

General description

The decentral I/O-System **ELW** transmits up to 4 switching-, control-, clock-, synchronizing signals. The I/O-modules connect e.g. sensors, actuators, measuring-, control- or monitoring devices with a PLC over distances of a few meters up to 100km. The transmission is done via fiber-optic cable (FOC). The **ELW** ensures fast data transmission in an 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. Neither are adjustments or programming required. Just plug and play.

Features

- Data transmission without any disturbance
- Signal transfer with up to max. 16 devices (with addressing: 4 digital inputs (4 Bit) at transmitter) or unlimited number in series (without addressing)
- Address selection at receiver: internal DIP-switch
- Low transit time, thereby almost simultaneous availability at all receiving stations or devices
- very simple installation and commissioning (screw terminals pluggable)

Technical data transmitter and receiver

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|-------------------|--|
| Housing | Module housing for rail mounting ME22,5 |
| Dimensions | LxWxH 100 x 22,5 x 127mm (without fibre connection) |
| Interface | Serial fiber optic transmission |
| Power budget | Fibre E9/125um 1300nm (SM): typ. 9dB Fibre G50/125um 860nm (MM): typ. 9,5dB Fibre G62,5/125um 860nm (MM): typ. 15dB Fibre G62,5/125um 1300nm (MM): typ. 11dB Fibre POF 990/1000um 660nm: typ. 15dB |
| Range | Depends on fibre typ (100m ... 100km) |
| Fibre connection | F-ST (SM, MM) or F-SMA (MM) connector |
| Signal delay | approx. 200ms (cycle time) from input to output |
| Error signal | Option: relay contact 60V/1A AC/DC, drops in case of failure and/or outputs drop to 0V |
| Power supply | 24V DC \pm 10% (Option: 12V DC, 230V AC) |
| Curr. consumption | Standby (max.): transmitter MM: 40mA, SM: 70mA, POF: 40mA receiver (max.): MM: 25mA, SM: 55mA, POF: 25mA Operation: depending on active outputs at receiver |
| Temperature | Operating temperature -20...+70°C |

Technical data of transmitter ELW-S

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|-------------------|------------------------------------|
| Input digital | 4 x 24V DC resp. 12V DC (1mA) |
| Curr. consumption | Standby (max.): MM: 10mA, SM: 15mA |

Technical data of receiver ELW-E and ELW-ED

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|-------------------|---|
| Output digital | 4 x 24V DC/0,7A resp. 12V DC/0,7A, total max. 2,5A |
| Curr. consumption | Standby (max.) ELW-E: MM: 15mA, SM: 45mA Standby (max.) ELW-ED: MM: 25mA, SM: 55mA |

Technical data of transceiver ELW-SE

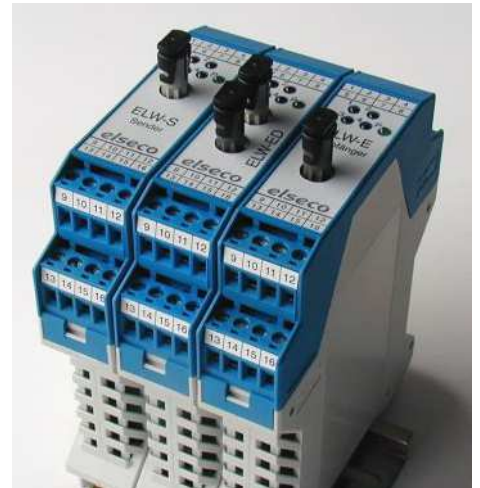
| | |
|-------------------|--|
| Input digital | 4 x 24V DC resp. 12V DC (1mA) |
| Output digital | 4 x 24V DC/0,7A bzw. 12V DC/0,7A, gesamt max. 2,5A |
| Curr. consumption | Standby (max.): MM: 10mA, SM: 25mA |

Options

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|-------------------|---|
| Address selection | receiver with internal DIP-switch for address selection |
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Device version

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|--------|---|
| ELW-S | Transmitter with 4 digital inputs |
| ELW-E | Receiver with 4 digital outputs |
| ELW-ED | Receiver with 4 digital outputs and signal transfer |
| ELW-SE | Transceiver with 4 digital inputs and 4 digital outputs |



Product family ELW



Transmitter ELW-S



Receiver ELW-E in bus-housing



Transceiver ELW-SE