

## MAS-DI-16-D Field Interface Boards 16 Digital Inputs



Masibus Digital Input Field Interface Board has 16 channels that accepts various types of AC/DC Wet voltages and potential free contacts with common External Field Excitation supply and converts them to isolated Open Collector/24V Digital output with external System side Excitation supply.

### Features

- AC / DC Voltage Input Range
- Output open collector (Source or Sink)
- Signal healthy indication for each channel

### Applications

- Translate and isolate AC/DC Field voltages to 24V signals
- Protect expensive control systems against field faults
- Digital field interface for PLC/DCS/SCADA systems
- Output compatible with source/Sink system side modules

## TECHNICAL SPECIFICATIONS

16-Channel Digital Input Field Interface Board

Input		Output	
No of Channels	16 Channels	Output Signal Type	Open collector, source or sink
Input Voltage & Category	Refer table 1	Nominal/Max. Voltage	24V/28V DC
Operating Voltage Range	Refer table 1	Nominal/Max. Current	5mA/50mA
On State Voltage ( $V_{on}$ )	Refer table 1, figure 1	Output ON status LED	Green
Off State Voltage ( $V_{off}$ )	Refer table 1, figure 1	Termination	25 pin D-sub male connector/20 pin FRC connector
Termination	Screw terminals	Supply	24V DC
Excitation Supply Terminals	Common 2 terminals	Isolation	
		Isolation	1.5KV AC between field and system side

# TECHNICAL SPECIFICATIONS

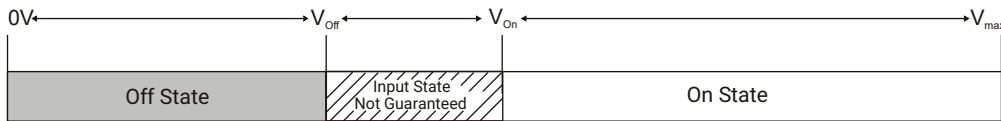
## 16-Channel Digital Input Field Interface Board

Physical		Environmental	
Dimension (in mm)	200(L) x 90(W) x 60(D)	Operating Temperature	0 to 50 °C
Mounting	DIN Rail (35 mm width)	Humidity	30-95% non-condensing
Profile Material	PVC	Environmental Protection	Conformal coating on PCB
Terminal Block	UL, CSA standard		
Terminal Cable Size	Upto 2.5mm <sup>2</sup> conductor		
Weight	Approx. 250 gm		

Table1

Voltage Category	Operating Voltage	On State Voltage(V <sub>on</sub> )	Nominal Input Current	Off State Voltage (V <sub>off</sub> )	Response Time
230VAC	110-265VAC	≥110VAC	12 mA at 230VAC	≤50VAC	≤100m sec.
110VAC	70-132VAC	≥70VAC	12 mA at 120VAC	≤30VAC	≤100m sec.
220VDC	110-250VDC	≥110VDC	2 mA at 220VDC	≤50VDC	≤20m sec.
110VDC	75-132VDC	≥75VDC	2 mA at 110VDC	≤30VDC	≤15m sec.
48VDC	30-55VDC	≥30VDC	3.2 mA at 48VDC	≤9VDC	≤10m sec.
24VDC	15-30VDC	≥15VDC	3 mA at 24VDC	≤5VDC	≤10m sec.
12VDC	7-15VDC	≥7VDC	3 mA at 12VDC	≤4VDC	≤10m sec.

Figure1: On/Off State Voltage Range



Model	Input Type	Input Voltage	Output Type	Output Protection	Output Connection
MAS-DI-16-D	X	X	X	X	X
	AC	1 230VAC 2 110VAC	0 Source 1 Sink	0 Non. Fuse 1 With Fuse	0 D Type male connector 1 FRC male connector
	DC	1 220VDC			
		2 110VDC			
		3 48VDC			
		4 24VDC			
		5 12VDC			

### Cable Ordering Code

Model	Cable Length
m-PC-D25F-LG	XX
	C 2.5 Meter
	D 3.0 Meter
	E 3.5 Meter
	F 5.0 Meter
	G 7.0 Meter
	S Special

**Note:** 20 Core 0.14mm<sup>2</sup> with DB 25 Female connector at one end and lug at another end.  
\* For Special Requirement Consult Factory



### Connection Details

