LW217 / LW218
Optical fiber modules for transmission of SSI encoders and measuring systems

Product Features:

- The optical fiber modules LW217 and LW218 are forming together a transmission system for data transmission of SSI signals by means of optical fibers
- For use with all encoders and sensors equipped synchronous serial interface (SSI)
- Safe and reliably transmission of signals, up to a distance of 2000 meters
- The optical fiber cable can be routed through explosive areas as well
- Input / Output data rate of max. 2 Mbit/s (transmitter and receiver)
- Resistant against extremely strong electromagnetic fields
- Glass fiber cables are available ready assembled
- Free adjustable SSI resolution from 1 to 99 bit
- Power supply either 5 VDC or 10 to 30 VDC
- Compact mounting on a 35 mm top hat rail

Available Systems:

**LW217 / LW218:**
Optical Fiber Module pair (transmitter and receiver)
- 5 VDC power supply voltage
- 850 nm wave length
- transmission distance up to 2000 meters

**LW217-1 / LW218-1:**
Optical Fiber Module pair (transmitter and receiver)
- 10 … 30 VDC power supply voltage
- 850 nm wave length
- transmission distance up to 2000 meters
# Technical Specifications:

## Power supply:
- **LW217 / 218:** 5 VDC / ± 5%
- **LW217-1 / 218-1:** 10 … 30 VDC
- **Ripple:** ≤ 10 % at 24 VDC
- **Protection circuit:** reverse polarity protection
- **Consumption:** < 1 W (per module)
- **Connections:** screw terminal, 1.5 mm² / AWG 16

## Optical fiber connection:
- **Optical wave length:** 850 nm resp. 1300 nm (multimode)
- **Optical transmission rate:** 120 Mbit/s
- **Glass fiber:** Multimode - fiber, 50/125 μm, 62.5/125 μm
- **Transmission distances:** max. 2000 m (transmitter and receiver)
- **Connections:** ST-plug (at the underside of the housing)

## SSI in- and outputs:
- **Transmission channels:** -T, +T and -D, +D (transmitter and receiver)
- **Other inputs:** /Error NPN input (transmitter)
- **Other outputs:** Open Drain output (receiver)
- **Format:** RS422
- **Data rate (input / output):** max. 2 Mbit/s (transmitter and receiver)

## Signal processing:
- **Conversion time:** < 300 ns per module

## Display elements:
- **Type:** 1 x LED (green)
- **Functions:** continuously on: synchronization ok
- **.:** synchronization error resp. disconnected / broken optical fiber cable

## Housing:
- **Material:** green plastic (RAL 6018)
- **Mounting:** 35 mm top hat rail (according to EN 60715)
- **Dimensions (w x h x d):** 19 x 92.3 x 110 mm / 0.7480 x 3.634 x 4.331 inch
- **Protection class:** IP40 / screw terminal: IP20
- **Weight:** approx. 80 g

## Ambient temperature:
- **Operation:** -10 °C … +70 °C / 14°F … 158°F (not condensing)

## Conformity & standards:
- **Interference resistance:** EN 61000-6-2:2006
- **Transient emissions:** EN 55011 Class B
- **Guideline 2011/65/EU:** RoHS-conform