

Key Features

- ✚ Robust metal casings
- ✚ Low optical link loss – max 30dB
- ✚ Without EMI, RFI and ground loop
- ✚ Bi-di transmission on 1 fiber with WDM
- ✚ High quantification level of 8BIT
- ✚ Hot plug-and-play with switch power supply
- ✚ Available in standalone and 19"3U rack systems



Introduction

Optical video transmitter and receiver are designed to extend the coaxial limit of 500 meters and get CCTV signals connected to 80km max on optical fiber cable. Also referred to as fiber converters, media converters, optical video converters, Optical video transmitter and receiver are a pair of CCTV transmission devices that transmit and receive high fidelity CCTV signals of video, audio, data, telephone, contact closure, Ethernet, etc. with advanced optical transmission technology which enables lossless transmission with minimum disturbance. And the plug-and-play design enables simple installation.

Olycom OM600 series of optical transmitter and receiver offer a wide selection of configurations, ranging from a simple setup with a single channel of a specific type of signal to sophisticated solutions with many channels of different signals (video, audio, data, telephone, alarm, and Ethernet). With the application of Wavelength Division Multiplexing (WDM) technology, all the signals are transmitted and received over a single optical fiber cable. The flexible configurations are open to customization and ODM to cater various needs.

Same with Ethernet media converters, optical video transmitter and receiver's flexibility can be optimized with the application of SFP transceiver.

Optical video transmitter and receiver types range from small standalone devices to high port-density chassis systems that offer advanced features for centralized management.

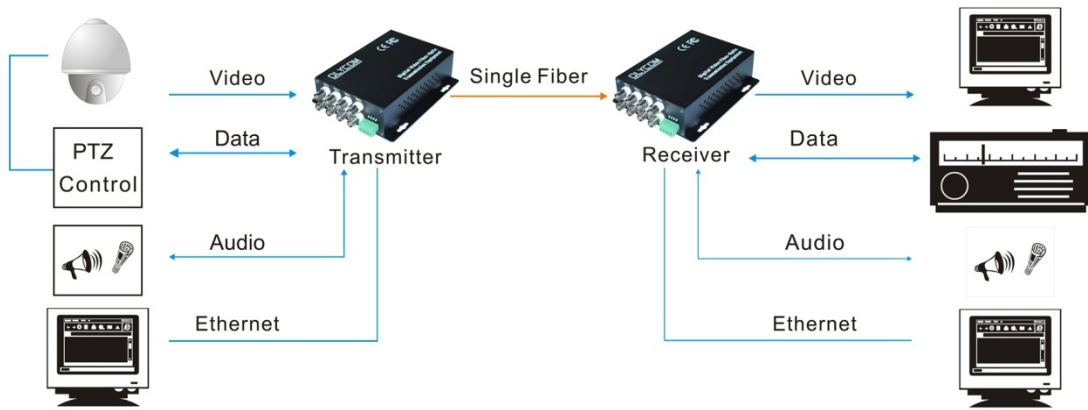
And fiber optic transmission, which is inherently secure and immune to outside interference, is favored in government, military, and medical environments.

