



Digital Output

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RS-485 Remote I/O Modules



I-87041W

32-channel Sink Type Open Collector Isolated Digital Output Module

Introduction

I-87041W offers 32 channels for digital output, each of which features Photocouple isolation. I-87041W supports sink type output with open collector. I-87041W has both 32 LED indicators for channel status and qualification for 4 KV ESD protection and 3750 V_{oc} intra-module isolation. You can pair I-87041W with a daughter board like either DN-37-381-A for easy wiring or DN-8K32R for relay output!

Features

- Support Digital Outputs (Sink Type)
- Photocouple Isolation
- Optional Daughter Boards
- 4 kV ESD Protection
- 3750 V_{oc} Intra-module Isolation
- RoHS Compliant
- Wide Operating Temperature Range: -25 ~ +75°C



Applications

Building Automation, Factory Automation, Machine Automation, Remote Maintenance, Remote Diagnosis, Testing Equipment.

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I-87KW Series

System Specifications

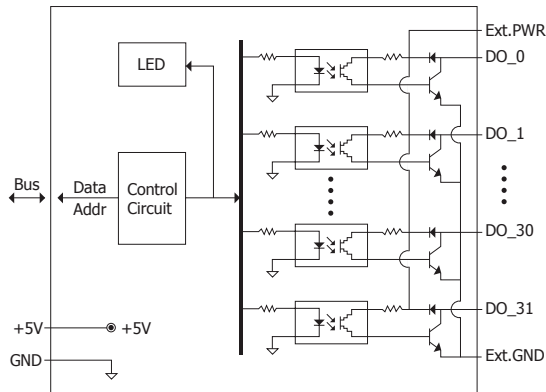
Communication	
Interface	RS-485
Format	N, 8, 1
Baud Rate	1200 ~ 115200 bps
Protocol	DCON
Dual Watchdog	Yes, Module (1.6 Seconds), Communication (Programmable)
Safe Value (When Host Fail or Communication Fail)	Yes
Power-on Preset Value	Yes
LED Indicator/Display	
System LED Indicator	1 LED as Power/Communication Indicator
I/O LED Indicator	32 LEDs as Digital Output Indicators
Isolation	
Intra-Module Isolation, Field-to-Logic	3750 V _{rms}
EMS Protection	
ESD (IEC 61000-4-2)	4 kV Contact for Each Terminal 8 kV Air for Random Point
Power	
Power Consumption	0.7 W Max.
Mechanical	
Dimensions (W x L x H)	30 mm x 85 mm x 114 mm
Environment	
Operating Temperature	-25 ~ +75°C
Storage Temperature	-40 ~ +85°C
Humidity	10 ~ 95% RH, Non-condensing

I/O Specifications

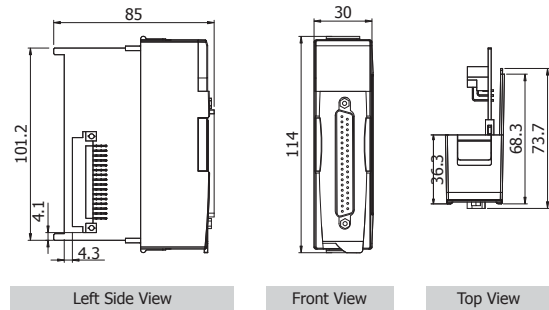
Digital Output	
Channels	32
Type	Open Collector
Sink /Source (NPN /PNP)	Sink
Load Voltage	+5 V _{oc} ~ +30 V _{oc}
Max. Load Current	100 mA/channel
Output Type	Open Collector
Short Circuit Protection	-
Power-on Value	Yes
Safe Value	Yes

I-87041W

Internal I/O Structure



Dimensions (Units: mm)



Wire Connections

Output Type	ON State Readback as 1	OFF State Readback as 0
Digital Output (Resistance Load)	DOx Ext.PWR Ext.GND	DOx Ext.PWR Ext.GND
Digital Output (Inductive Load)	DOx Ext.PWR Ext.GND	DOx Ext.PWR Ext.GND

Pin Assignments

Pin Assignment	Terminal	No.	Pin Assignment
Ext.PWR	19	37	Ext.PWR
Ext.GND	18	36	Ext.GND
Ext.GND	17	35	DO_31
DO_15	16	34	DO_30
DO_14	15	33	DO_29
DO_13	14	32	DO_28
DO_12	13	31	DO_27
DO_11	12	30	DO_26
DO_10	11	29	DO_25
DO_9	10	28	DO_24
DO_8	09	27	DO_23
DO_7	08	26	DO_22
DO_6	07	25	DO_21
DO_5	06	24	DO_20
DO_4	05	23	DO_19
DO_3	04	22	DO_18
DO_2	03	21	DO_17
DO_1	02	20	DO_16
DO_0	01		

37-pin Male D-Sub Connector

Ordering Information

I-87041W-G CR	32-channel Sink Type Open Collector Isolated Digital Output Module (Gray Cover) (RoHS)
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Accessories

	DN- 8K32R	32-channel relay output board Include : CA- 3705A (37 Pin Male-Female D-sub cable 0.5 M)
	DN-37-A	I/O Connector Block with DIN-Rail Mounting and 37-pin D-sub Connector (pitch:5.08 mm)
	DN-37-381-A	I/O Connector Block with DIN-Rail Mounting and 37-pin D-sub Connector (pitch:3.81 mm)
	CA-3705A	Male-Female D-sub Cable 0.5 M
	CA-3710A	Male-Female D-Sub Cable 1M
	CA-3715A	Male-Female D-Sub Cable 1.5M

	MD-11	Input Type MagicWire for I-8041W/I-87041W
	MD-11	Output Type MagicWire for I-8040W/I-87040W
	SG-770 CR	7 channel differential or 14 channel single-ended surge protector (RoHS)
		I-8041 and I-87041W with DN-8K32R
		I-8040/41/42 and I-87040W/41W with DN-37-381-A

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