SYSMAC CJ-series Interrupt Input Units

CJ1W-INT01

CSM_CJ1W-INT01_DS_E_1_1

High-speed Starting of I/O Interrupt Tasks. Use Up to Two Units for a Total of Up to 32 Interrupt Inputs.

- Receive inputs to start I/O interrupt tasks. When the Interrupt Input Unit receives an input, the CPU Unit will interrupt execution of the cyclic tasks in the normal program and execute an I/O interrupt task.

CJ1W-INT01

Features

- High-speed ON response of 0.05 ms
- Use up to 32 interrupt inputs with up to two Units per CPU Unit.
- Applicable with both NPN and PNP output devices. Polarity selection is not required. ✻

✻ The same polarity is used for the same common.

Ordering Information

Interrupt Input Units

Unit type	Product name	Specifications						No. of words allocated	Current consumption (A)		Model	Standards
		I/O points	Input voltage current	Commons	Input pulse width conditions	Max. Units mountable per Unit	External connection		5 V	24 V		
CJ1 Basic I/O Units	Interrupt Input Unit 	16 inputs	24 VDC, 7 mA	16 points, 1 common	ON time: 0.05 ms max. OFF time: 0.5 ms max.	2	Removable terminal block	1 word	0.08	–	CJ1W-INT01	UC1, N, L, CE

Note: 1. Can be used only on CPU Racks, and not on Expansion Racks.
2. The locations where the Units can be mounted depend on the CPU Rack and the CPU Unit model.
CJ2H-CPU6□-EIP: From the slot next to the CPU Unit until the fourth slot.
CJ1G, CJ1H: From the slot next to the CPU Unit until the fifth slot.
CJ1M: From the slot next to the CPU Unit until the third slot.

Accessories

There is no accessory for the CJ series Interrupt Input Units.

International Standards

- The standards indicated in the "Standards" column are those current for UL, CSA, cULus, cUL, NK, and Lloyd standards and EC Directives as of the end of September 2008. The standards are abbreviated as follows: U: UL, U1: UL (Class I Division 2 Products for Hazardous Locations), C: CSA, UC: cULus, UC1: cULus (Class I Division 2 Products for Hazardous Locations), CU: cUL, N: NK, L: Lloyd, and CE: EC Directives.
- Ask your OMRON representative for the conditions under which the standards were met.

Mountable Racks

Molde	CJ system					CP1H system	NSJ system	
	CJ2-CPU Rack	CJ1-CPU Rack	CJ1H-CPU Rack	CJ1M-CPU Rack	Expansion Backplane	CP1H PLC	NSJ Controller	Expansion Backplane
CJ1W-INT01	2 Units ✻1	Not supported	2 Units ✻2	2 Units ✻3	Not supported ✻4	Not supported	Not supported	Not supported ✻4

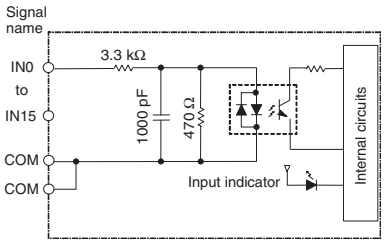
✻1. The Interrupt Input Unit can be mounted in slots 0 to 3 on the CJ2H-CPU6□-EIP CPU-Rack. An I/O setting error will occur if an Interrupt Input Unit is mounted to slot 4 or higher.
✻2. The Interrupt Input Unit can be mounted in slots 0 to 4 on the CJ1-CPU Rack. An I/O setting error will occur if an Interrupt Input Unit is mounted to slot 5 or higher.
✻3. The Interrupt Input Unit can be mounted in slots 0 to 2 on the CJ1M-CPU Rack. An I/O setting error will occur if an Interrupt Input Unit is mounted to slot 3 or higher.
✻4. An I/O setting error will occur if an Interrupt Input Unit is mounted to an Expansion Rack.

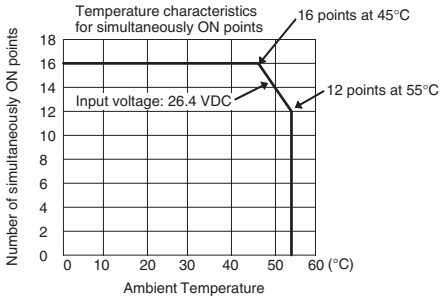
Specifications

CJ1W-INT01 Interrupt Input Unit (16 Points)

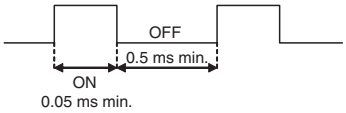
Name	16-point Interrupt Input Unit with Terminal Block
Model	CJ1W-INT01
Rated Input Voltage	24 VDC
Rated Input Voltage Range	20.4 to 26.4 VDC
Input Impedance	3.3 kΩ
Input Current	7 mA typical (at 24 VDC)
ON Voltage/ON Current	14.4 VDC min./3 mA min.
OFF Voltage/OFF Current	5 VDC max./1 mA max.
ON Response Time	0.05 ms max.
OFF Response Time	0.5 ms max.
Number of Circuits	16 (16 points/common, 1 circuit)
Number of Simultaneously ON Points	100% (16 points/common) simultaneously ON (24 VDC)
Insulation Resistance	20 MΩ between external terminals and GR terminal (at 100 VDC)
Dielectric Strength	1,000 VAC between external terminals and GR terminal for 1 minute at a leakage current of 10 mA max.
Internal Current Consumption	80 mA max.
Weight	110 g max.
Accessories	None

