



## I-87041

## I-87041-G

32-ch Isolated DO (5 ~ 30 V<sub>DC</sub>) Module

### Features

- 32-channel Open Collector Output
- Sink-type Digital Output
- Optional Daughterboards
- 3750 V<sub>rms</sub> Intra-module Isolation
- Configurable Power-on Value
- Configurable Safe Value



### Introduction

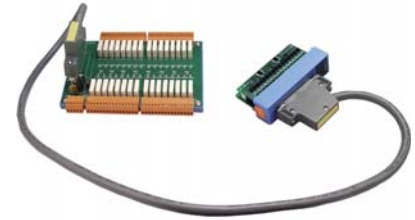
The I-87041 module offers 32 Digital Output channels, each of which features Photocouple isolation and supports sink-type output using an open collector. The I-87041 includes 32 LED indicators that can be used to monitor the status of the Digital Output channels, and options are available for configuring both power-on and safe values. 3750 V<sub>rms</sub> intra-module isolation is provided as standard. The I-87041 can be paired with a daughterboard, such as the DN-37-381-A for easy wiring, or the DN-8K32R for relay output.digital output module for industrial use.



I-8040, I-8041, I-8042, I-87040, I-87041 with  
DN-37-381-A & DB37 Male to Female Cable  
(Optional)



I-8040, I-8041, I-8042, I-87040, I-87041 with  
DN-37-A & DB37 Male to Female Cable  
(Optional)



I-8041 and I-87041 with  
DN-8K32R & DB37 Male to Female Cable  
(Optional)

### System Specifications

CPU Module	
Watchdog Timer	Yes, Module (1.6 Seconds), Communication (Programmable)
Isolation	
Intra-module Isolation	3750 V <sub>rms</sub>
LED Indicators	
Status	1 x Power and Communication 32 x I/O
Power	
Power Consumption	1.5 W Max.
Mechanical	
Dimensions (W x L x H)	31 mm x 114 mm x 66 mm
Environment	
Operating Temperature	-25 ~ +75 °C
Storage Temperature	-30 ~ +75 °C
Humidity	5 ~ 95% RH, Non-condensing

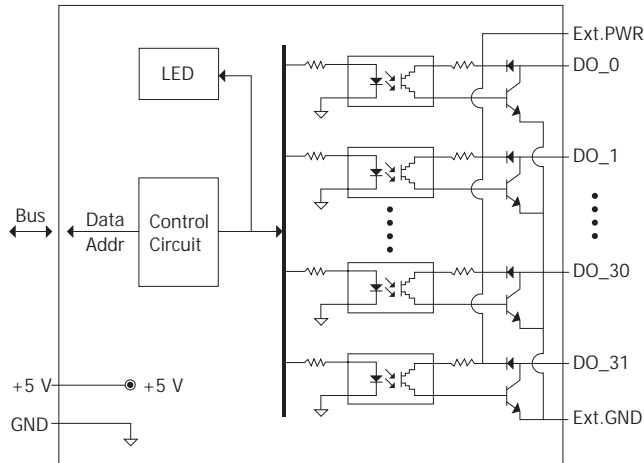
### Applications

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

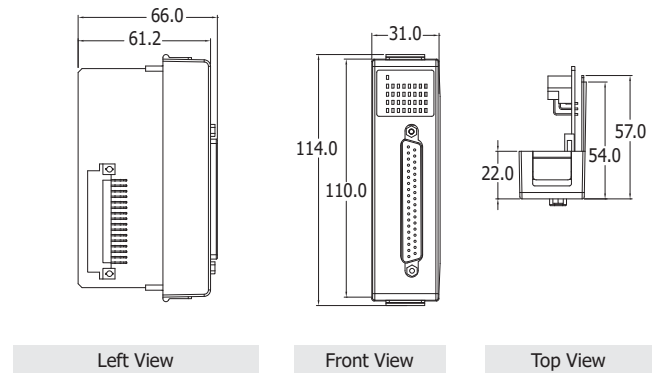
### I/O Specifications

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
Power-on Value	Yes
Safe Value	Yes

## Internal I/O Structure



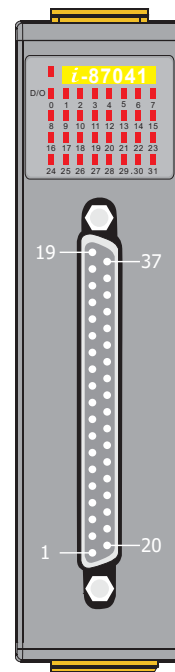
## Dimensions (Units: mm)



## 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-87041 CR</b>	32-ch Isolated DO (Sink, NPN, 5 ~ 30 V <sub>DC</sub> ) Module (Blue Cover) (RoHS) Includes CA-4002F (DB37 connector Female with plastic cover)
<b>I-87041-G CR</b>	32-ch Isolated DO (Sink, NPN, 5 ~ 30 V <sub>DC</sub> ) Module (Gray Cover) (RoHS) Includes CA-4002F (DB37 connector Female with plastic cover)

## Accessories

DN-8K32R CR	32-channel Relay Output Board (RoHS) Include: CA-3705A (DB37 Male to Female Cable, 90°, 0.5 M)
DN-37-A CR	Female DB37 to Screw Terminal Board (Pitch= 5.08 mm) with DIN-rail Mounting (RoHS) Include: CA-3710A (DB37 Male to Female Cable, 90°, 1 M)
DN-37-381-A CR	Female DB37 to Screw Terminal Board (Pitch=3.81 mm) with DIN-rail Mounting (RoHS) Include: CA-3710A (DB37 Male to Female Cable, 90°, 1 M)
CA-3705A CR CA-3710A CR CA-3715A CR	DB37 Male to Female Cable, 90°, 0.5 M/1 M/1.5 M (RoHS)
CA-3710AM CR CA-3720AM CR CA-3730AM CR CA-3750AM CR CA-37100AM CR	DB37 Male to Female, with Molded Cable, 45°, 1 M/2 M/3 M/5 M/10 M (RoHS)