Specification

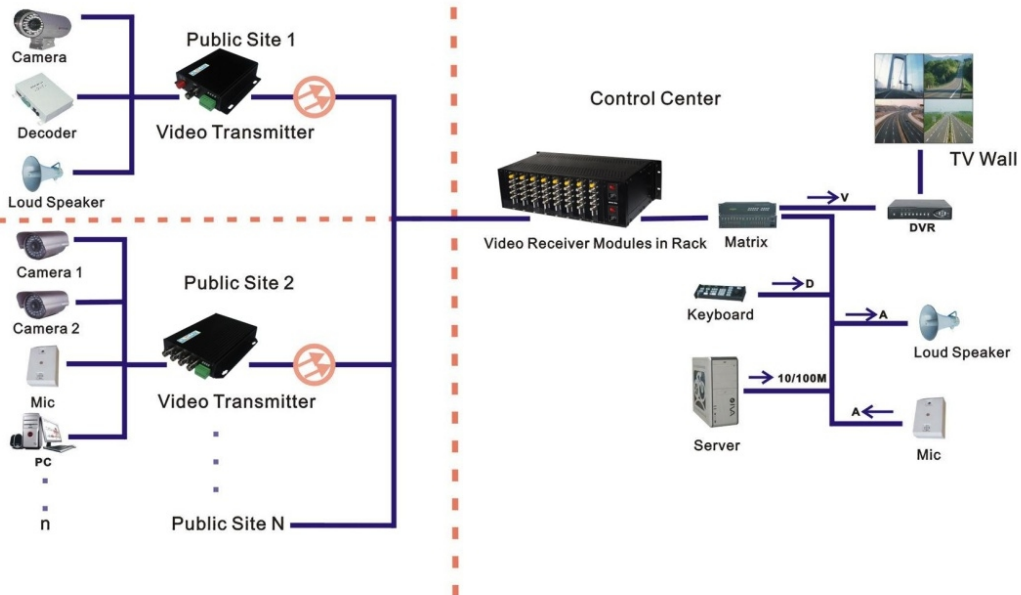
Optical	
Wavelength	1310nm/1550nm
Output Power	-8~3dBm
Optic Fiber	Single mode (9/125um) 20Km to 80Km Multimode (50/125um) 1Km, (62.5/125um) 500m
Receiving Sensitivity	-30dBm
Interface	FC/ST/SC/LC
Video	
Bandwidth	8MHZ
Compatible Systems	NTSC/PAL/SECAM
Impedance/Voltage	BNC 75Ω (unbalanced) / 2.0Vp-p
Differential Gain	< ±1%
Differential Phase	< ±1
S/N ratio	>60dB(weighting)(8 bit)
Interface	BNC
Data	
Data Protocol	RS232, RS422, RS485, Manchester, BIPHASE data
Bandwidth	0~300kbps
Error rate	10 ⁻⁹
Interface	Phoenix terminal
Audio	
Impedance / Voltage	600ohm(unbalanced) / 2.0Vp-p
Frequency Response	10~20kHz
Total Harmonic Distortion	<0.05%
Differential Phase	< ±1
S/N ratio	>95dB(weighting)
Interface	Phoenix terminal
Sample Rate	48k Hz
Resolution	16 bits
Contact Closure	
Signal Input	Alarm, Binary input, support TTL, RS-232/422/485 or passive switch button
Signal Output	Arbitrary alarm, Binary output, support TTL, RS-232/422/485 or relay output
Interface	Phoenix terminal
Telephone	
Phonetic Bandwidth	8KHz
Work Mode	Point to point hot line, program controlling switch/extension mode
Distortion	<1%
S/N Ratio	>95dB
Interface	RJ11 or RJ45
Ethernet	
Work Mode	Full duplex / half duplex, autosensing
Network Speed	10/100Mbps, autosensing
Interface	RJ45
Chassis and Cards	
Chassis Slots Quantity	18 slots
Compatibility(with cards)	1~4ch cards(18pcs); 8ch cards(9pcs)
Flexibility	Supports mixed installation of different configurations
Cards	In 4ch PCB(153x100x10mm) or 8ch PCB size (153x100x25mm) configurations which require larger size can't be used with this system
Electrical. Environmental. Mechanical	
Operating Voltage	Standalone:220VAC to 5V/12VDC, Rack: dual 220V/-48V AC, card: powered by chassis
Operating Temperature	-35°C~+75°C
Storage Temperature	-45°C~+85°C
Humidity	0~95% non-condensing
Dimension And Weight	Standalone and card: depends on different configurations, Chassis: 19"3U

Application

- ✦ Police and safe city monitoring system
- ✦ Express way security protection and toll station system
- ✦ City traffic monitoring system
- ✦ Building and campus monitoring system
- ✦ Industrial monitoring (airport, chemical plant, railway, etc.)
- ✦ Military monitoring (frontier defense, national defense)
- ✦ Electronic power oil field, TV station program broadcasting
- ✦ Gymnasium (live video and audio transmission)



Highway Video Surveillance Solution



Ordering Details

Olycom OM610 series of optical transmitter and receiver offer a wide selection of configurations, ranging from a simple setup with a single channel of a specific type of signal to sophisticated solutions with many channels of different signals (video, audio, data, telephone, alarm, and Ethernet). The flexible configurations are open to customization and ODM to cater various needs.

