

Product Discontinuation Notices

Issue Date
April 1, 2024

Product Discontinuation

ID Sensor Units



CS1W-V680 series



Recommended Replacement

ID Sensor Units

CJ1W-V680 series

RFID Units

NX-V680 series

[Final order entry date]

The end of March, 2025

[Date of The Last Shipping]

The end of March, 2026

[Scheduled date of maintenance close]

The end of March, 2032

[Caution on recommended replacement]

Production of the ID sensor unit will be discontinued due to the discontinuation of production of the CS series, which is a host device.

For the CJ1W-V680 series, please use the CJ series as the host device.

In that case, you can use V680 as is.

For the NX-V680 series, please use the NX series as the host device.

In that case, you can use V680 as is, but you will need to change the software.

For details, please refer to the user's manual for ID sensor unit, CJ series, and NX series.

[Difference from discontinued product]

Recommended replacement Model	Body Color	Dimensions	Wire connection	Mounting Dimensions	Characteristics	Operation ratings	Operation methods
CJ1W-V680 series	--	--	--	--	*	*	--
NX-V680 series	--	--	--	--	--	--	--

** : Compatible

* : The change is a little/Almost compatible

-- : Not compatible

- : No corresponding specification

[Product Discontinuation and recommended replacement]

Product discontinuation	Recommended replacement
CS1W-V680C11	CJ1W-V680C11
	NX-V680C1
CS1W-V680C12	CJ1W-V680C12
	NX-V680C2

[Body color]

