



APP AD100 series devices are applied to digital transmission, multiplexing audio, data and contact closures signals via 1 or 2 multi-mode as well as single-mode fibers.

The system ensures high quality stereophonic audio 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 two-way 3 contact closure signals.

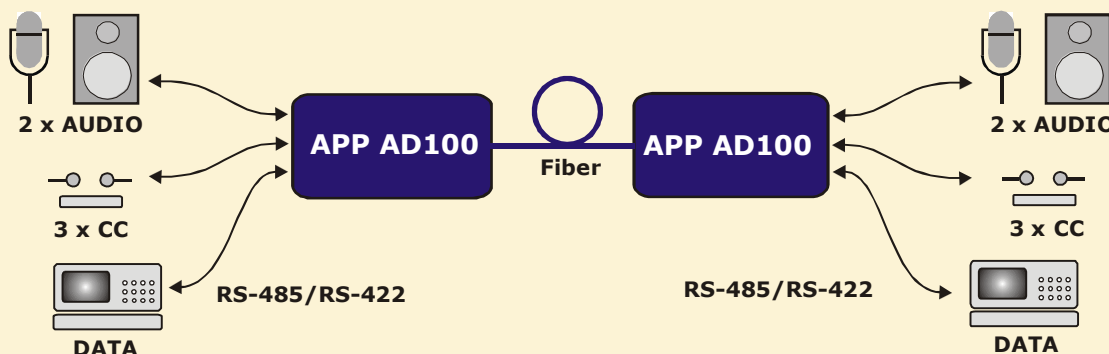
Optical fiber, as a transmission medium, enable galvanic separation between data transmission systems. The solution protect the systems against influence of stray current, charge transmitting as result a difference of potentials or strong electromagnetic disturbances.

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
- high quality audio
- RS-422/485 data
- contact closures signals (CC)
- 1 or 2, MM or SM fibers
- DIN TS-35 rail assembly



Application diagram:



**Technical parameters:**

**Audio interface:**

number of channels: 2 two-way  
 bandwidth: 20 Hz – 20 kHz ( $\pm 0,5$  dB)  
 ADC converter: 16 bit, SR 48 kHz  
 input impedance: 50 k $\Omega$  lub 600  $\Omega$   
 electrical level: + 6 dB  
 SNR: > 93 dB

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

number of channels: 1 two-way  
 data format: asynchronous, serial  
 electrical interface: V.11, transparent  
 data rate: 115 kbps

**CC (contact closure) interface:**

number of channels: 3 two-way  
 electrical input interface: + 3,3 V pull-up 10 k $\Omega$   
 electrical output interface: DC 500 mA photovoltaic relay

**Optical interface:**

optical medium: 50/125  $\mu$ m, 62,5/125  $\mu$ m, 9/125 $\mu$ m  
 output wavelength: 1310/1550 nm  
 connector type: SC  
 bit rate: 155 Mbps

**Operating temperature range:** 0 to + 55  $^{\circ}$ C

**Power supply:** 8 - 48 VDC

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

**Housing:** clear anodised aluminium

**Device versions:**

<b>Multi-mode system (MM)</b>			
APP AD100	2 x A $\leftrightarrow$ , 1 x D $\leftrightarrow$ , 3 x CC $\leftrightarrow$	LD/PIN 1310 nm, 2 x MM	up to 5 km
APP AD100RM*	2 x A $\leftrightarrow$ , 1 x D $\leftrightarrow$ , 3 x CC $\leftrightarrow$	LD/PIN 1310 nm, 2 x MM	up to 5 km
APP AD100	2 x A $\leftrightarrow$ , 1 x D $\leftrightarrow$ , 3 x CC $\leftrightarrow$	LD/PIN 1310/1550 nm LD/PIN 1550/1310 nm	up to 5 km
APP AD100RM*	2 x A $\leftrightarrow$ , 1 x D $\leftrightarrow$ , 3 x CC $\leftrightarrow$	LD/PIN 1310/1550 nm LD/PIN 1550/1310 nm	up to 5 km
<b>Single-mode system (SM)</b>			
APP AD100	2 x A $\leftrightarrow$ , 1 x D $\leftrightarrow$ , 3 x CC $\leftrightarrow$	LD/PIN 1310 nm, 2 x SM	up to 60 km
APP AD100RM*	2 x A $\leftrightarrow$ , 1 x D $\leftrightarrow$ , 3 x CC $\leftrightarrow$	LD/PIN 1310 nm, 2 x SM	up to 60 km
APP AD100	2 x A $\leftrightarrow$ , 1 x D $\leftrightarrow$ , 3 x CC $\leftrightarrow$	LD/PIN 1310/1550 nm LD/PIN 1550/1310 nm	up to 15, 25, 40, 60 km
APP AD100RM*	2 x A $\leftrightarrow$ , 1 x D $\leftrightarrow$ , 3 x CC $\leftrightarrow$	LD/PIN 1310/1550 nm LD/PIN 1550/1310 nm	up to 15, 25, 40, 60 km

\* - module to APP DR10 rack