

CS-series CompoBus/S Master Unit

CS1W-SRM21

CSM_CS1W-SRM21_DS_E_1_1

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

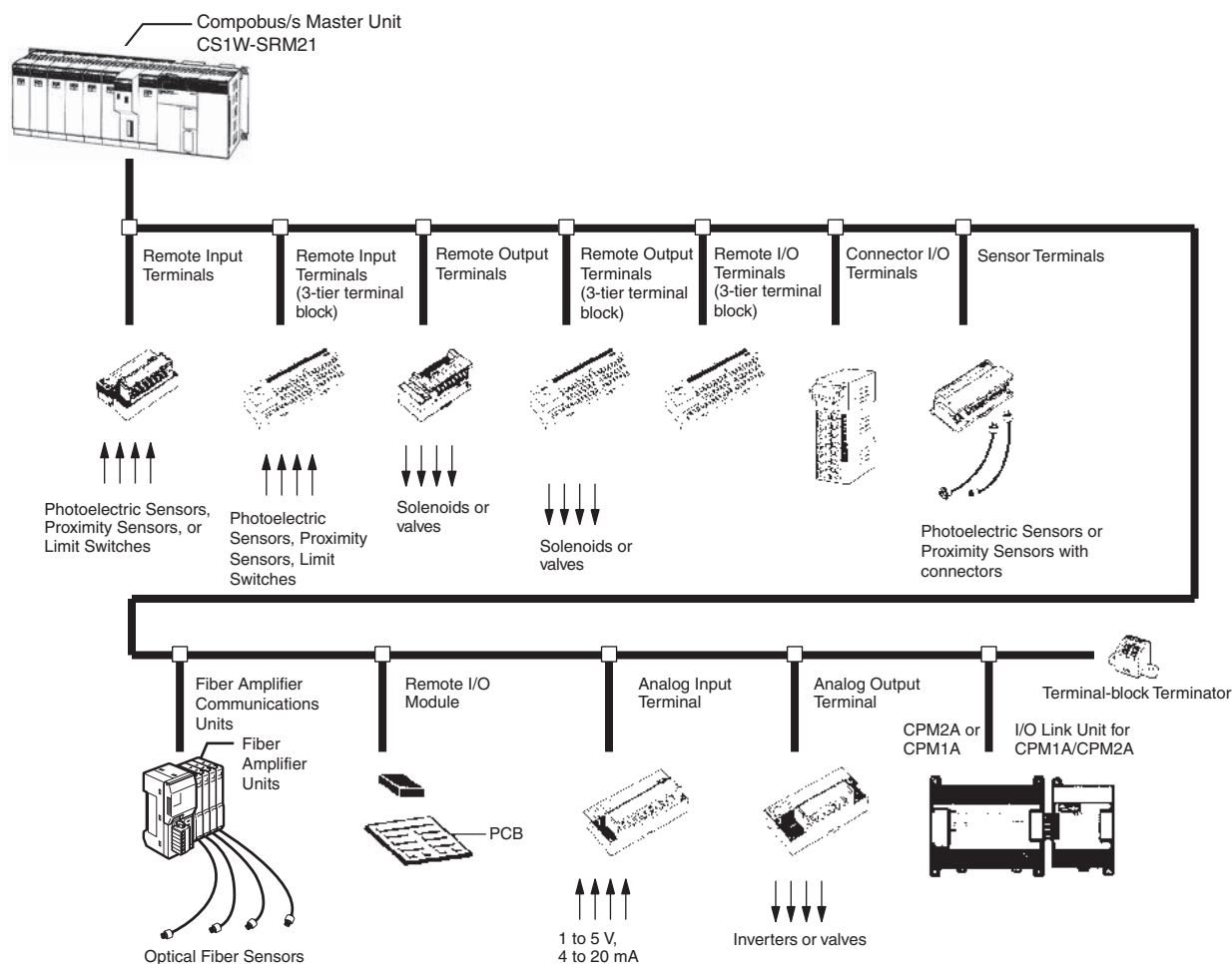


CS1W-SRM21

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).

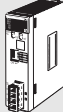
System Configuration



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 mm ² conductors (2 signal wires) Four 0.75 mm ² conductors (2 signal wires and 2 power supply wires)
	Special Flat Cable	Four 0.75 mm ² 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

Unit type	Name	Specifications			No. of unit numbers allocated	Current consumption (A)		Model	Standards
		Communications functions	No. of I/O points	Max. Units mountable per CPU Unit		5 V	24 V		
CS1 Special I/O Units	 CompoBus/S Master Unit	Remote I/O communications	256 max. (128 inputs and 128 outputs)	95	2	0.15	—	CS1W-SRM21	U, C, CE
			128 max. (64 inputs and 64 outputs)	96	1				