**Product discontinuation
Model CS1W-V680 series**

Color : WarmGray



**Recommendable replacement
Model CJ1W-V680/NX-V680 series**

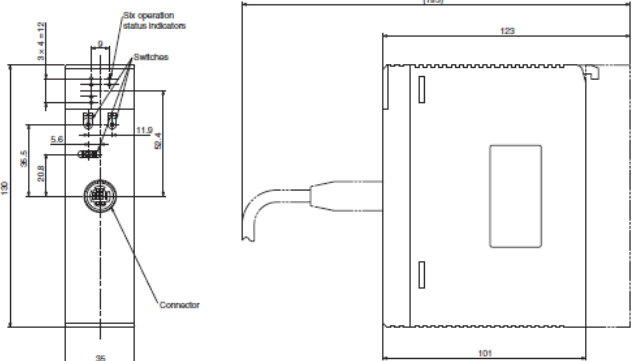
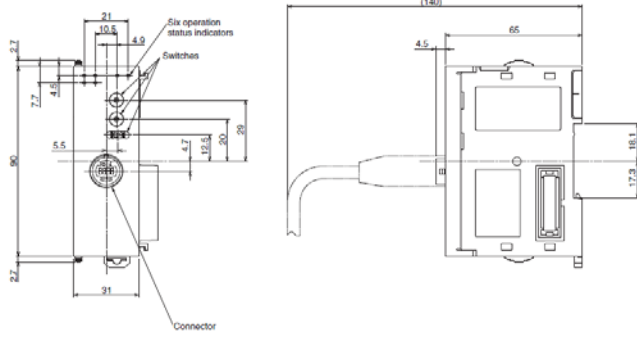
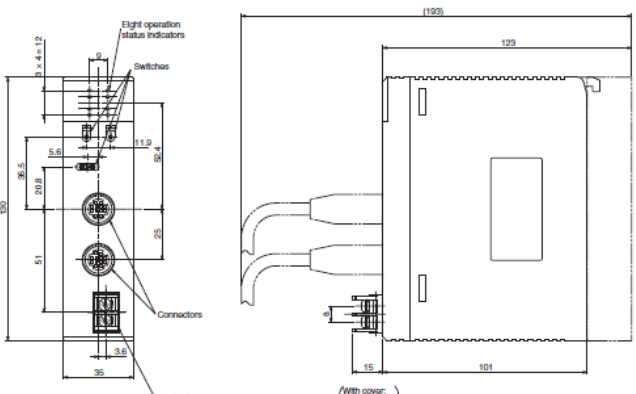
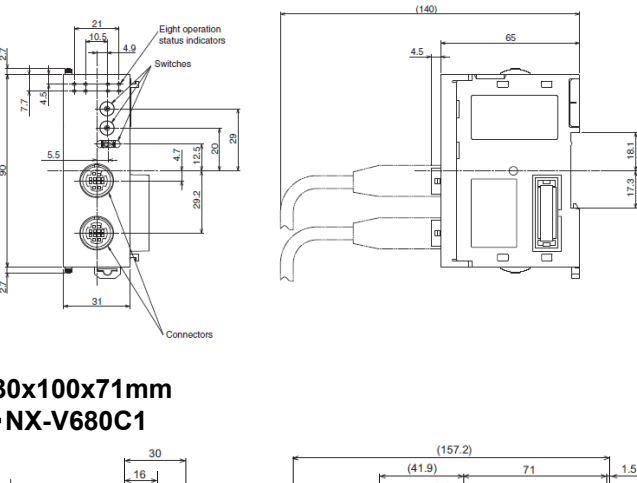
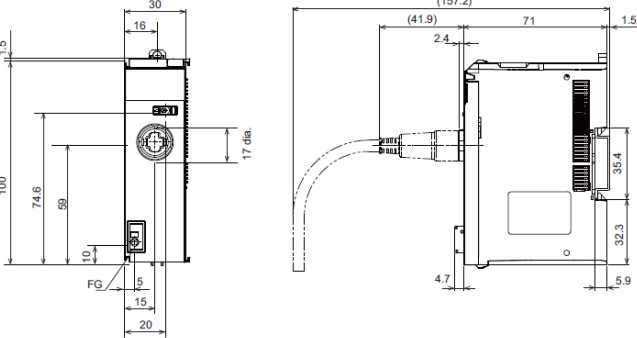
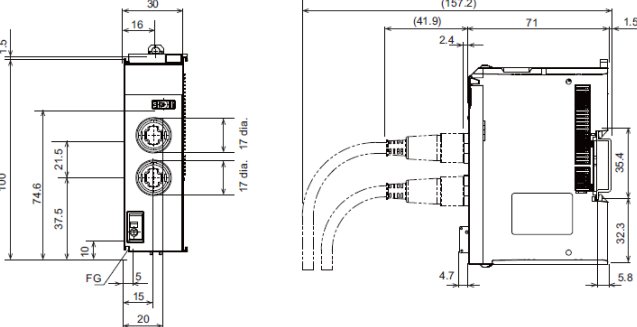
**CJ1W-V680 series
Color : WarmGray**



**NX-V680 series
Color : Black**



[Dimensions]

<p>Product discontinuation Model CS1W-V680 series</p>	<p>Recommendable replacement CJ1W-V680/NX-V680 series</p>
<p>35x130x101mm -CS1W-V680C11</p> 	<p>31x65x90mm -CJ1W-V680C11</p> 
<p>-CS1W-V680C12</p> 	<p>-CJ1W-V680C12</p> 
<p>30x100x71mm -NX-V680C1</p> 	<p>-NX-V680C2</p> 

[Characteristics] (Product discontinuation CS series)

