



## I-87046W

16-channel Non-isolated DI (Dry) Module

### Features

- 16-channel Digital Input
- Dry Contact Digital Input Channels
- Long-distance Measurement
- All Channels can be used as 16-bit Counters
- $\pm 4$  kV ESD Protection
- All Channels Non-isolated



### Introduction

The I-87046W is a 16-channel Digital Input module that can be used for longdistance measurement, with an effective distance of up to 500 meters for dry contact connections. All channels can be used as 16-bit counters and 4 kV ESD protection is provided. The I-87046W also includes 16 LED indicators that can be used to monitor the status of the Digital Input channels.

### Applications

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

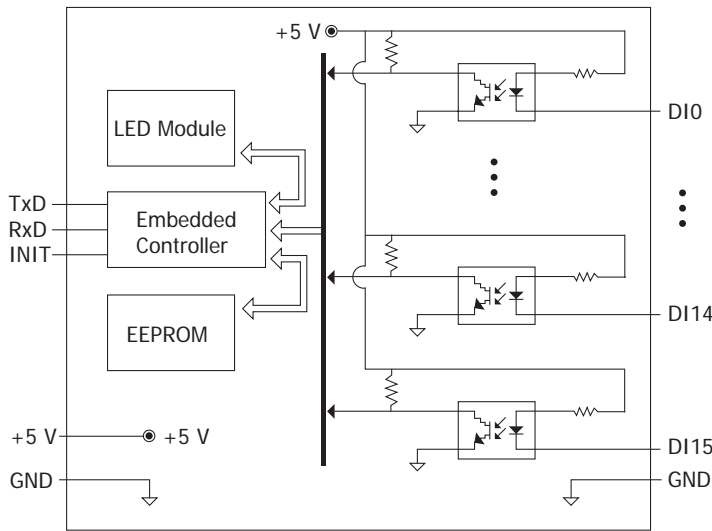
### System Specifications

COM Port	
Ports	RS-485
Data Format	N, 8, 1
Baud Rate	1200 ~ 115200 bps
Protocol	DCON
CPU Module	
Dual Watchdog Timer	Module (1.6 Seconds), Communication (Programmable)
LED Indicators	
System LED Indicator	1
I/O LED Indicator	16
EMS Protection	
ESD (IEC 61000-4-2)	$\pm 4$ kV Contact for Each port, $\pm 8$ kV Air for Random Poin
Power	
Consumption	1.0 W Max.
Mechanical	
Dimensions (W x L x H)	30 mm x 115 mm x 102 mm
Environment	
Operating Temperature	-25 ~ +75 °C
Storage Temperature	-40 ~ +85 °C
Humidity	10 ~ 95 % RH, Non-condensing

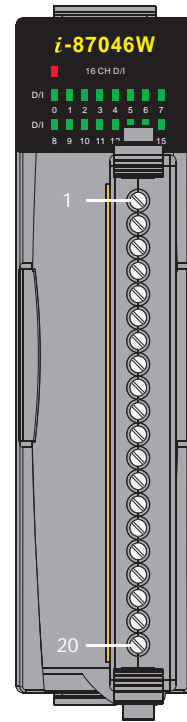
### I/O Specifications

Digital Input/Counter	
Channels	16
Type	Dry Contact
Sink/Source (NPN/PNP)	Sink, Source
ON Voltage Level	Close to GND
OFF Voltage Level	Open
Max. Counts	16-bit (65535)
Frequency	100 Hz
Min. Pulse Width	5 ms
Low Pass Filter	Yes
Effective Distance	500 M Max.

## Internal I/O Structure



## Pin Assignments



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

## Wire Connections

Digital Input/Counter	ON State Readback as 1	ON State Readback as 0
	Close to GND (+1 VDC Max.)	OPEN (+4 V ~ +30 VDC)
Dry Contact		

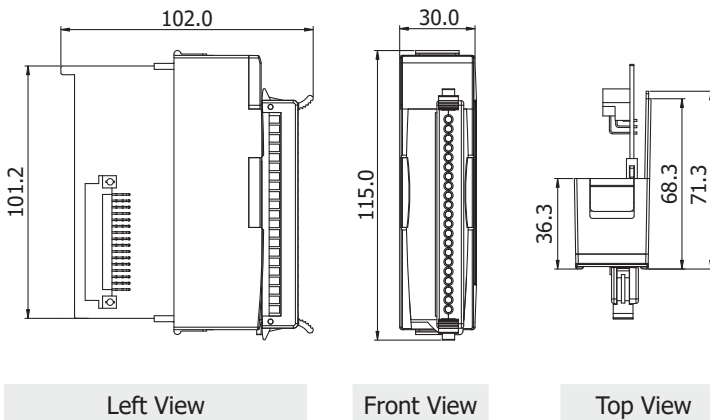
## Accessories



**SG-770 CR**

7/14-channel Differential/Single-ended Surge Protector (RoHS)

## Dimensions (Unit: mm)



## Ordering Information

**I-87046W-G CR**

16-channel Non-isolated Digital Input Module using the DCON Protocol (RoHS)