



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

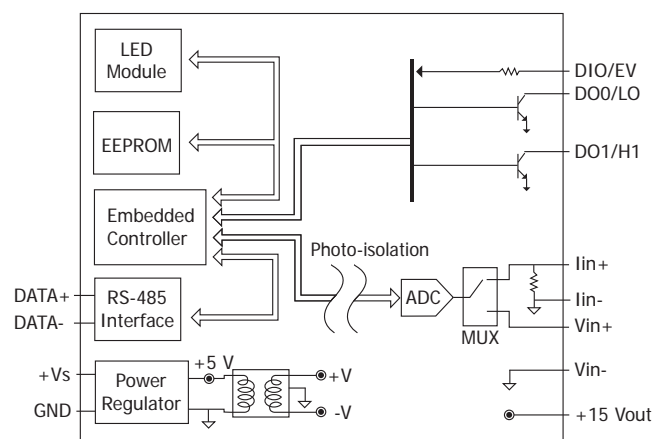
System Specifications

Model	I-7014D
Communication	
Interface	RS-485
Bias Resistor	No (Usually supplied by the RS-485 Master. Alternatively, add a tM-SG4 or SG-785.)
Format	N, 8, 1
Baud Rate	1200 to 115200 bps
Protocol	DCON
Dual Watchdog	Yes, Module (1.6 Seconds), Communication (Programmable)
LED Indicators/Display	
System LED Indicator	Yes, 1 as Power/Communication Indicator
I/O LED Indicators	-
7-segment LED Display	Yes
Isolation	
Intra-module Isolation, Field-to-Logic	3000 Vdc
EMS Protection	
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
Power	
Reverse Polarity Protection	Yes
Input Range	+10 ~ +30 Vdc
Consumption	1.9 W
Mechanical	
Dimensions (L x W x H)	123 mm x 72 mm x 35 mm
Installation	DIN-Rail or Wall Mounting
Environment	
Operating Temperature	-25 to +75°C
Storage Temperature	-40 to +85°C
Humidity	10 to 95% RH, Non-condensing

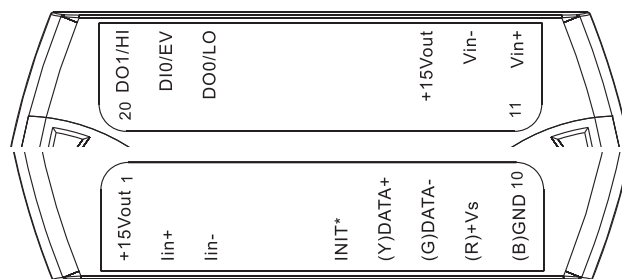
I/O Specifications

Model	I-7014D
Analog Input	
Channels	1
Wiring	Differential
Sensor Types	±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	-
Digital Input	
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
Digital Output	
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

Voltage Input Wire Connection	Current Input Wire Connection
2-wire Transmitter Wire Connection	3-wire Transmitter Wire Connection

Digital Input/Counter	Readback as 1	Readback as 0
	Open	Closed to GND
Dry Contact		

Digital Output	ON State Readback as 1	OFF State Readback as 0
Resistance Load		
Inductance Load		

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)
	tM-7561 CR	USB to RS-485 Converter (RoHS)
	tM-SG4 CR	RS-485 Bias and Termination Resistor Module (RoHS)

	I-7514U CR	4-channel RS-485 Hub (RoHS)
	SG-770 CR	7-channel Differential or 14-channel Single-ended Surge Protector (RoHS)
	SG-3000 Series	Signal Conditioning Modules for Thermocouple, RTD, DC Voltage, DC Current and Power Input Transformers