



## I-7014D

1-channel Transmitter Input with 7-segment LED Display

### Features

- Current, Voltage and Transmitter Input
- High Resolution: 16-bit
- 50 Hz Event Counter (Digital Input)
- High/Low Alarm (Digital Output)
- 3000 Vdc Intra-module Isolation
- Dual Watchdog
- Wide Operating Temperature Range: -25 to +75°C



### Introduction

The I-7014 is an 1-channel Transmitter Input module that provides a +15 VDC isolated loop power supply for transmitter input, and is designed for both voltage and current input types. In addition, the module provides 1 Digital Input channel as a 50 Hz event counter and 2 Digital Output channels that can be used as a high/low alarm. The I-7014 also features 3000 Vdc intra-module isolation.

### Applications

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

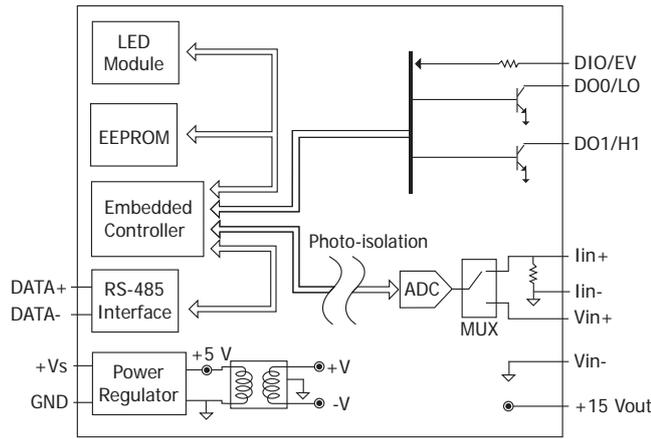
### System Specifications

Model	I-7014D
<b>Communication</b>	
Interface	RS-485
RS-485 Bias Resistor	No (An RS-485 master is required to provide the bias.)
Format	N, 8, 1
Baud Rate	1200 to 115200 bps
Protocol	DCON
Dual Watchdog	Yes, Module (1.6 Seconds), Communication (Programmable)
<b>LED Indicators/Display</b>	
System LED Indicator	Yes, 1 as Power/Communication Indicator
I/O LED Indicators	-
7-Segment LED Display	Yes
<b>Isolation</b>	
Intra-module Isolation, Field-to-Logic	3000 Vdc
<b>EMS Protection</b>	
ESD (IEC 61000-4-2)	±2 kV Contact for each Terminal
EFT (IEC 61000-4-4)	±4 kV to Power Line
Surge (IEC 61000-4-5)	±0.5 kV for Power Line
<b>Power</b>	
Reverse Polarity Protection	Yes
Input Range	+10 ~ +30 Vdc
Consumption	1.9 W
<b>Mechanical</b>	
Dimensions (L x W x H)	123 mm x 72 mm x 35 mm
Installation	DIN-Rail or Wall Mounting
<b>Environment</b>	
Operating Temperature	-25 to +75°C
Storage Temperature	-40 to +85°C
Humidity	10 to 95% RH, Non-condensing

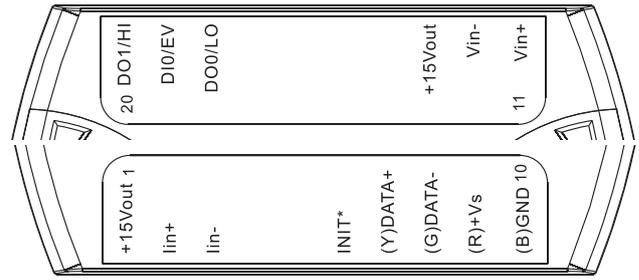
### I/O Specifications

Model	I-7014D
<b>Analog Input</b>	
Channels	1
Wiring	Differential
Sensor Type	±150 mV, ±500 mV, ±1V, ±5 V, ±10 V, ±20 mA
Resolution	16-bit
Accuracy	±0.05%
Sampling Rate	10 Hz
Input Impedance	Voltage: 30 kΩ Current: 125 Ω
Isolated Loop Power	±15 Vdc, 30 mA
Overvoltage Protection	±15 Vdc
Open Wire Detection	-
<b>Digital Input</b>	
Channels	1
Contact	Dry
Sink/Source (NPN/PNP)	Source
ON Voltage Level	Close to GND
OFF Voltage Level	Open
Counter	Yes, 50 Hz, 16-bit
Input Impedance	3 kΩ
Overvoltage Protection	±30 Vdc
<b>Digital Output</b>	
Channels	2
Type	Open Collector
Sink/Source (NPN/PNP)	Sink
Load Voltage	+3.5 ~ +50 Vdc
Max. Load Current	30 mA/Channel
Power-on Value	Yes
Safe Value	Yes

Internal I/O Structure



Pin Assignments



Wire Connections

<b>Voltage Input Wire Connection</b> 		<b>Current Input Wire Connection</b> 	
<b>2-wire Transmitter Wire Connection</b> 		<b>3-wire Transmitter Wire Connection</b> 	
<b>Digital Input/Counter</b>  Dry Contact	<b>Readback as 1</b> Open 	<b>Readback as 0</b> Closed to GND 	
	<b>Digital Output</b>  Resistance Load Inductance Load	<b>ON State</b> Readback as 1 	<b>OFF State</b> Readback as 0 

Ordering Information

I-7014D CR	1-channel Transmitter Input with 7-segment LED Display using the DCON and Modbus Protocols (Blue Cover) (RoHS)
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Accessories

tM-7520U CR	RS-232 to RS-485 Converter (RoHS)	I-7514U CR	4-channel RS-485 Hub (RoHS)
tM-7561 CR	USB to RS-485 Converter (RoHS)	SG-770 CR	7-channel Differential or 14-channel Single-ended Surge Protector (RoHS)
tM-SG4 CR	RS-485 Bias and Termination Resistor Module (RoHS)	SG-3000 Series	Signal Conditioning Modules for Thermocouple, RTD, DC Voltage, DC Current and Power Input Transformers

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3  
RS-485 Remote I/O Modules

I-7014D