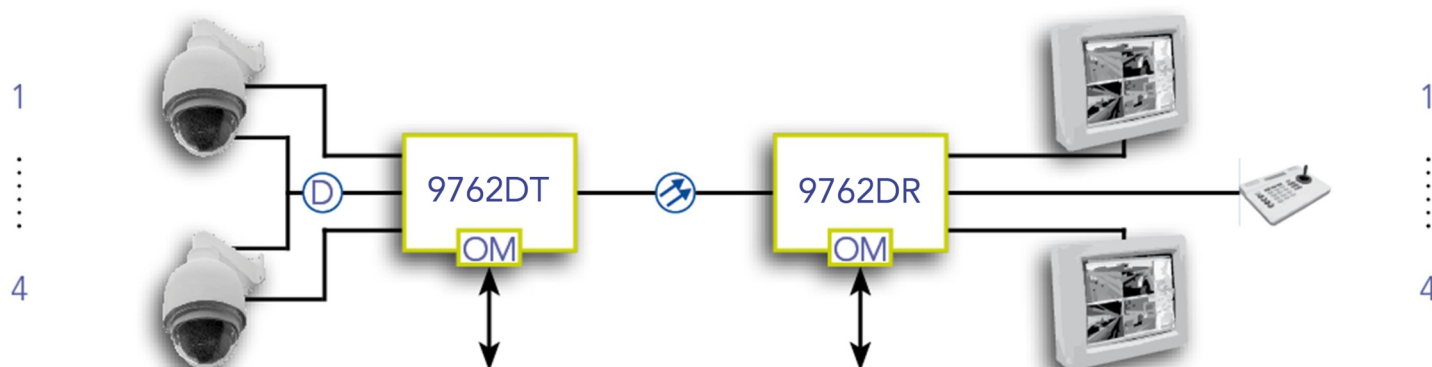
Data channels
There are three data channels, including one with a configurable interface, that are suitable for RS-232/422/485/ Manchester PTZ control and other applications. The configurable duplex data interface is suitable for RS-232/422/485 and Manchester operation for PTZ and other applications. In addition, four Option Module channels are available to support additional duplex audio/data, contact closures, and intercom links requirements via plug-in option modules.

The wide operating temperature range of these units makes the 9762D series well-suited for environmentally harsh applications such as traffic monitoring, video surveillance in city centres, and federal and critical infrastructures.

The 9762D comes as a rack-mount version, suitable for a 9002 power supply chassis. To create a stand-alone version of the 9762D rack-mount card, use the 9003-2 mini chassis.

TKH GROUP   optelecom

Video

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

Data

Number of channels	3 (simplex, in the video direction)
Data port	
Connector type	RJ-45
Data type (bit/ sampling rate)	1-channel RS-232 (DC-115.2kbps/ 1.5MHz) 1-channel RS-422, RS-485-2W, RS-485-4W, Manchester, switch selectable (DC-256Kbps/ 3MHz)
RS-485 port	
Connector type	RJ-12
Data type	1-channel RS-485-2W (DC to 256 kbit/s/ 3MHz)
Option Module	
Number of channels	4 (full-duplex)
Data interfaces	Data interface 1 x audio (A Module); 1 x user-configurable RS-232/422/485 (B-Module), 1 x contact closure (C Module), 2x audio (D or E Module), 2x intercom audio (GM or GR Module).

For more information on data interfaces, refer to the data sheet of the 9961 and 9962.

Technical Specifications
9762D Series

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	875mA at 6 VDC (5.25W)
RX	825mA at 6 VDC (5W)
Rack-mount units	9002 or 9003-2 power supply chassis

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 40.6 x 218.4mm (6.1 x 1.6 x 8.6in)
Weight	362.9g (12.74oz)

Optical	9762DT/DR-MM TX/RX	9762DT/DR-SM TX/RX
Fiber type	1xMM (62.5)	1xSM (09)
Output wavelength	1310 nm / 1550 nm	1310 nm / 1550 nm
Output power	-4dBm/-7dBm	-4dBm/-7dBm
Input sensitivity	-30dBm/-22dBm	-34dBm/-27dBm
System link budget	15dB at 1310 nm	20dB at 1310 nm
System link budget (Tx to Rx)	18dB at 1310 nm	23dB at 1310 nm
Fiber length (range)2	4km	57km
Minimum link loss	0dB	0dB
Connector type	ST	ST (FC optional)

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

Ordering Information

Models	Description	Fiber type
9762DT(XXXX)/MM-ST	4-channel digital video with data/option channels	MM
9762DR(XXXX)/MM-ST	4-channel digital video with data/option channels	MM
9762DT(XXXX)/SM-ST	4-channel digital video with data/option channels	SM
9762DR(XXXX)/SM-ST	4-channel digital video with data/option channels	SM
9762DT(XXXX)/SMH-ST	4-channel digital video with data/option channels	SM
9762DR(XXXX)/SMH-ST	4-channel digital video with data/option channels	SM

* "XXXX" represents the identification letters for the four option modules, as selected by the user upon ordering.