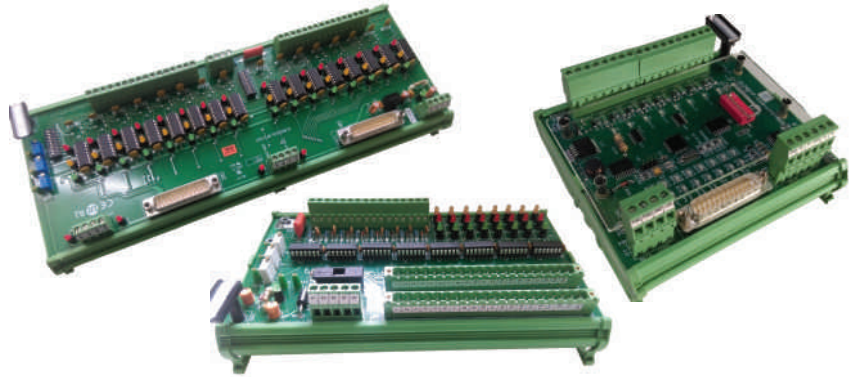


Special DI LFD Module

Digital Input Field Interface Modules with Line Fault detection (LFD) and Alarm Contact

Features:

- Fast traceability of fault /healthy status through Channel-wise LED indications.
- LED Indication for Wire break, Short Circuit, Signal healthy.
- Fault Alarm contact for each channel/ group of eight.
- Fault detection is done using external EOL Resistance Network.
- Fault status & signal status on Modbus (refer selection matrix).
- Provides ease trouble-shooting & maintenance.
- Compact in design.
- Universal Rail mounting.



Technical Data:

Field Input Data

Field Interrogation Voltage	24VDC
Field Wiring Configuration	Two wire interrogation
Protection	Current limiting
Status Indication	Green LED for Input Status Red LED for Wire Break Orange LED for Wire Open
External EOL Resistor termination on field	Series & Parallel Resistor network across field pot free contact (Refer selection matrix)
Termination	Screw Terminals

System Output Data

Output Signal Voltage	24VDC
Signal Mode	Redundant /Non. Redundant
Configuration	High going
Alarm contact	Alarm contacts
Termination	25 Pin D-Sub Connector or MSTB Screw type Plug in connector

Auxiliary Power Supply

Field Power Supply	24VDC
System Power supply	24VDC

System Side Termination

Terminal Type	D-Sub Connector/ Screw terminal MSTB Plug-in type
Contact Material	Copper Alloy
Operating Current	5 A per contact
Contact Resistance	≤ 10mΩ
Insulation Resistance	≥ 5000 MΩ
Maximum Voltage	1000 Vrms

Field Side Termination

Terminal Type	Screw Terminal
Nominal Current /Sq.mm	24A/ 2.5mm ²
Rated Voltage	250V
Rated surge Voltage	4KV
Solid/ Stranded [mm ² / mm ²] AWG	0.2-4/ 0.2-2.5/ 24-12
Insulation material	PA/I
Stripping Length	8mm
Tightening torque	0.6 Nm Max.

General Data

Ambient temperature	0°C to +60°C
Relative humidity	Max. 90% (Non-condensing)
PCB design	UL,ANSI IPC 2221,2222 & MIL 275B
Screw- Terminals	UL, CSA Standard & CE standard
Mounting	Din Rail Mountable

Selection Matrix for 24VDC, Digital Input Line Fault Detection Interface Module

Channel Density		16	8	8
Protection	Current Limiting	✓	✓	✓
	Healthy Signal	✓	✓	-
Redundancy	Fault Signal	✓ (group of 8)	✓ (Per channel)	-
	D sub connector	-	-	✓
Alarm Contact (fault status)	On Screw Terminal	✓ (group of 8)	✓ (Per channel)	-
	On Modbus Port	-	-	✓ (modbus)
	Suitable EOL Resistor network	1K Series, 10K Parallel	1K Series, 10K Parallel	Series 3.3K, Parallel 6.8K
Current Consumption	280mA	160mA	300mA	
Dimensions in mm(L X W)	312 x 126	202X126	130 x 126	
Part No.	UL16DI-RED-WFD-D25	UL24D08DIWFD-2C20	UL08DIF-D25-LFD-MOD	
Ordering Code	085010200142	085010100001	091020100015	

Note: In Digital Input Field Interface module wide range of permutations & combinations are available.

- DI LFD Module with only LED Indication for short circuit & open circuit available on require.
- DI LFD Module with 2 alarm contact for group of 8 channel can be assigned to 2 DI channel of PLC for reedback.
- DI LFD Module with alarm contact for each channel require additional DI channels for fault reedback on controller.
- DI LFD Module with fault status read on modbus if used than additional DI channel for fault reedback is not required.
- EOL Resistors network is in customer scope OR EOL resistor board available on request.