

Optical converters

xDW-S-FAS-BOX

- Compatible with RS485 buses of LITES electrical fire alarm systems
- Digital modulation
- 1x SC/PC optical connector (CWDM)
- 2x RS485 or 1x RS422 up to 1Mbps
- 1x LOCK NO/NC relay
- Overvoltage protection
- Operating temperature from -40 °C to +75 °C



The xDW-S-FAS digital optical converters are compatible with the RS485 buses of LITES electrical fire alarm systems over both MM and SM optical fibers.

The devices are developed and manufactured in the EU and meet NDAA requirements.

Available models

Order name	Order code
TDW-S-FAS-BOX	1-505-221
RDW-S-FAS-BOX	1-605-221
FIWRE-S-FAS	1-005-221



Technical parameters

RS485

Number of buses	2
Speed	Max. 1 Mbps
Surge protection	600 W waveform 10/1000 μ s

OPTICAL PORT

Optical performance	-14 to -8 / -10 to 0 dBm (SM/MM)
Sensitivity	-31 dBm
Optical connector	SC/PC
Range on MM 50/125 μ m	Max. 6 km
Range on MM 62.5/125 μ m	Max. 4 km
Range on SM 9/125 μ m	Max. 20 km

LOCK RELÉ

Number of	1
Functions	Transmission fault detection
Max. Load	125 VAC / 0.5 A or 60 VDC / 0.3 A
Contact type	Switching

POWER

Input voltage range	10 - 60 VDC
Energy consumption	Max. 1.5 W
Surge protection	600 W [10/1000 μ s]

ENVIRONMENT

Operating temperature	-40...+75 °C
Storage temperature	-40...+70 °C
Humidity	Max. 95 % (non-condensing)

MECHANICS

Weight	0,22 kg
Dimensions - h / w / d	30 x 110 x 92 mm



Standards and protocols

Standard	Note
Modbus	RTU
RS485	Compatible with all RS485 buses up to 1 Mbps

EMC and safety

Standard	Level	Note
EN 61000-6-2		Immunity - industrial environment
IEEE 1613		Environmental and Testing Requirements Electric Power Substations
EN 55032		EMC of multimedia devices - emission requirements
EN 55035		EMC of multimedia devices - immunity requirements
EN 50130-4 ed. 2		Alarm systems - Part 4: Electromagnetic compatibility
EN 62368-1		Safety requirements of Information technology equipment
EN IEC 63000		The Assessment Of Electrical And Electronic Products With Respect To The ROHS
EN 61000-4-2	8 kV	Air discharge
EN 61000-4-2	4 kV	Contact discharge
EN 61000-4-3	10 V/m	Radiated HF field
EN 61000-4-4	2 kV	Bursty
EN 61000-4-5	2 kV	Shock pulses
EN 61000-4-8	30 A/m	Magnetic field

Notes

- The manufacturer reserves the right to change technical parameters without prior notice.

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