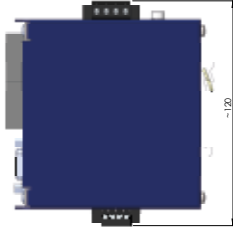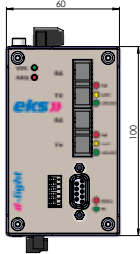# DL232 / DL232-R

RS232-FO-SYSTEM PROTOCOL TRANSPARENT

The fiber optic systems DL232 connect systems with a RS232-interface via fiber optics. The DL232 allows communication via software-handshake (X-ON/X-OFF). With the help of this innovative system optical bus, star, tree and mixed structures are possible.

The special multifunctional fiber optic system DL232-R also allows the construction of optical ring structures.

LEDs and potential-free contacts (optional for DL232) of a fault detector relay are able to signal defective states.

FiberView works similarly to a traffic light. If the "traffic light" is green, everything is fine. If the yellow LED lights, the budget is still tolerable, but already below a certain system reserve. Additionally to the LED, this pre-warning level is also signaled by a potential-free contact. If the "traffic light" turns red there is a serious error.

Type	P-ST	H-ST	MM-ST	MM-SC	MM-SC/BIDI	SM-ST	SM-SC	SM-E2	SM-SC/BIDI
Article no. DL232	01000 1101	01000 1112	01000 1121	01000 1123	01000 1123-BIDI A 1123-BIDI B	01000 1131	01000 1133	01000 1135	01000 1133-BIDI A 1133-BIDI B
Article no. DL232-2x	01000 1151	01000 1162	01000 1171	01000 1173	01000 1173-BIDI	01000 1181	01000 1183	01000 1185	01000 1183-BIDI

Type	P-ST	H-ST	MM-ST	MM-SC	MM-SC/BIDI	SM-ST	SM-SC	SM-E2	SM-SC/BIDI
Article no. DL232-R	01000 1351	01000 1362	01000 1371	01000 1373	01000 1373-BIDI	01000 1381	01000 1383	01000 1385	01000 1383-BIDI
FO-connector	ST	ST	ST	SC	SC	ST	SC	E-2000	SC
Fiber type	POF 980/1000 µm	HCS 200/230 µm	Multimode 62.5 (50)/125 µm			Singlemode 9/125 µm			
Optical budget	12 dB	12 dB	12 dB			16 dB			
FO range	50 m (180 dB/km)	200 m (8 dB/km)	5 km (1 dB/km)			30 km, others up to 100 km on request (0.3 dB/km)			
Wavelength	650 nm	850 nm	1310 nm		1310 nm 1550 nm	1310 nm			1310 nm 1550 nm
Data rate max.	115.2 KBit/s								
Transmission type	Duplex, Half duplex bei DL232-2x und DL232-R								
Operation mode	Switchable: none or wave impedance (Rw + Rpd + Rpu) DTE oder DCE								
RS232 Cable length	15 m								
RS232 Connector	9-pole Sub-D female and 6-pole terminal								
Status-LEDs	Power supply (green) / Failure (red) / Data receive (green) / Status (red) / FiberView (red, yellow, green)								
Power supply	12–30 VDC, other voltages on request								
Power consumption	5 Watts, 200 mA (24 V)								
Potential separation	500 VDC (24 VDC <> RS232)								
Operating temperature	–40 °C – +70 °C (Multimode and Singlemode with ST or SC), –20 °C – +55 °C (all others)								
EMC	EN61000-6-2/EN55022 + A1 + A2 Class B								
Weight	570 g								
Dimensions	60 x 100 x 113 mm (60 x 120 x 113 mm incl. connector)								
Housing	Stainless steel, powder coated								