

## CompoBus/S IP67 I/O Modules SRT2-□D0□CL(-1)

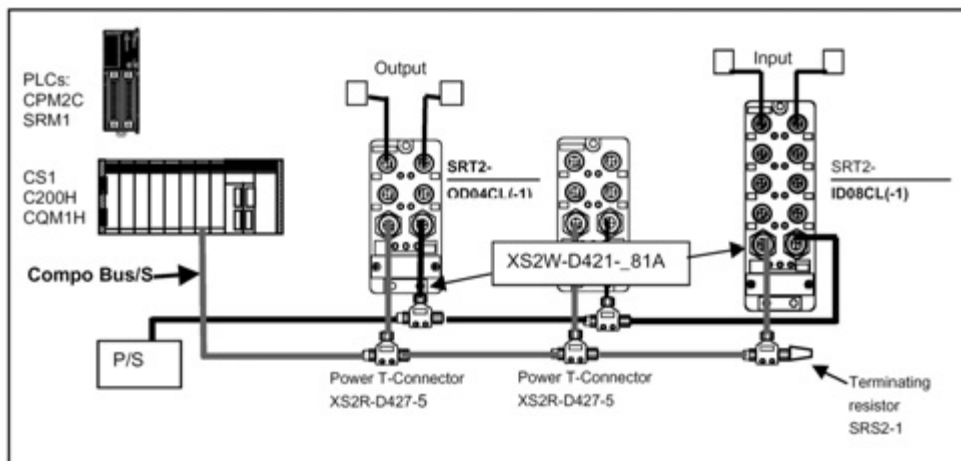
Waterproof input and output blocks make wiring a snap and replacement of sensors or actuators a quick twist of a connector. These IP67 rated blocks are perfect for plug-and-go applications and offer the high-speed performance of Omron's CompoBus/S distributed I/O network. 4-point and 8-point Input and Output blocks are available in both NPN and PNP versions. Pre-terminated cables prevent wiring errors and reduce installation time by over 50%.



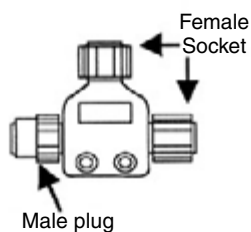
- IP67 sealing enable installations in wet environments
- M12 connectors for all I/O connections and power
- LEDs provide visible diagnostics information at the block location
- Input and output versions available; choose NPN or PNP models
- Supports both high speed and long distance modes of operation
- Remove and insert under power
- Securely mount using two screws through the mounting holes
- Compact size: 160 X 54 X 45mm (8-pt models)
- UL, CSA and CE rated

## Application

The diagram below shows how cables and I/O modules are connected to form a plug-and-go system.



## Power T-Connector XS2R-D427-5



## Specifications

### ■ Communication Media/Distance

Communications medium	4-core cable (VCTF 0.75 mm <sup>2</sup> -4)			
Communication distance	Communication mode	Trunk length	Branch line length	Total branch line length
	High-speed communication mode (See Note 1)	30 m max.	3 m max.	30 m max.
	Long distance communication mode (See Note 2)	Unrestricted branching up to a total cable length of 200 m		

- Note:**
1. If the number of slaves connected is 16 or less, communications are possible with a trunk line length of 100 m max. and a total branch length of 50 m max.
  2. There are no restrictions on the branching configuration, trunk line length, branch line length, or total branch length. Connect a terminating resistor to the node farthest from the Master.
  3. Use in combination with 2-core VCTF cables and dedicated flat cables is not possible.

## ■ General Block

Item	SRT2-ID04CL(-1)/SRT2-OD04CL(-1)	SRT2-ID08CL(-1)/SRT2-OD08CL(-1)
Communications power supply voltage	14 to 26.4 VDC supplied via Communications connector	
I/O power supply voltage	20.4 to 26.4 VDC (24 VDC -15%/+10%)	
Communications power supply current consumption	15 mA max.	20 mA max.
Ambient operating temperature	-10° to 55° C (with no icing)	
Ambient operating humidity	25% to 85% with no condensation	
Connector tightening torque	0.39 to 0.49 N•m	
Construction	IEC IP67	
Mounting method	Mounted using M5 screws	
Weight	Approx. 180g	Approx. 240g

## ■ Input

Item	SRT2-ID04CL(-1)	SRT2-ID08CL(-1)
Input type	SRT2-ID0□CL is a sinking block and uses NPN (sinking) devices SRT2-OD0□CL-1 is a sourcing block and uses PNP (sourcing) devices	
Input current	6.0 mA typical at 24 VDC 3.0 mA min. at 17 VDC	
Input impedance	4.4 kΩ	
ON delay time	1.5 ms max.	
OFF delay time	1.5 ms max.	
ON voltage	15 VDC	
OFF voltage	5 VDC	
OFF current	1.0 mA max.	
Number of circuits	4 points with 1 common	8 points with 1 common

