Digital, video and data fiber optic converter

APP VD200

ELEKTRONIK ART

APP VD200 series devices are applied to digital transmission, multiplexing video, data and contact closures signals through 1 multi-mode or single-mode fiber.

The system ensures high quality uncompressed video 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 115 kbps as well as 2 two-way contact closure signals.

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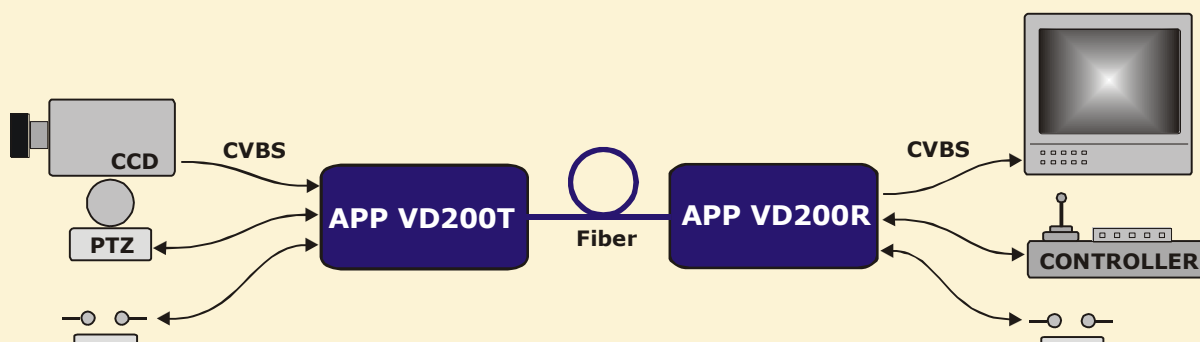
The devices are offered as a cards mounted in 19" racks or as a stand-alone devices make them possible to applicate on DIN TS-35 rail.

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

V | **D** | **2 CC**

Application diagram:

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Technical parameters:

Video interface:

number of channels:	1
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 115 kbps
connector type:	RJ-45

CC (contact closure) interface:

number of channels:	2 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, 9/125μm
output wavelength:	1310/1550 nm
connector type:	SC
bit rate:	155 Mbps

Operating temperature range: - 35 to + 60 °C

Power supply: 8 - 48 VDC

Dimensions: 100 x 100 x 25 mm

Housing: clear anodised aluminium

Device versions:

Multi-mode system (MM)			
APP VD200T	1 x V →, 1 x D ↔, 2 x CC ↔	LD/PIN 1310/1550 nm, 1 x MM	up to 5 km
APP VD200R	1 x V ←, 1 x D ↔, 2 x CC ↔	LD/PIN 1550/1310 nm, 1 x MM	up to 5 km
APP VD200TM*	1 x V →, 1 x D ↔, 2 x CC ↔	LD/PIN 1310/1550 nm, 1 x MM	up to 5 km
APP VD200RM*	1 x V ←, 1 x D ↔, 2 x CC ↔	LD/PIN 1550/1310 nm, 1 x MM	up to 5 km
Single-mode system (SM)			
APP VD200T	1 x V →, 1 x D ↔, 2 x CC ↔	LD/PIN 1310/1550 nm, 1 x SM	up to 15, 25, 40, 60 km
APP VD200R	1 x V ←, 1 x D ↔, 2 x CC ↔	LD/PIN 1550/1310 nm, 1 x SM	up to 15, 25, 40, 60 km
APP VD200TM*	1 x V →, 1 x D ↔, 2 x CC ↔	LD/PIN 1310/1550 nm, 1 x SM	up to 15, 25, 40, 60 km
APP VD200RM*	1 x V ←, 1 x D ↔, 2 x CC ↔	LD/PIN 1550/1310 nm, 1 x SM	up to 15, 25, 40, 60 km

* - module to APP DR10 rack