



### Features

- Support Digital Outputs (Sink Type)
- Photocouple Isolation
- Optional Daughter Boards
- 4 kV ESD Protection
- 3750 V<sub>dc</sub> Intra-module Isolation
- RoHS Compliant
- Wide Operating Temperature Range: -25 ~ +75°C



### 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<sub>dc</sub> 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!

### Applications

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

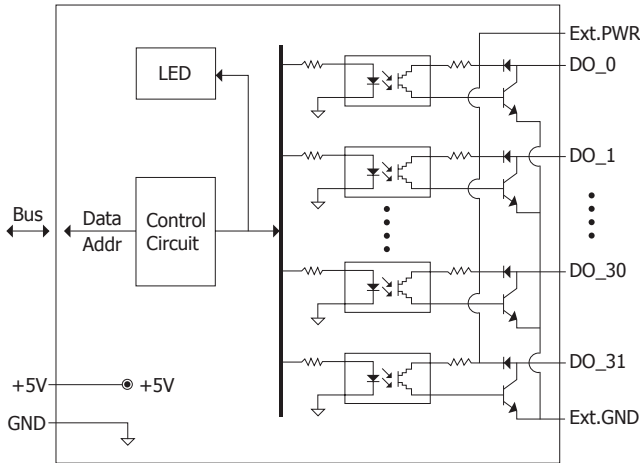
### System Specifications

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 <sub>rms</sub>
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

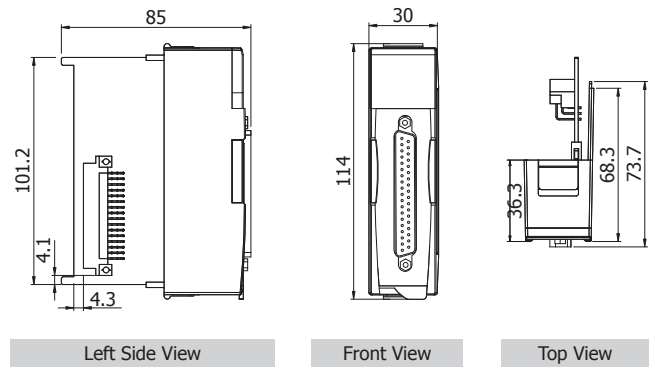
### I/O Specifications

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

### 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)		
Digital Output (Inductive Load)		

### 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

<b>I-87041W-G CR</b>	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 Moun ting and 37-pin D-sub Connector (pitch:5.08 mm)
	DN-37-381-A	I/O Connector Block with DIN-Rail Moun ting 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	