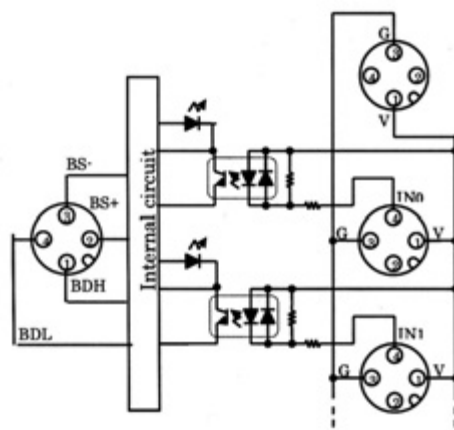
## ■ Output

Item	SRT2-OD04CL(-1)	SRT2-OD08CL(-1)
Output type	SRT2-OD0□CL is a sinking block and uses NPN (sinking) devices SRT2-OD0□CL-1 is a sourcing block and uses PNP (sourcing) devices	
Rated outputs current	0.5 A per point (2 A per common)	0.5 A per point (2.4 A per common)
Residual voltage	1.2V max.	
Leakage current	0.1 mA max.	
ON delay time	0.5 ms max.	
OFF delay time	1.5 ms max.	
Number of circuits	4 points with 1 common	8 points with 1 common

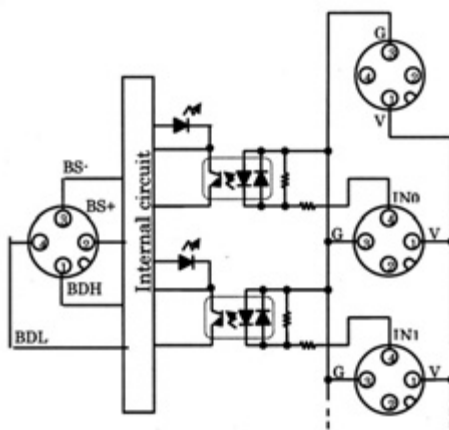
# Installation

## Internal Circuit Diagrams

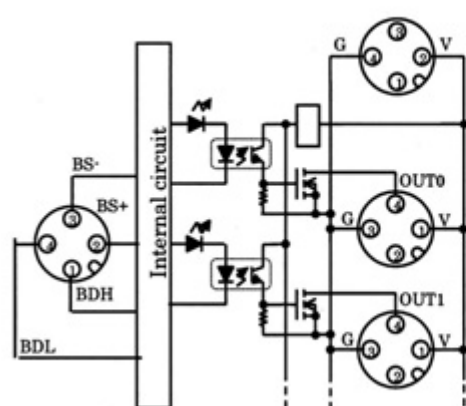
SRT2-ID0□CL(NPN)



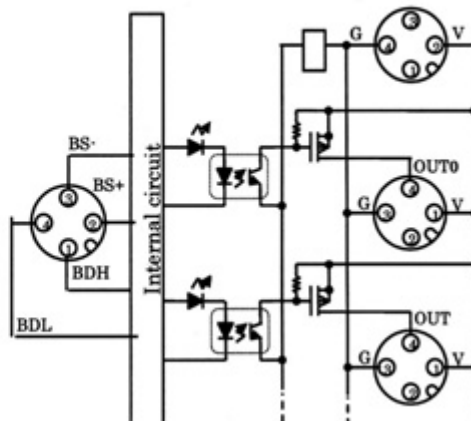
SRT2-ID0□CL(PNP)



SRT2-OD0□CL(NPN)

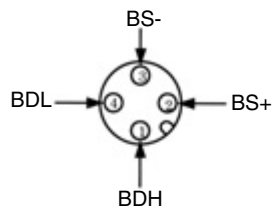
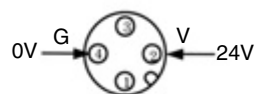


SRT2-OD0□CL(PNP)

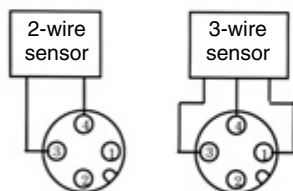


## ■ Connection Diagram for Connectors

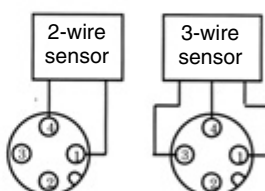
Communications Connector

Power Supply Connector  
(ID0□(-1))Power Supply Connector  
(OD0□(-1))

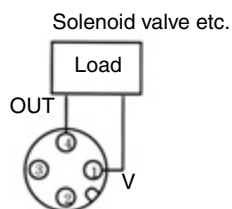
Input Connection (ID0□) (NPN)



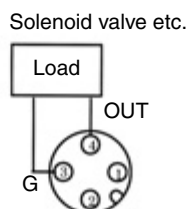
Input Connection (ID0□-1) (PNP)



