



The devices APP MV4 / MDV4 series devices are applied to digital transmission, multiplexing 4 video channels, data and contact closures signals through 1 multi-mode or single-mode fiber.

The system ensures high quality uncompressed 4 video channels transmission thanks to high quality ADC-DAC converters and digital transmission without loss of quality even long distance.

The devices are fully transparent for emitting data stream and enable electric signals transmission in accordance with V.11 recommendation, RS-422/485 particularly, up to 250 kbps as well as 1 two-way contact closure signal.

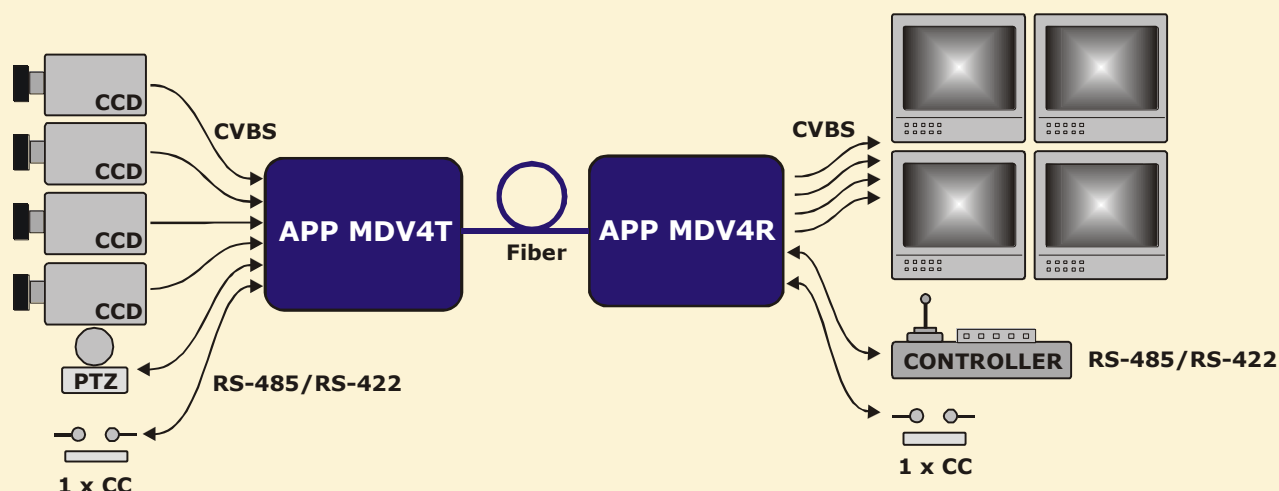
Optical fiber, as a transmission medium, enable galvanic separation between data transmission systems. The solution protect the systems against influence of stray current, charge transmitting as result a difference of potentials or strong electromagnetic disturbances.

The devices are offered as a cards mounted in 19" racks or as a stand-alone devices make them possible to applicate on DIN TS-35 rail.

- **digital transmission**
- **uncompressed 4 x video**
- **RS-422/485 data**
- **contact closures signal (CC)**
- **1 MM or SM fiber**
- **DIN TS-35 rail assembly**



### Application diagram:



[www.elektronikart.pl](http://www.elektronikart.pl)

# Digital, 4 x video and data fiber optic multiplexer

## APP MDV4

### Technical parameters:

#### Video interface:

number of channels:	4
video format:	CVBS PAL
input electrical interface:	0,5 - 1,6 Vp-p
output electrical interface:	1 Vp-p
connector type:	BNC 75 Ω

#### Data interface (V.11):

number of channels:	1 two-way
data format:	asynchronous, serial
electrical interface:	V.11, transparent
data rate:	up to 250 kbps
connector type:	RJ-45

#### CC (contact closure) interface:

number of channels:	1 two-way
electrical input interface:	+ 3,3 V pull-up 10 kΩ
electrical output interface:	DC 500 mA photovoltaic relay
connector type:	RJ-45

#### Optical interface:

optical medium:	50/125 μm, 62,5/125 μm, 9/125 μm
output wavelength:	850/1310/1550 nm
connector type:	SC
bit rate:	800 Mbps

**Operating temperature range:** 0 to + 55 °C

**Power supply:** 8 - 48 VDC

**Dimensions:** 100 x 120 x 25 mm

**Housing:** clear anodised aluminium

#### Device versions:

Multi-mode system (MM)			
APP MV4T	4 x V →	VCSEL 850 nm, 1 x MM	up to 4 km
APP MV4R	4 x V ←	PIN 850 nm, 1 x MM	up to 4 km
APP MV4TM*	4 x V →	VCSEL 850 nm, 1 x MM	up to 4 km
APP MV4RM*	4 x V ←	PIN 850 nm, 1 x MM	up to 4 km
APP MDV4T	4 x V →, 1 x D ↔, 1 x CC ↔	LD/PIN 1310/1550 nm, 1 x MM	up to 4 km
APP MDV4R	4 x V ←, 1 x D ↔, 1 x CC ↔	LD/PIN 1550/1310 nm, 1 x MM	up to 4 km
APP MDV4TM*	4 x V →, 1 x D ↔, 1 x CC ↔	LD/PIN 1310/1550 nm, 1 x MM	up to 4 km
APP MDV4RM*	4 x V ←, 1 x D ↔, 1 x CC ↔	LD/PIN 1550/1310 nm, 1 x MM	up to 4 km
Single-mode system (SM)			
APP MV4T	4 x V →	LD 1310 nm, 1 x SM	up to 15, 25, 40, 60, 80 km
APP MV4R	4 x V ←	PIN 1310 nm, 1 x SM	up to 15, 25, 40, 60, 80 km
APP MV4TM*	4 x V →	LD 1310 nm, 1 x SM	up to 15, 25, 40, 60, 80 km
APP MV4RM*	4 x V ←	PIN 1310 nm, 1 x SM	up to 15, 25, 40, 60, 80 km
APP MDV4T	4 x V →, 1 x D ↔, 1 x CC ↔	LD/PIN 1310/1550 nm, 1 x SM	up to 15, 25, 40, 60 km
APP MDV4R	4 x V ←, 1 x D ↔, 1 x CC ↔	LD/PIN 1550/1310 nm, 1 x SM	up to 15, 25, 40, 60 km
APP MDV4TM*	4 x V →, 1 x D ↔, 1 x CC ↔	LD/PIN 1310/1550 nm, 1 x SM	up to 15, 25, 40, 60 km
APP MDV4RM*	4 x V ←, 1 x D ↔, 1 x CC ↔	LD/PIN 1550/1310 nm, 1 x SM	up to 15, 25, 40, 60 km

\* - module to APP DR10 rack

[www.elektronikart.pl](http://www.elektronikart.pl)

tel: + 48 81 446 51 52  
fax: + 48 81 446 51 53

80 Mełgiewska Str., 20-234 Lublin

info@elektronikart.pl  
marketing@elektronikart.pl