

**LIGHTNING SPEED TRANSFER
ON THE DATA HIGHWAY**

OPTICAL DATA COUPLERS WITH 100 MBIT/S



OPTICAL DATA COUPLER FOR FAST ETHERNET TRANSMISSION

Optical transfer of a wide variety of Ethernet protocols, including industrial Ethernet at 100 Mbit/s

- Fast Ethernet optical data coupler
- Consistently high data rate of 100 Mbit/s
- Protocol-free full duplex data transmission

New applications are possible

- Visually supported remote maintenance and diagnosis
- Plant documentation
- ...

Easist use thanks to optimized features

- Minimal infrastructure costs
- Operating range 150 m
- Quick disconnect for fast mounting
- No parameterization required
- Bar graph for signal strength



WE BRING 100 MBIT/S FAST ETHERNET TO STORAGE AND RETRIEVAL SYSTEMS

The optical data coupler serves as a connection of Ethernet modules to remote modules. These can move along an axis toward each other. The devices are optimized for conditions in high bay warehouse bays. It is easy to connect vehicle controls of the automatic storage and retrieval vehicles to the stationary control system without reducing the Ethernet transfer speed.

The physical transfer takes place protocol-free with 100 Mbit/s full duplex. The data rate remains constant irrespective of distance. With the optical data coupler, modules in industrial Ethernet topologies such as PROFINET, Ethernet/IP as well as TCP/IP can be connected. Telegrams are not saved, which enables immediate transfer.





TECHNICAL DATA

Effective operating range	0 m to 150 m
Range limit	180 m
Light source	Laser diode, laser class 1M
Interface	100 Base-TX
Data rate	100 MBit/s
Data flow display	Green LED: OPTO link, Yellow LED: LAN-link
Function display	Bar graph for signal strength (8 LEDs: red, yellow, green)
Operating voltage	18 V DC to 30 V DC
Operating temperature	-10 °C to 50 °C
Connection technology	Power supply: M12 plug, 4-pin Service: M12 plug, 8-pin LAN: M12 plug, 4-pin, D-coded
Material	Enclosure: ABS / PC, optical cover: Plastic
Weight	700 g

MODEL NUMBER

For data transfer, an F1 unit must be used with an F2 unit.

Designation	Version
LS680-DA-EN/F1	Infrared light
LS680-DA-EN/F2	Visible red light



Operating indicator

OPTO link

Laser error

Fault

LAN link

Signal quality

MOUNTING ACCESSORIES

OMH-LS610-01

- Adjustment unit for uncomplicated mounting thanks to an innovative quick-clamping lever
- Exact adjustment with horizontal and vertical adjustment screws



OMH-LS610-02

- Direct mounting set (4 threaded inserts M4) thanks to an innovative quick-clamping lever



Protective cap LS610

- Additional fastening for transport and storage

CONNECTING CABLE POWER SUPPLY

Designation	Description
V1-G-2M-PVC	Female cordset, straight, M12, 4-pin, PVC cable, length: 2 m
V1-G-2M-PUR	Female cordset, straight, M12, 4-pin, PUR cable, length: 2 m
V1-M-5M-PVC	Female cordset, straight, M12, 4-pin, PVC cable, length: 5 m
V1-M-5M-PUR	Female cordset, straight, M12, 4-pin, PUR cable, length: 5 m
V1-W-2M-PVC	Female cordset, angled, M12, 4-pin, PVC cable, length: 2 m
V1-W-2M-PUR	Female cordset, angled, M12, 4-pin, PUR cable, length: 2 m
V1-W-5M-PVC	Female cordset, angled, M12, 4-pin, PVC cable, length: 5 m
V1-W-5M-PUR	Female cordset, angled, M12, 4-pin, PUR cable, length: 5 m



NETWORK CABLE

The sensor is connected to the network by an M12 connector.

Designation	Description
V1SD-G-2M-PUR-ABG-V45-G	Patch cable M12 to RJ45, length: 2 m
V1SD-G-5M-PUR-ABG-V45-G	Patch cable M12 to RJ45, length: 5 m
V1SD-G-ABG-PG9	Male cordset M12 D-coded, 4-pin for bus cable, self-assembly

Contact

Pepperl+Fuchs GmbH
Lilienthalstraße 200
68307 Mannheim · Germany
Tel. +49 621 776-4411 · Fax +49 621 776-27-4411
E-mail: fa-info@pepperl-fuchs.com

Worldwide Headquarters

Pepperl+Fuchs GmbH · Mannheim · Germany
E-mail: fa-info@pepperl-fuchs.com

USA Headquarters

Pepperl+Fuchs Inc. · Twinsburg, OH · USA
E-mail: fa-info@us.pepperl-fuchs.com

Asia Pacific Headquarters

Pepperl+Fuchs Pte Ltd · Singapore
Company Registration No. 199003130E
E-mail: fa-info@sg.pepperl-fuchs.com

www.pepperl-fuchs.com

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