LUXCOM Technologies Inc.

MOD6-D1-3

Drop and Insert Modem

Applications

- Pipeline SCADA systems
- Refinery SCADA systems
- Factory floor data link
- Traffic monitoring and control systems
- Computer to controller

Description

The MOD6-D1-3 fiber optic modem transmits RS-422, or RS485 2W/4W data in a drop and insert topology. It is ideally suited to a poll-response protocol; however it can also be used for point to point communication. The last modem in the network may be optically connected back to the first modem creating a ring configuration for greater system reliability. The network may have up to 100 modems. The modems are data rate transparent for signals between DC and 100K Baud. Multimode or single mode fibers can be used interchangeably with the MOD6.

Features:

- Fiber lengths from 10 to 100 Km depending on optics option
- Redundant optics option with auto switch over on link failure
- Link failure alarm contact closure
- Compatible with RS-485 and RS-422 data levels
- EMI/RFI immune
- Singlemode or multi-mode fiber without adjustment
- Extensive indicators
- Standby power supply input option: 12V, 24V, or 48V
- CE Tested
- DIN Rail Mounted

Specifications

Optical

Light source	850 nm SLED M version 1300 nm SLED MM version 1300 nm ELED SM version **
Optical Connectors	ST
Optical Sensitivity	-55 dBm (10^{-9} BER)

Operating distance

2M version	-18dBm launch, 62.5/125 fiber,	3.0 dB loss/Km	12 Km
2M version	-36dBm launch, 9/125 fiber,	2.0 dB loss/Km	09 Km
2MM version	-18dBm launch, 62.5/125 fiber,	0.7 dB loss/Km	50 Km
2MM version	-37dBm launch, 9/125 fiber,	0.4 dB loss/Km	45 Km
2SM version	-18dBm launch, 9/125 fiber,	0.4 dB loss/Km	90 Km

** An ELED is used for exceptionally long distances with single mode fibre

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Specifications (cont.)

ELECTRICAL

Data rate	DC to 40 Kb/s NRZ full duplex DC to 20 Kb/s Manchester
Data bits/character	Any
Data interface	RS-485 2 or 4 wire
Data connector	DB-9S
Data input/output levels	RS-485/RS-422
Data receiver input impedance	High-Z or 120W, selectable
12Vdc non-isolated input range	9V to 18V
Supplied power cube for above out	100-240 Vac, 50-60 Hz input; 12Vdc
12Vdc isolated supply option	9V to 18V input
24Vdc isolated supply option	18V to 36V input
48Vdc isolated supply option	36V to 72V input
Power consumption	< 2.4W
Alarm Relay Current	1A max.
Alarm Relay Voltage	200V max.

GENERAL

Operating Temperature	-40C to 74C
Humidity (RH)	10% to 95% (non condensing)

***Specifications subject to change without notice**

Part Numbers

MOD6-D1-3 - XXX -ST- X

Auxiliary Power Input

0 =12 Vdc non-isolated (default)
1 =12 Vdc isolated
2 =24 Vdc isolated
3 =48 Vdc isolated

Light Source

2M =850nm dual optics
2MM=1300nm dual optics
2SM =1300nm dual optics ELED**

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LUXCOM Technologies Inc.
102 Walgreen Road, Ottawa, Ontario K0A 1L0 Canada Tel.: +1 (613) 831-7777 Fax: +1 (613) 831-7778
email: sales@luxcom.com
www.luxcom.com