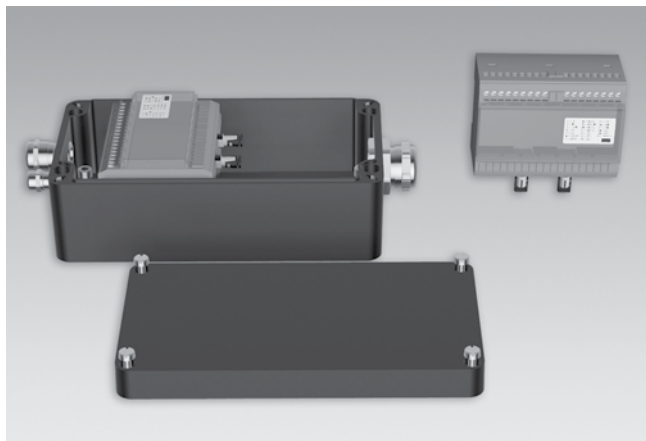


Signal Processing

Fiber-optic transmitter/receiver with outdoor box for interference-free transmission of square-wave signals

Fiber-optic transmitter/receiver with outdoor box



LWL-SBR, LWL-EHR

Features

- Transmission length up to 1500 m
- Converting standard square-wave signals into optical signals
- Reconversion of optical signals into electrical signals and generation of status signals
- Transmission error detection via checksum (CRC)
- High-precision transmission of signals (Jitter <100 ns)
- Constant delay time <20 µs
- Automatic channel switchover in realtime upon failure of one fiber-optic channel
- Outdoor box with protection IP 66, IP 67

Technical data - electrical ratings

Fiber-optic transmitter: LWL-SHR

Voltage supply	9...30 VDC
Consumption	≤300 mA
Start time	<500 ms
Inputs	HTL, TTL
Input signals	K1, K2, K0 + inverted Err + inverted
Wave length	~820 nm
Transmission length	≤1500 m
Outputs	Fiber1, Fiber2

Fiber-optic receiver: LWL-EHR

Voltage supply	9...30 VDC
Consumption	≤300 mA
Start time	<500 ms
Inputs	2x fiber-optic, 2x error acknowledgement (Ack)
Input signals	Fiber1, Fiber2, Ack1, Ack2
Input level	Ack >2.5 V
Wave length	~820 nm
Transmission length	≤1500 m
Outputs	HTL (power linedriver) TTL (RS422)
Output signals	K1, K2, K0 + inverted Err + inverted Status S1, status S2, sum status (SSum)
Output frequency	≤300 kHz (HTL) ≤1 MHz (TTL)
Output level	HTL: LOW: ≤0,2 UB; HIGH: ≥0,8 UB TTL: LOW: ≤0,7 V; HIGH: ≥3 V
Status output	S1, S2 (configurable)

Technical data - electrical ratings

LED operating status	1x power LED (green) 1x overload LED (red) 1x status LED (green) each channel 1x error LED (red) each channel 1x link LED (green) each channel
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Technical data - mechanical design

Fiber-optic transmitter: LWL-SHR, Fiber-optic receiver: LWL-EHR

Dimensions W x H x L	100 x 75 x 53 mm
Protection DIN EN 60529	IP 20
Operating temperature	-20...+70 °C (without dew)
Connection	Screw terminal connector 2x ST connector
Housing type	Mounting on standard rails according to EN 50022

Fiber-optic transmitter in outdoor box: LWL-SBR

Dimensions W x H x L	122 x 81 x 220 mm
Protection DIN EN 60529	IP66/IP67
Ambient temperature	-40...+85 °C
Weight approx.	300 g
Connection	1x cable gland M16x1.5 1x cable gland M20x1.5 1x cable gland M32x1.5
Material	Housing: aluminium die-cast

Signal Processing

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Fiber-optic transmitter/receiver with outdoor box

Part number

Fiber-optic transmitter, output 2x fiber-optic

Fiber-optic receiver, input 2x fiber-optic

LWL-SHR **11090965**

LWL-EHR

11090965 Input stages
Input HTL/TTL

11090948 Output stages
Output HTL
11090946 Output TTL

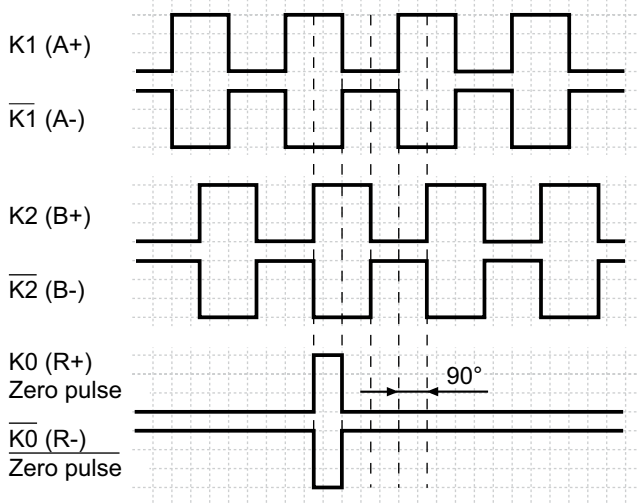
Fiber-optic transmitter mounted in outdoor box

