

## Fiber Optic Bridge FOB32 FOC signal transmission

### General description

The decentrally I/O-system **FOB32** transmits up to 32 switching and controlling signals. The I/O-modules connect e.g. sensors, actuators or measuring-/monitoring systems with a PLC over a distance up to 40km. The transmission is done unidirectional via fiber optic cable (FOC). The **FOB32** ensures fast data transmission in a rough industrial environment and in open terrain without any disturbance. As a result of absolute potential isolation problems which can be caused by potential losses, disturbing voltages, etc. are generally prevented. The point to point transmission with the **FOB32** does not need any software.

Neither are adjustments or programming required.

With the expansion devices (Slaves), the inputs and outputs can be extended by 8 to max. 32 signals. For this purpose, the devices must be simply plugged to the basic unit (Master) via integrated bus connector on the side.

For customized applications the devices are available for POF, singlemode and multimode fiber.

The point to point transmission with the **FOB32** does not need any software. Neither are adjustments or programming required. So the installation and startup is very simple.

### Features

- Unidirectional data transmission up to 32 signals without any disturbance
- Bus-connection (data + supply) for fast device expansion by 8 digital inputs resp. outputs
- Easy mounting and commissioning (pluggable screwing clamps)
- Easy startup without adjustment or programming

### Technische Daten Sender und Empfänger

Power supply	24V DC $\pm$ 10% (option: 12V DC)
Housing	Slim module case ME22.5 for rail mounting
Dimensions	LxWxH 100 x 22.5 x 127mm (without fiber connector)
Interface	serial FOC-transmission
Leistungsbudget	Fiber E9/125um 1300nm (SM): typ. 9dB Fiber G50/125um 860nm (MM): typ. 9,5dB Fiber G62,5/125um 860nm (MM): typ. 15dB Fiber G62,5/125um 1300nm (MM): typ. 11dB Fiber POF 990/1000um 660nm: typ. 15dB
Range	Depends on fiber type (100m ... 40km)
Fiber connection	F-ST or F-SMA connector
Signal delay	approx. 5 ms (cycle time)
Error signal	Outputs drop to 0V (optional); Relay contact 60V/1A AC/DC: <b>NEW</b> since S/N 18110019: intrinsically safe; Switching logic of relay contact selectable (for details have look at the connection plan)
Power supply	24V DC $\pm$ 10% (option: 12V DC)
Current consumption in standby mode (all values are approx.):	SGG: MM 30mA, SM 50mA; SEG: 10mA EGG: MM 20mA, SM 25mA; EEG: 10mA
Environment	Operating temperature -20...+70°C

### Technical specifications of transmitter (Master and Slaves)

Input digital 8 x 24V DC (1mA)

### Technical specifications of receiver (Master and Slaves)

Output digital 8 x 24V DC/0.7A, total max. 2,5A

### Device versions

FOB32-SGG	Transmitter basic unit (Master, Adr. 1): 8 digital inputs
FOB32-SEG	Transmitter expansion unit (Slave, Adr. 2-4): 8 digital inputs
FOB32-EGG	Receiver basic unit (Master, Adr. 1): 8 digital outputs
FOB32-EEG	Receiver expansion unit (Slave, Adr. 2-4): 8 digital outputs

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Technical changes, errors and misprints reserved

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Receiver FOB32-EGG (Master) and 3 FOB32-EEG (Slaves)



Transmitter FOB32-SGG (Master) and 3 FOB32-SEG (Slaves)



Receiver FOB32-EGG (Basic unit, Master)