Item	Product discontinuation CS1W-V680 series			
	Model CS1W-V680C11		Model CS1W-V680C12	
Unit classification	Special I/O Unit			
Influence on CPU Unit's cycle time	0.15 ms		0.3 ms	
External power supply	---		24 VDC +10%/-15%, 360mA	
Internal current consumption	V680-HA63□ Amplifier connected: 5 VDC, 260 mA 24 VDC, 125 mA V680-H01 Antenna connected: 5 VDC, 260 mA 24 VDC, 280 mA		5 VDC, 320 mA 24 VDC, 0 mA	
Weight	180 g max.		300 g max.	
Mounting location	CS-series CPU Rack or CS-series Expansion Rack (Cannot be mounted to C200H Expansion I/O Racks or SYSMAC BUS Slave Racks.)			
No. of Units per Rack (See note 1.)	V680-HA63□ Amplifier connected: 5 per Rack V680-H01 Antenna connected: 2 per Rack		10 per Rack	
Connectable Antennas (See note 2.)	V680-series Amplifiers(V680-HA63□) V680-series Antenna(V680-H □□) One channel		V680-series Amplifiers(V680-HA63□) V680-series Antenna(V680-H □□) One or two channels	
Applicable RF Tags	V680-series RF Tags			
No. of allocated unit numbers	1		2	
No. of allocated words	10 words		20 words	
Control protocol	Special protocol			
Data exchange methods with CPU Unit	Special I/O Unit Area in CIO Area: CIO 2000 to CIO 2959	Constant data exchange of 10 words/Unit	CPU Unit to ID Sensor Unit	Unit controls, communications processing specification, data storage area specification
			ID Sensor Unit to CPU Unit	Unit information, results information, processing results monitor
	Special I/O Unit words in DM Area: D20000 to D29599	100 words/Unit transferred when power is turned ON or when restarting the Unit	CPU Unit to ID Sensor Unit	System Settings, Auto Wait Time Setting, Write Protection Disable Setting, Antenna Connection Setting, Results Monitor Output, Test Setting, Run/Test Switching Method Setting
Data transfer quantity (See note 3.)	2,048 bytes max. (160 bytes/scan)		2,048 bytes max./channel (160 bytes/scan)	
Operating modes	Run Mode			
	Test Mode	<ul style="list-style-type: none"> · Communications tests · Range level measurements · Read speed level measurements · Write speed level measurements · Noise level measurements · Communications success rate measurements 		
Diagnostic function	(1) CPU watchdog timer (2) Communications error detection with RF Tag (3) Antenna power supply error			

Note 1. "Rack" indicates either the CPU Rack or an Expansion Rack.

Note 2. The V680-H01 Antenna can be connected only to the CS1W-V680C11 ID Sensor Unit.

It cannot be used with the CS1W-V680C12 ID Sensor Unit.

Note 3. If using Intelligent I/O Instructions is specified as the data transfer method, up to 2,048 bytes can be transferred in one scan.

[Characteristics] (Recommendable replacement CJ series)

Item	Recommendable replacement CJ1W-V680 series			
	Model CJ1W-V680C11		Model CJ1W-V680C12	
Unit classification	Special I/O Unit			
Influence on CPU Unit's cycle time	0.15 ms		0.3 ms	
External power supply	---		24 VDC +10%/-15%, 360mA	
Internal current consumption	V680-HA63□ Amplifier connected: 5 VDC, 260 mA 24 VDC, 130 mA V680-H01(-V2) Antenna connected: 5 VDC, 260 mA 24 VDC, 280 mA		5 VDC, 320 mA 24 VDC, 260 mA	
Weight	120 g max.		130 g max.	
Mounting location	CJ-series Rack or CJ-series Expansion Rack (Cannot be mounted to C200H Expansion I/O Racks or SYSMAC BUS Slave Racks.)			
No. of Units per Rack (See note 1.)	CJ1W-PA205R: V680-HA63□ Amplifier connected: 4 per Rack V680-H01 Antenna connected: 2 per Rack CJ1W-PA202: V680-HA63□ Amplifier connected: 2 per Rack V680-H01 Antenna connected: 1 per Rack		CJ1W-PA205R: 2 per Rack CJ1W-PA202: 1 per Rack	
Connectable Antennas (See note 2.)	V680-series Amplifiers(V680-HA63□) V680-series Antenna(V680-H □□) One channel		V680-series Amplifiers(V680-HA63□) V680-series Antenna(V680-H □□) One or two channels	
Applicable RF Tags	V680-series RF Tags			
No. of allocated unit numbers	1		2	
No. of allocated words	10 words		20 words	
Control protocol	Special protocol			
Data exchange methods with CPU Unit	Special I/O Unit Area : CIO 2000 to CIO 2959	Constant data exchange of 10 words/Unit	CPU Unit to ID Sensor Unit	Unit controls, communications processing specification, data storage area specification
			ID Sensor Unit to CPU Unit	Unit information, results information, processing results monitor
	Special I/O Unit words in DM Area: D20000 to D29599	100 words/Unit transferred when power is turned ON or when restarting the Unit	CPU Unit to ID Sensor Unit	System Settings, Auto Wait Time Setting, Write Protection Disable Setting, Antenna Connection Setting, Results Monitor Output, Test Setting, Run/Test Switching Method Setting

