



I-87054

8-ch Isolated DI and 8-ch Isolated DO Module



I-87054-G

Features

- 8-channel Isolated Digital Input and 8-channel
- Sink-type Digital Output Channels
- All Digital Input Channels can be used as 16-bit Counters
- 3750 V_{DC} Intra-module Isolation
- Configurable Power-on Value
- Configurable Safe Value



Introduction

The I-87054 module offers 8 isolated Digital Input channels and 8 isolated Digital Output channels. Either sink- or source-type Digital Input can be selected via the wire connections, and all Digital Input channels are also able to be used as 16-bit counters. The I-87054 includes 16 LED indicators that can be used to monitor the status of the Digital Input and Digital Output channels, and options are available for configuring both power-on and safe values. 3750 V_{DC} intra-module isolation are provided as standard.

Applications

- Building Automation
- Machine Automation
- Remote Diagnosis
- Factory Automation
- Remote Maintenance
- Testing Equipment

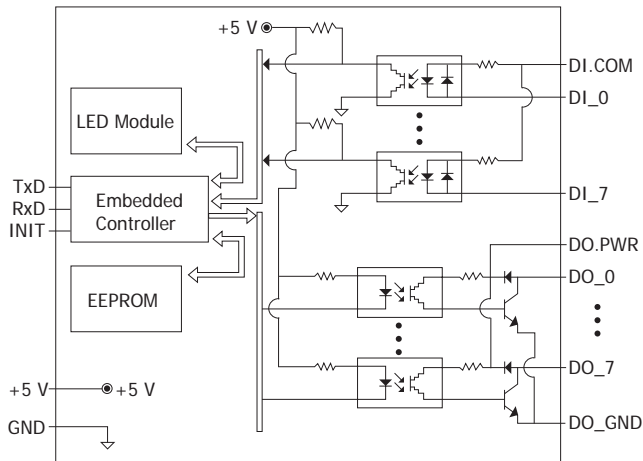
System Specifications

CPU Module	
Watchdog Timer	Yes, Module (1.6 Seconds), Communication (Programmable)
Isolation	
Intra-module Isolation	3750 V _{rms}
LED Indicators	
Status	1 x Power and Communication 16 x I/O
COM Ports	
Baud Rate	115200 bps
Data Format	N, 8, 1
Protocol	DCON
Power	
Power Consumption	0.9 W Max.
Mechanical	
Dimensions (W x L x H)	31 mm x 116 mm x 88 mm
Environment	
Operating Temperature	-25 ~ +75 °C
Storage Temperature	-30 ~ +75 °C
Humidity	5 ~ 95% RH, Non-condensing

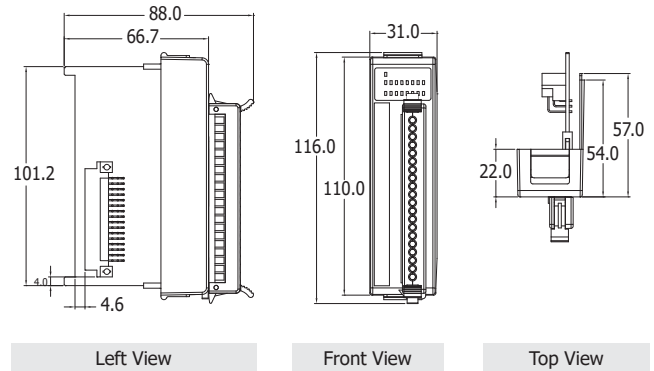
I/O Specifications

Digital Input	
Low Pass Filter	Yes
Digital Input/Counter	
Channels	8
Type	Wet Contact
Sink/Source (NPN/PNP)	Sink, Source
Wet Contact, ON Voltage Level	+3.5 V _{DC} ~ +30 V _{DC}
Wet Contact, OFF Voltage Level	+1 V _{DC} Max.
Max. Counts	16-bit (65535)
Frequency	100 Hz
Min. Pulse Width	5 ms
Input Impedance	10 kΩ, 0.66 W
Digital Output	
Channels	8
Type	Open Collector
Sink/Source (NPN/PNP)	Sink
Load Voltage	+5 V _{DC} ~ +30 V _{DC}
Max. Load Current	375 mA/channel
Power on Value	Yes
Safe Value	Yes

Internal I/O Structure



Dimensions (Units: mm)



Wire Connections

Digital Input/Counter	ON State Readback as 1	OFF State Readback as 0
Sink	OPEN or < +1 VDC 	+4 ~ +30 VDC
Source	OPEN or < +1 VDC 	+4 ~ +30 VDC
Output Type	ON State Readback as 1	OFF State Readback as 0
Digital Output (Resistance Load)		
Digital Output (Inductive Load)		

Pin Assignments

Terminal No.	Pin Assignment
01	DI.COM0
02	DI0
03	DI1
04	DI2
05	DI3
06	DI4
07	DI5
08	DI6
09	DI7
10	DO0
11	DO1
12	DO2
13	DO3
14	DO4
15	DO5
16	DO6
17	DO7
18	DO.GND
19	DO.GND
20	DO.PWR

Ordering Information

I-87054 CR	8-ch Isolated DI (Wet) and 8-ch Isolated DO (Sink, NPN) Module (Blue Cover) (RoHS)
I-87054-G CR	8-ch Isolated DI (Wet) and 8-ch Isolated DO (Sink, NPN) Module (Gray Cover) (RoHS)