Features

- Single-channel video transmitters and receivers
- 9-bit uncompressed digital video
- High-quality video ≥63dBw SNR
- Compatible with NTSC and PAL standards
- Standalone and rack-mount versions
- Network Management System (NMS) compatible

9111D Series
1-channel video

Description

The Optelecom® 9111D series models transport one high quality video over one optical fiber. They provide digital quality video transmission in simple, easy-to-use packages. The rack-mount versions can support up to 54 channels in a 4 RU high, 19" rack space.

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 9111D series well-suited for environmentally harsh applications such as traffic monitoring, video surveillance in city centers, and federal and critical infrastructures.
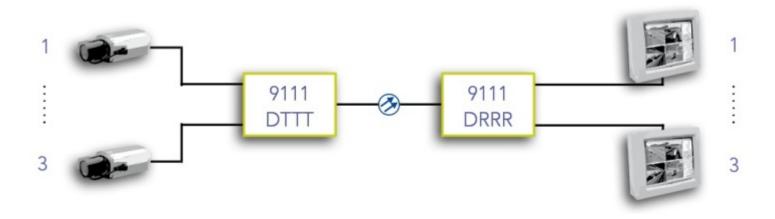
The 9111D series comes as a rack-mount version, suitable for a 9002 or 9008 power supply cabinet, or as a standalone unit. The 9111D series modules are managed with the Optelecom® Network Management System (NMS).

To create a standalone version of the 9111D rack-mount card, use the 9003-2 mini chassis.

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Video

Video	
Video format	NTSC, PAL
Video input	1Vpp into 75Ω
Connector type	BNC
Bandwidth	5Hz to 6.5MHz (-3dB)
Differential gain	1.0% typical
Differential phase	0.7° typical
Signal-to-noise ratio	≥63dBw
Video encoding	Uncompressed 9-bit linear PCM
Video sampling rate	16MHz

Power Requirements

Power Requirements	
9111DT	
Voltage	6VDC
Current	200mA
9111DTTT	
Voltage	6VDC
Current	500mA
9111DR	
Voltage	6VDC
Current	300mA
9111DRRR	
Voltage	6VDC
Current	800mA
9113DT	
Voltage	8-15VDC
Current	110mA at 12VDC
9114DR	
Voltage	8-15VDC
Current	150mA at 12VDC

Technical Specifications
9111D 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

Mechanical

9111DT, 9111DTTT, 9111DR, 9111DRRR

Housing	1-slot card, 9000 series chassis
Dimensions (h x w x d)	154.9 x 20.3 x 218.4mm (6.1 x 0.8 x 8.6in)
Weight	136g (4.79oz)

9113DT

Housing	Miniature standalone
Dimensions (h x w x d)	19.0 x 19.0 x 121.9mm (0.75 x 0.75 x 4.8in)
Weight	90.7g (3.18oz)

9114DR

Housing	Standalone
Dimensions (h x w x d)	25.4 x 68.6 x 109.2mm (1.0 x 2.7 x 4.3in)
Weight	136g (4.79oz)

Optical

	9111DT-L 9111DR-L	9111DT-LD 9111DR-L	9111DTTT-LD 9111DRRR-L	9113DT-LD 9111DR-L	9113DT-LD 9114DR-L
Fiber type	MM (62.5)	SM (09)	SM (09)	SM (09)	SM (09)
Output wavelength	1310nm	1310nm	1310nm	1310nm	1310nm
Output power	-17dBm	-7dBm	-7dBm	-7dBm	-7dBm
Input sensitivity	-29dBm	-30dBm	-30dBm	-30 dBm	-30dBm
System link budget	12dB[1]	23dB	23dB	23dB	23dB
Fiber length (range)2	5km[2]	57km	57km	57km	57km
Connector type	ST (others optional)	ST (others optional)	ST (others optional)	ST (others optional)	ST (others optional)

[1] For 50/125μm fiber, subtract 4dB.

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

Ordering information

Models	Description	Fiber type
9111DT-L-ST	9-bit digital video transmitter	1xMM
9111DTTT-L-ST	Triple 9-bit digital video transmitter	3xMM
9114DR-LM-ST	Compact digital video receiver	1xMM
9111DRRR-L-ST	Triple 9-bit digital video receiver	3xMM, 3xSM
9111DT-LD-ST	9-bit digital video transmitter	1xSM
9111DTTT-LD-ST	Triple 9-bit digital video transmitter	3xSM
9113DT-LD-ST	Mini digital video transmitter	1xSM
9114DR-L-ST	Compact digital video receiver	1xSM

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