Circuit Configuration



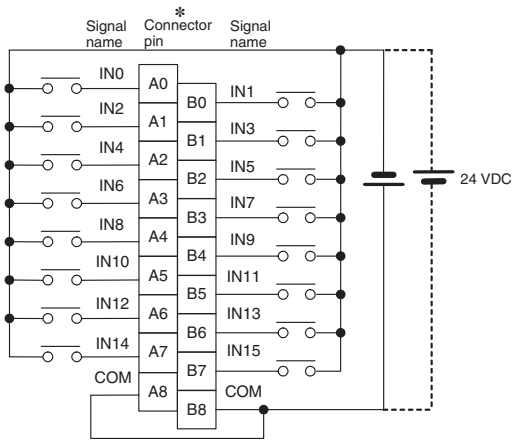


- Up to two Interrupt Input Units can be mounted to the CPU Rack, but they must be connected as one the five Unit ✻ immediately next to the CPU Unit. If an Interrupt Input Unit is connected in any other position, an I/O setting error will occur.
- Set the pulse width of signals input to the Interrupt Input Unit so they satisfy the following conditions.



✻ With the CJ2JH-CPU6□-EIP CPU Units, the Unit must be mounted as one of the four Units immediately next to the CPU Unit.

Terminal Connections

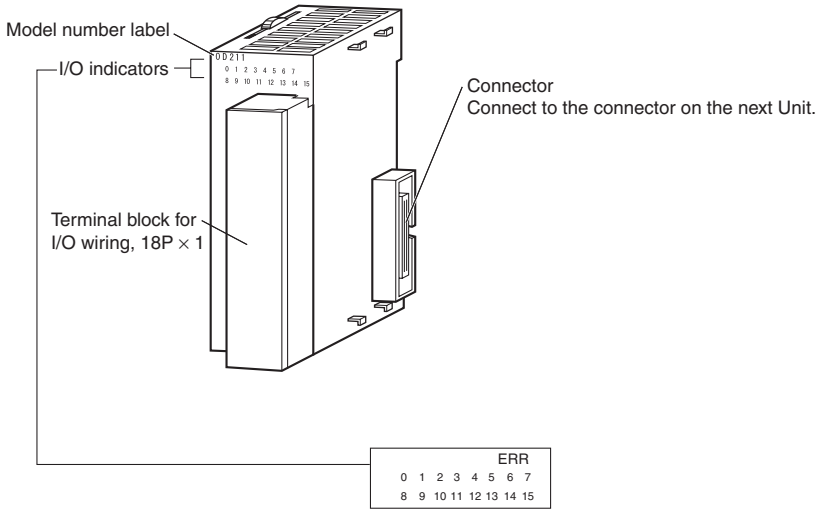


- The polarity can be connected in either direction.

✻ Terminal numbers A0 to A8 and B0 to B8 are used in this datasheet, but they are not printed on the Unit.

External Interface

8-point/16-point Units (18-point Terminal Blocks)



Wiring Basic I/O Units with Terminal Blocks

Electric Wires

The following wire gauges are recommended.

Terminal Block Connector	Wire Size
18-terminal	AWG 22 to 18 (0.32 to 0.82 mm^2)

Crimp terminals

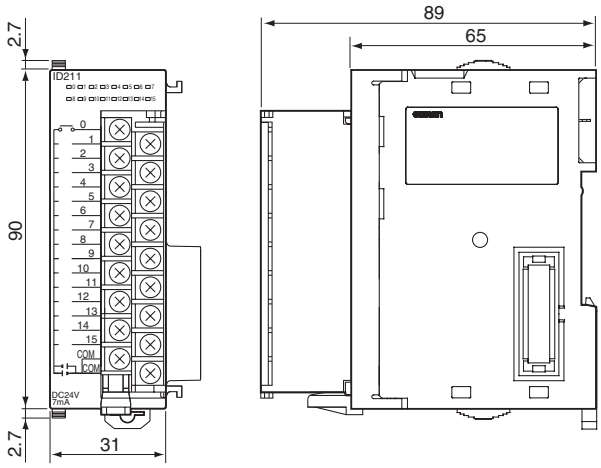
Use crimp terminals (M3) having the dimensions shown below.

Dimensions

(Unit: mm)

8-point/16-point Units (18-point Terminal Blocks)

CJ1W-INT01



Related Manuals

Name	Cat. No.	Contents
SYSMAC CJ Series CJ1H-CPU□□H-R, CJ1G/H-CPU□□H, CJ1G-CPU□□P, CJ1G-CPU□□, CJ1M-CPU□□ Programmable Controllers Operation Manual	W393	Provides an outlines of and describes the design, installation, maintenance, and other basic operations for the CJ-series PLCs.

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