Item	Recommendable replacement CJ1W-V680 series	
	Model CJ1W-V680C11	Model CJ1W-V680C12
Data transfer quantity (See note 3.)	2,048 bytes max. (160 bytes/scan)	2,048 bytes max./channel (160 bytes/scan)
Operating modes	Run Mode	
	Test Mode	<ul style="list-style-type: none"> · Communications tests · Range level measurements · Read speed level measurements · Write speed level measurements · Noise level measurements · Communications success rate measurements
Diagnostic function	(1) CPU watchdog timer (2) Communications error detection with RF Tag (3) Antenna power supply error	

Note 1. "Rack" indicates either the CPU Rack or an Expansion Rack.

Note 2. The V680-H01 Antenna can be connected only to the CJ1W-V680C11 ID Sensor Unit.

It cannot be used with the CJ1W-V680C12 ID Sensor Unit.

Note 3. If using Intelligent I/O Instructions is specified as the data transfer method, up to 2,048 bytes can be transferred in one scan.

[Characteristics] (Recommendable replacement NX series)

Item	Recommendable replacement NX-V680 series	
	Model NX-V680C1	Model NX-V680C2
Unit classification	RFID Unit	
Number of antennas connected	1	2
External connection terminal	FG terminal block (1 terminal)	
I/O refreshing method	Free-Run Refreshing	
Communications protocol	ISO/IEC 18000-3(15693)	
Connectable Antennas	V680-series · Antenna with Separate Amplifier: V680-HS□□ · Antenna with Built-in Amplifier: V680-H01-V2	V680-series · Antenna with Separate Amplifier: V680-HS□□
Applicable RF Tags	V680S-series RF or V680-series RF Tags	
RF Tag reading/writing size	8,192 bytes max.	
Divided data size	16 to 128 bytes	
Backup function	Supported.	
Isolation method	Digital isolator isolation	
Insulation resistance	20 MΩ min. between isolated circuits(at 100 VDC)	
Dielectric strength	510 VAC between isolated circuits for 1 minute with a leakage current of 5 mA max.	
I/O power supply method	Supplied from the NX bus	
Current consumption from I/O power supply	·V680-H01-V2 connection 250mA max. ·V680-HA63□ connection 210mA max.	·V680-HA63□ connection 380mA max.
NX Unit power consumption	·Connector to a CPU Unit 1.00 W max. ·Connected to Communications Coupler Unit 0.90 W max.	

Item	Recommendable replacement NX-V680 series	
	Model NX-V680C1	Model NX-V680C2
Weight	120 g max.	130 g max.
Installation orientation and restrictions	Installation orientation: • Connected to a CPU Unit Possible in upright installation. • Connected to a Communications Coupler Unit Possible in 6 orientations Restrictions: No restrictions	

Specifications and prices in this product news are as of the issue date and are subject to change without notice. Only main changes in specifications are described in this document. Please be sure to read the relevant catalogs, datasheets, product specifications, instructions, and manuals for precautions and necessary information when using products.