# CJ1W-SRM21

CSM\_C.I1W-SBM21\_DS\_E\_2\_1

# CompoBus/S is a high-speed I/O bus

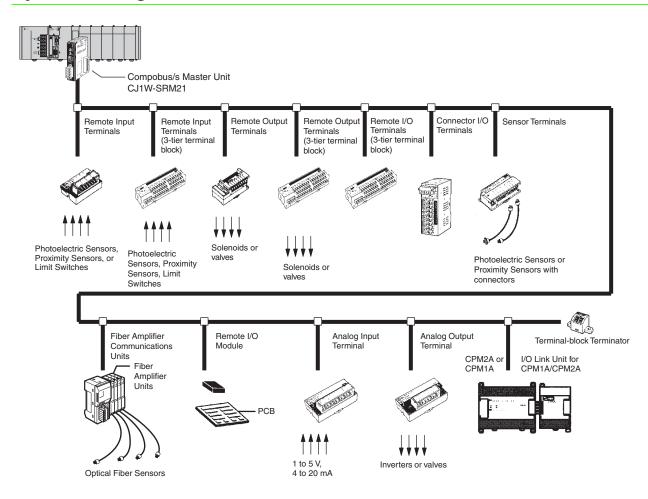


CJ1W-SRM21

## **Features**

- Up to 256 I/O points per Master.
- Up to 32 Slaves per Master.
- Communications cycle time: 0.5 ms (at 750 kbps).
- Communications distance: Up to 500 m (at 93.75 kbps).
- Free wiring with any branching method for up to 200 m (in long-distance communications mode).

## **System Configuration**



# **Communication Specifications**

Item		Specification					
Communications method		Special CompoBus/S protocol					
Communications baud rate		High-speed Communications Mode: 750 kbps Long-distance Communications Mode: 93.75 kbps					
Modulation method		Baseband method					
Coding method		Manchester coding method					
Error control checks		Manchester code check, frame length check, and parity check					
Cable	VCTF cable (JIS C 3306)	Two 0.75 mm² conductors (2 signal wires) Four 0.75 mm² conductors (2 signal wires and 2 power supply wires)					
	Special Flat Cable	Four 0.75 mm <sup>2</sup> conductors (2 signal wires and 2 power supply wires)					
Communications distance	2-conductor VCTF cable	High-speed Communications Mode Main line length: 100 m max. Branch line length: 3 m max. Total branch line length: 50 m max.					
		Long-distance Communications Mode Main line length: 500 m max. Branch line length: 6 m max. Total branch line length: 120 m max.					
	4-conductor VCTF cable	High-speed Communications Mode Main line length: 30 m max. Branch line length: 3 m max. Total branch line length: 30 m max.					
		Long-distance Communications Mode: Flexibly branched, provided that the total length of cable is a maximum of 200 m.					
	Special Flat Cable	High-speed Communications Mode Main line length: 30 m max. Branch line length: 3 m max. Total branch line length: 30 m max. When 4-conductor VCTF cable or Special Flat Cable is used to connect fewer than 16 Slaves, the main line can be up to 100 m long and the total branch line length can be up to 50 m in High-speed Communications Mode.  Long-distance Communications Mode: Flexibly branched, provided that the total length of cable is a maximum					
		of 200 m.					

# **Ordering Information**

#### International Standards

- 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.
- Contact your OMRON representative for further details and applicable conditions for these standards.

	Name	Specifications			No. of unit	Current consumption (A)			
Unit type		Communications functions	No. of I/O points	Max. Units mountable per CPU Unit	numbers allocated	5 V	24 V	Model	Standards
CJ1 Special I/O Units	CompoBus/S Master Unit	Remote I/O communications	256 max. (128 inputs and 128 outputs)		1 or 2	0.15	15 –	CJ1W-SRM21	UC1, N, L, CE,
			128 max. (64 inputs and 64 outputs)		(variable)	0.13			

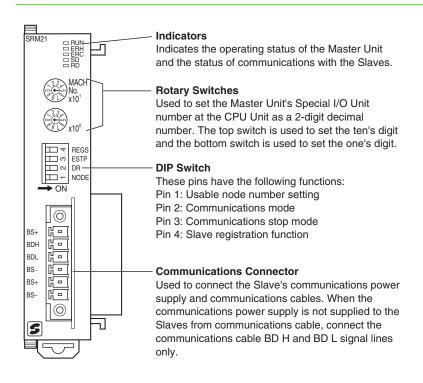
Note: This unit cannot be used with the Machine Automation Controller NJ-series.

# **Specifications**

I/O points	256 (128 inputs and 128 outputs) or 128 (64 inputs and 64 outputs) (Switch-selectable)
Applicable PLC models	CJ-series PLCs
Unit type	Special I/O Unit
Allocated words *	For 256 I/O: 20 words (8 for inputs, 8 for outputs, 4 for status) For 128 I/O: 10 words (4 for inputs, 4 for outputs, 2 for status)
No. of mountable Master Units	40
Node address	8 addresses per node
No. of connectable Slaves	32
Status information	Communications Error Flags, Participation Flags

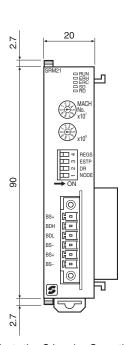
<sup>\*</sup> Uses Special I/O Unit Area (in CIO Area).

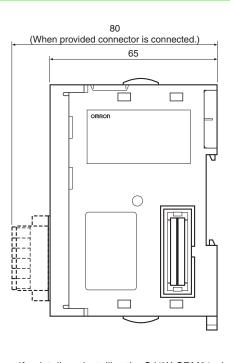
## **Part Names and Functions**



Dimensions (Unit: mm)







Refer to the *CJ-series Operation Manual* for details on installing the CJ1W-SRM21 when it is connected in a CJ-series CPU Rack or Expansion Rack.

## **Related Manual**

Cat. No.	Manual Name
W266	CompoBus/S Operation Manual
W318	CompoBus/S SRM1 Master Control Units Operation Manual
W377	CPM2C-S Programmable Controllers Operation Manual
W352	CPM2A I/O Link Units Operation Manual
W356	CPM2C I/O Link Units Operation Manual

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