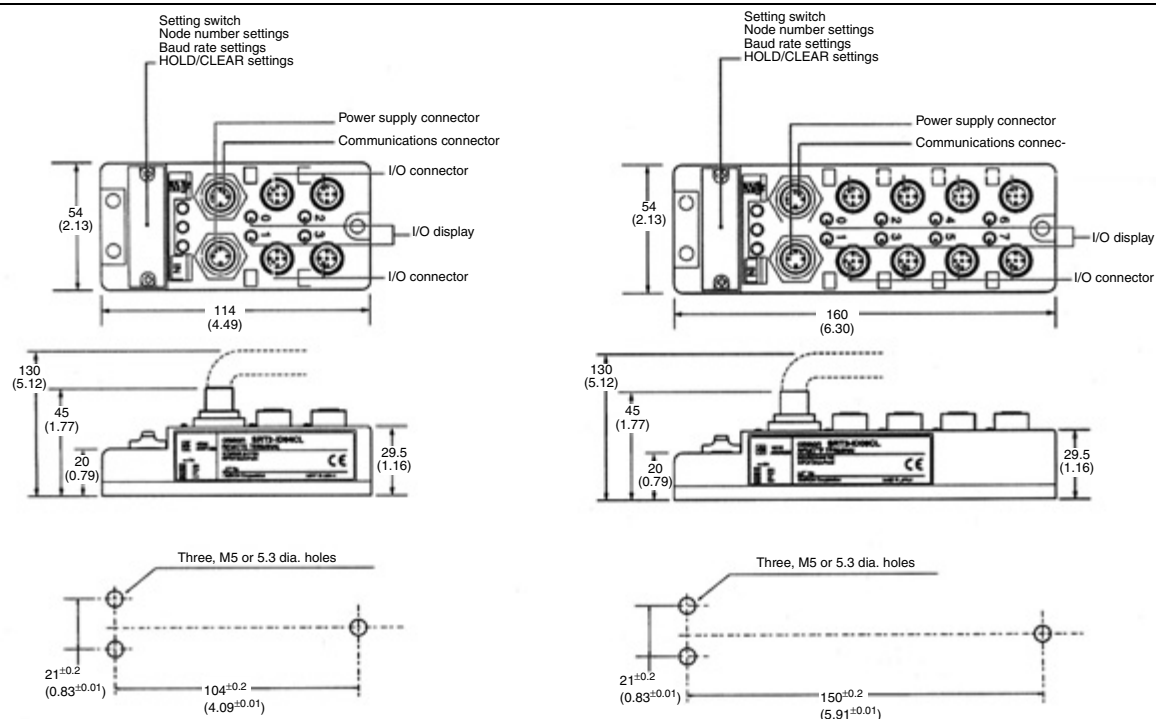
Output Connection (OD0□) (NPN)



Output Connection (OD0□-1) (PNP)





## Dimensions unit: mm (inch)









## Ordering Information

### ■ I/O Modules

Item	Number of points	I/O type	Part number
CompoBus/S IP67 input blocks 	4	NPN input points	SRT2-ID04CL
		PNP input points	SRT2-ID04CL-1
	8	NPN input points	SRT2-ID08CL
		PNP input points	SRT2-ID08CL-1
CompoBus/S IP67 output blocks 	4	XXX output points	SRT2-OD04CL
		XXX output points	SRT2-OD04CL-1
	8	XXX output points	SRT2-OD08CL
		XXX output points	SRT2-OD08CL-1

## ■ Applicable Connectors




### Power Cables and Connectors

Item	Description	Part Number
Power cable 	4 conductor cable with straight connectors on each end	XS2W-D421-□81-A
Power cable 	4 conductor cable with female straight connector on one end	XS2F-D421-□80-A_
Power cable 	4 conductor cable with male straight connector on one end	XS2H-D421-□80-A
Power T-connector 	4 conductor, 2 parallel circuit T-connector	XS2R-D427-5
Terminating resistor 	Circular style terminating resistor for Compobus/S	SRS2-1
Field-attachable, straight connector 	6mm, 4 conductor, straight, plug assembly	XS2G-D4S1
Field-attachable, right angle connector	6mm, 4 conductor, right angle, plug assembly	XS2G-D4S2

**Note** To complete the cable part numbers, use the following code to fill in the □:

C = 1 meter, D = 2 meters, G = 5 meters, J = 10 meters, \_ = leave blank, \_ = add ZZ (XS2F only)

## ■ I/O Connectors

I/O Connectors	Description	Part number
I/O Connectors 	4 conductor cable with straight connectors on each end	XS2W-D421-□81-A
	4 conductor cable right angle connector on each end	XS2W-D422-□81-A
	4 conductor cable, one straight connector, one right angle connector	XS2W-D423-□81-A
I/O Connectors 	4 conductor cable, one straight connector, stripped wires	XS2F-D421-□80-A_
Field-attachable, straight connector 	6 mm, 4 conductor, straight plug assembly	XS2G-D4S1

**Note** To complete the cable part numbers, use the following code to fill in the □:

C = 1 meter, D = 2 meters, G = 5 meters, J = 10 meters, \_ = leave blank, \_ = add (XS2F only)

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS. To convert millimeters into inches, divide by 25.4

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