LWL-SBR **11126092**

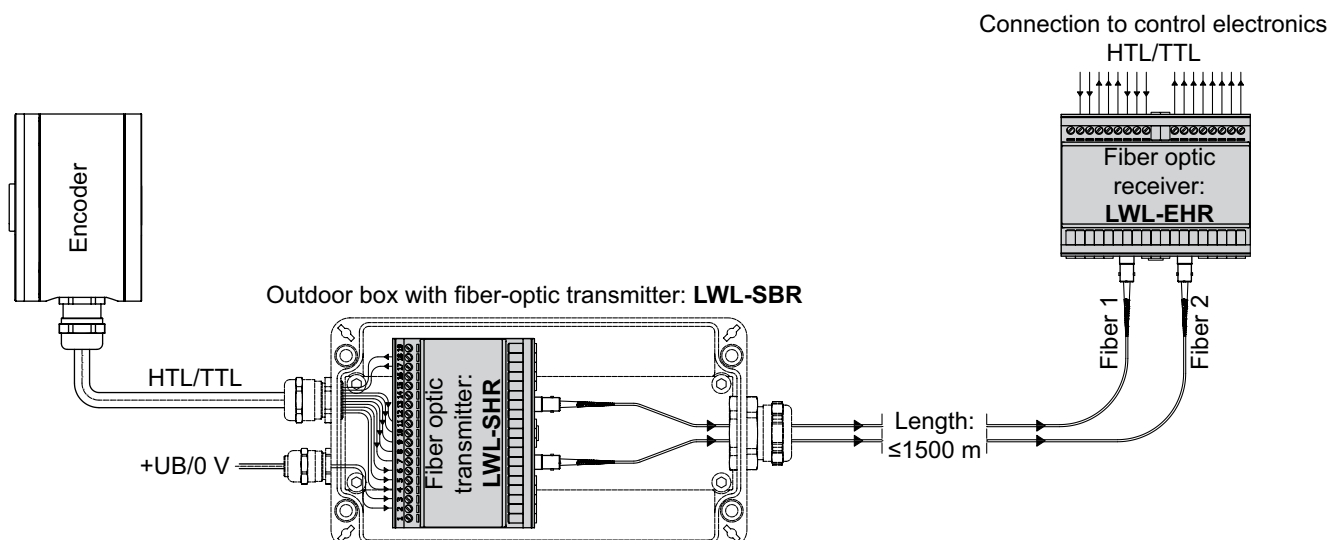
11126092 Design
With transmitter LWL-SHR

Output signals

At positive rotating direction



Data transfer

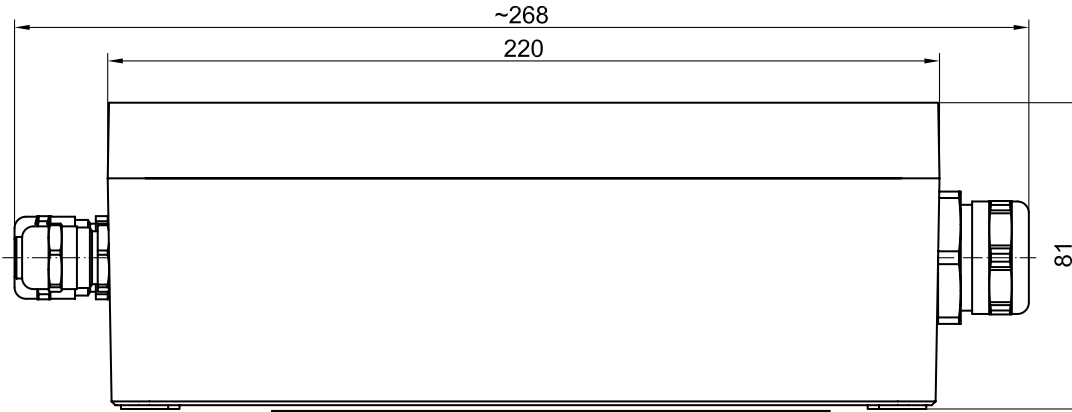


Signal Processing

Fiber-optic transmitter/receiver with outdoor box for interference-free transmission of square-wave signals

Fiber-optic transmitter/receiver with outdoor box

Dimensions



Outdoor-Box with fiber-optic transmitter: LWR-SBR

