I-9053P

16-channel Isolated Digital Input Module

Features

- 16-channel Digital Input
- Channel Status LED Indicators
- Compatible with 24 V Levels
- Long Distance Measurement
- Dry and Wet Contact, Selectable via Wire Connections
- 3750 VDC Intra-module Isolation
- Wide Operating Temperature Range: -25 ~ +75 °C

Introduction

The I-9053P offers 16 channels for digital input, catering for both dry and wet contact, with an effective distance for dry contact of up to 500 meters. All channels feature photocouple isolation.

The I-9053P provides 16 LED indicators that can be used to monitor the DI channel status. 4 kV ESD protection and 3750 VDC intra-module isolation are also provided to enhance noise immunity capabilities in industrial environments.

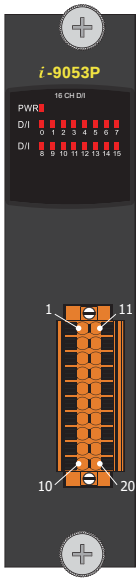
System Specifications

LED Display	
System LED Indicator	1 LED as Power Indicator
I/O LED Indicator	16 LEDs as Digital Input Indicators
Isolation	
Intra-module Isolation, Field-to-Logic	3750 VDC
EMS Protection	
ESD (IEC 61000-4-2)	±4 kV Contact for each Terminal ±8 kV Air for Random Point
Power	
Power Consumption	1 W Max.
Mechanical	
Dimensions (W x L x H)	31 mm x 134 mm x 144 mm
Environment	
Operating Temperature	-25 ~ +75 °C
Storage Temperature	-40 ~ +85 °C
Humidity	10 ~ 90% RH, Non-condensing

I/O Specifications

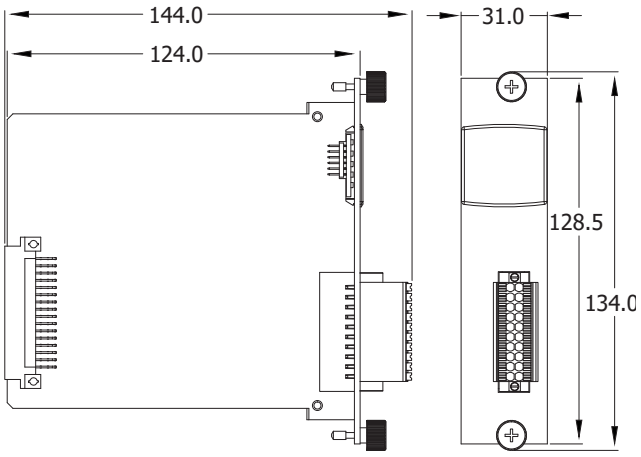
Digital Input		
Channels		16
Sink/Source (NPN/PNP)		Sink/Source
Input Type		Dry, Wet
Dry Contact	On Voltage Level	Close to GND
	Off Voltage Level	Open
Wet Contact	On Voltage Level	+19 VDC ~ +30 VDC
	Off Voltage Level	+11 VDC Max.
Input Impedance		3 KΩ, 1W
Built-in Isolated Power Supply		500 m Max.
Low Pass Filter		1 ms/5 ms/10 ms/20 ms/40 ms/70 ms (by Jumper select) or CPU parameter setting; Default Setting is Disable

Pin Assignments



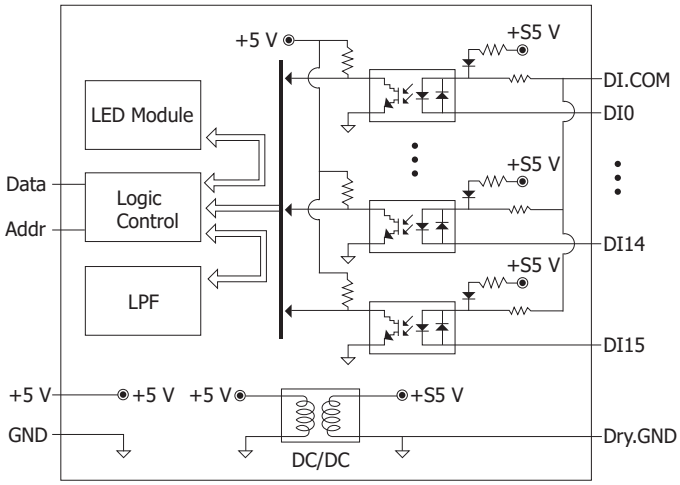
Pin Assignment	Terminal No.		Pin Assignment
Dry.GND	01	11	Dry.GND
DI.COM	02	12	DI.COM
DI0	03	13	DI8
DI1	04	14	DI9
DI2	05	15	DI10
DI3	06	16	DI11
DI4	07	17	DI12
DI5	08	18	DI13
DI6	09	19	DI14
DI7	10	20	DI15

Dimensions (Units: mm)

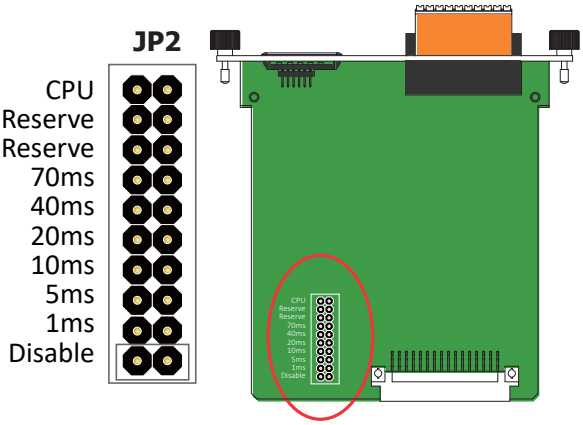


Left View | Front View

Internal I/O Structure

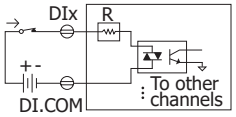
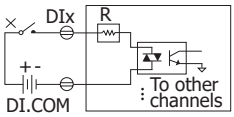
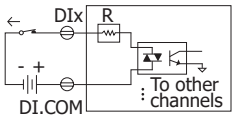
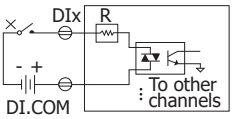


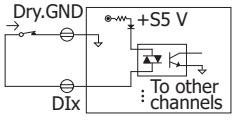
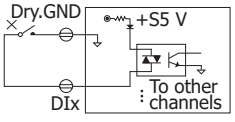
Jumpers for Low Pass Filter Selection



Default Setting is **Disable**

Wire Connections

Input Type	ON State LED ON Readback as 1	ON State LED OFF Readback as 0
Wet Contact (Sink)		
Wet Contact (Source)		

Input Type	ON State LED ON Readback as 1	ON State LED OFF Readback as 0
Dry Contact	Close to GND	Open
		

Ordering Information

I-9053P CR	16-channel Isolated Digital Input Module (RoHS)