International Standards

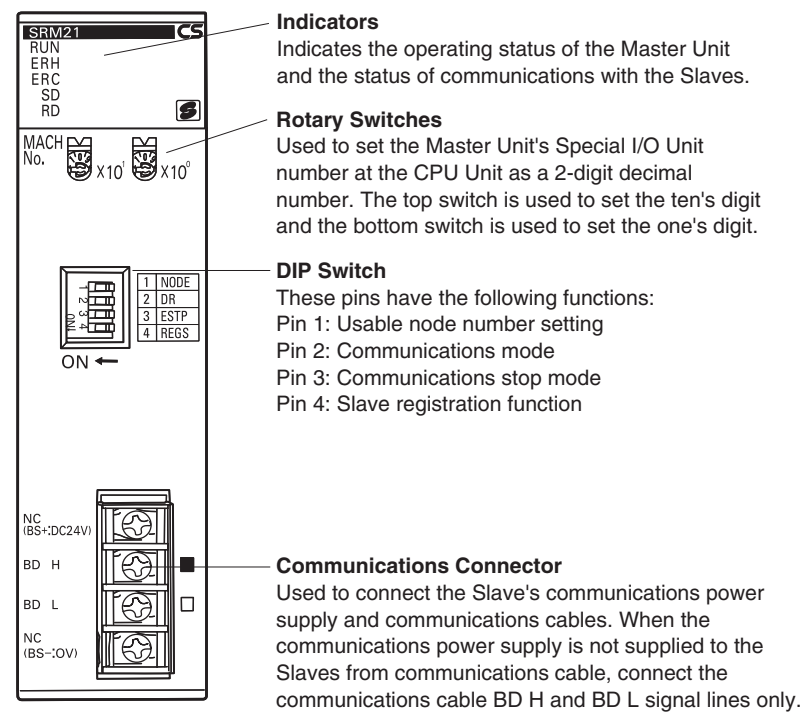
- The standards indicated in the "Standards" column are those current for UL, CSA, cULus, cUL, NK, and Lloyd standards and EC Directives as of the end of October 2008. (The standards are abbreviated as follows: U: UL, U1: UL Class I Division 2 Products for Hazardous Locations, C: CSA, US: cULus Class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

Specifications

Applicable PLC models	CS-series PLCs	
Unit type	CS1 Special I/O Unit	
Internal current consumption	5 VDC, 150 mA max.	
Weight	167g max.	
I/O points	256 (128 inputs and 128 outputs)	128 (64 inputs and 64 outputs)
Allocated words *	20 words (8 for inputs, 8 for outputs, 4 for status)	10 words (4 for inputs, 4 for outputs, 2 for status)
No. of mountable Master Units	95	96
Node address	8 addresses per node	
No. of connectable Slaves	32	
Status information	Communications Error Flags, Participation Flags	

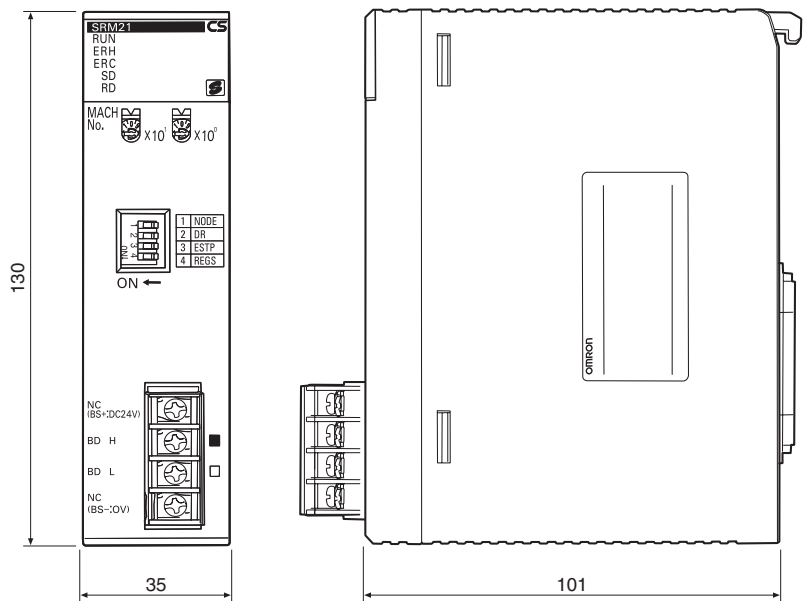
* Uses Special I/O Unit Area (in CIO Area).

Part Names and Functions



Dimensions

(Unit: mm)



Refer to the *CS-series Operation Manual* for details on installing the CS1W-SRM21 when it is connected in a CS-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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- Outdoor use, uses involving potential chemical contamination or electrical interference, or conditions or uses not described in this catalog.
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- Systems, machines, and equipment that could present a risk to life or property.

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2009.4

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