Below listed are some items for your reference. Please contact us for more configurations / customization / OEM / ODM.

OM610-1V ↑ 1D ↓ 1P1E WT/R	1ch video Tx + 1ch RS485 data Rx + 1ch 10/100M Ethernet + 1 Telephone.
OM610-1V ↑ 2D ↓ 2A ↑ 1E WT/R	1ch video Tx + 2ch RS485 data Rx + 2ch audio Tx + 1ch 10/100M Ethernet
OM610-1V ↑ 2D ↓ 2A ↑ 2K ↑ WT/R	1ch video Tx + 2ch RS485 data Rx + 2ch audio Tx + 1ch Contact Closure Tx
OM610-2P1EWT/R	2ch Telephone + 1ch 10/100M Ethernet
OM610-2V ↑ 1D ↓ 1P1E WT/R	2ch video Tx + 1ch RS485 data Rx + 1ch 10/100M Ethernet + 1 Telephone.
OM610-2V ↑ 2D ↓ 2A ↑ 1E WT/R	2ch video Tx + 2ch RS485 data Rx + 2ch audio Tx + 1ch 10/100M Ethernet
OM610-4EWT/R	4ch 10/100M Ethernet
OM610-4P2D ↓ WT/R	4ch Telephone+ 2ch RS485 data Rx
OM610-4V ↑ 1D ↓ 4E WT/R	4ch video Tx + 1ch RS485 data Rx + 4ch 10/100M Ethernet
OM610-4V ↑ 1D ↓ 4PWT/R	4ch video Tx + 1ch RS485 data Rx + 4ch Telephone
OM610-4V ↑ 12D ↓ WT/R	4ch video Tx + 12ch RS485 data Rx
OM610-2D ↓ 8PWT/R	2ch RS485 data Rx + 8ch Telephone
OM610-20D ↓ WT/R	20ch RS485 data Rx
OM610-1V ↑ ↓ 1D ↑ ↓ 1A ↑ ↓ 1K ↑ ↓ WT/R	1ch bi-di video + 1ch bi-di RS485 data + 1ch bi-di audio + 1ch bi-di contact closure
OM610-2D ↑ ↓ 4A ↑ ↓ 1E WT/R	4ch bi-di audio + 2ch bi-di RS485 data + 1ch 10/100M Ethernet
OM610-1V ↑ 1D ↑ ↓ 3A ↑ 2K ↑ ↓ WT/R	1ch video Tx + 2ch bi-di RS485 data + 3ch audio Tx + 1ch bi-di contact closure
OM610-4V ↑ 2D ↓ 2A ↑ 1E 1P2K ↑ WT/R	4ch video Tx + 2ch RS485 data Rx + 2ch audio Tx + 1ch 10/100M Ethernet + 1ch Telephone + 2ch Contact Closure Tx

Item Number Code

OM600	OM600-Video Optical Transmitter / Receiver, 610-desk-top standalone, 620-card style 613-mini series, 615-HD series
V	Video
A	Audio
D	Data
K	Alarm (I/O, contact closure)
P	Telephone
E	Ethernet
M,W	M-Multi-mode, W-Single mode
S,U	S-1310nm, U-1550nm
T,R	T -Transmitter, R-Receiver
FC,ST,SC,LC	Fiber connector type
↑, ↓, ↑ ↓	↑- forward (from TX to RX), ↓ - reverse (from RX to TX), ↑↓- bidirectional
1,2,3,...	Digits ahead of signal-quantity of required channel
05, 20, 40...	Digits next to fiber connector-working distance