

PROFIBUS-DP Gateway to Host Link / Compoway-F

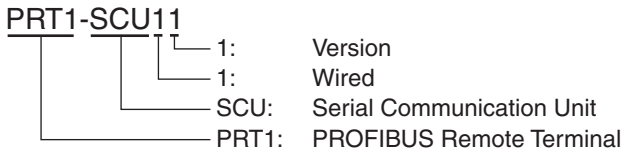
PRT1-SCU11

Omron's intelligent PROFIBUS gateway

- Supports all Compoway-F-equipped products (temperature controllers, digital panel meters, etc.).
- Can be used in Host Link mode for connecting MCW151-E.
- Cost-effectively integrates existing instruments into a PROFIBUS network.
- Requires no complex protocol conversion writing.
- Has function blocks for drag-and-drop configuration.
- Connects up to 15 instruments to a single PROFIBUS point.



Model Number Structure



Specifications

Unit Specifications

Storage temperature	-20 to +75 °C
Ambient temperature	0 to +55 °C
Ambient humidity	10 to 90% (non-condensing)
EMC compliance	EN 50081-2, EN 61131-2
Power supply	+ 24 VDC (+10% / -15%) Current consumption 80 mA (typical)
Weight	125 g (typical)
Communication interface	RS-485 based PROFIBUS-DP RS-422A Host Link RS-485 Compoway-F RS-232C Peripheral Port supporting connection to ThermoTools

Peripheral Port

- The Peripheral Port is intended to allow communication between Personal Computer based software (i.e. ThermoTools) and temperature controllers.
- Use OMRON's CS1W-CN226 cable to setup the connection.

PROFIBUS Cable

- Only use shielded twisted pair cable, line type A as specified by EN 50170 vol. 2 (e.g. Belden 3079A).
- The maximum cable length per bus segment (32 stations) depends on the selected communication speed:

Baud rate (kbit/s)	Length/segment
9.6, 19.2, 45.45, 93.75	1200
187.5	1000
500	400
1500	200
3000, 6000, 12000	100

PROFIBUS Communication Specifications

Applicable standard	EN 50170 vol. 2 (PROFIBUS-DP)
Type	PROFIBUS-DP Slave
Bus connector	9-pin sub-D female, RS-485
Bus termination	NOT included
Baud rates in kbit/s (auto-detect)	9.6, 19.2, 45.45, 93.75, 187.5, 500, 1500, 3000, 6000, 12000
PROFIBUS address range	01-99
Communication cable	Type A (EN 50170 vol. 2)
Minimum slave interval	0.5 ms
Input data	200 bytes maximum
Output data	200 bytes maximum
Supported DP functions (as responder)	Data_Exchange Chk_Cfg / Set_Prm Slave_Diag Global_Control (SYNC/FREEZE/CLEAR) RD_Inp / RD_Outp / Get_Cfg
GSD file	OC_0780.GSD

Host Link / Compoway-F Communication Specifications

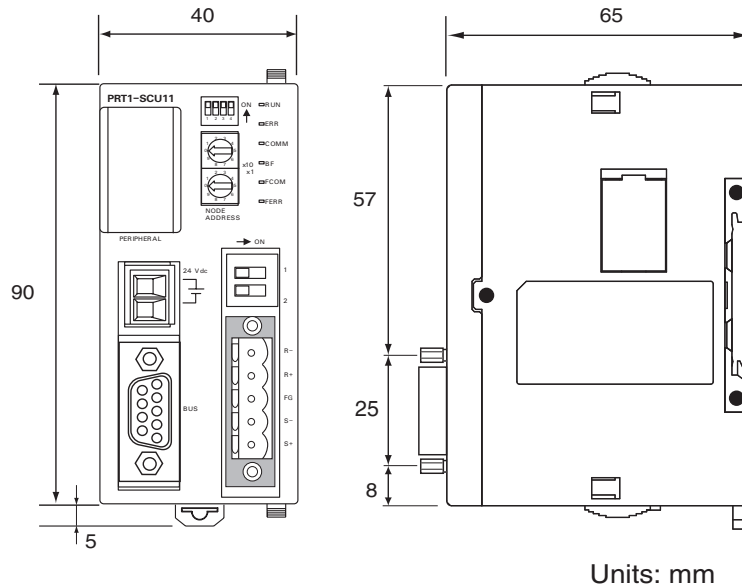
Host Link slaves supported	MCW151-E
Compoway-F slaves supported	E5AN / E5CN / E5EN / E5GN E5ZN E5ER / E5AR
Max. No of devices	15
Connection type	RS-422A (4-wire) for Host Link RS-485 (2-wire) for Compoway-F
Baud rates in kbit/s	9.6, 19.2, 34.8
Slave address range supported	1 ~ 15 (address and selected PROFIBUS I/O module must match)

I/O Configuration Options

Type	Device	Description		
Compoway-F	Fixed Comm. Blocks	Basic	E5□IN E5ZIN E5□R	1 word I/O per loop
		Extended	E5□IN	6 word in / 2 word out
			E5ZIN	11 word in / 3 word out
	E5□R		21 word in / 5 word out	
	Free Comm. Blocks	READ	See note	5 word in / 4 word out
		WRITE		2 word in / 7 word out
OPERATE			2 word in / 3 word out	
Host Link	MCW151-E	5, 10, 15 word I/O		

- Note:**
- Host Link and Compoway-F devices can not be intermixed on the same network.
 - Total maximum I/O size: 100 words I/O.
 - Other non-listed Compoway-F devices can be handled using Free Communication Block. Refer to the PRT1-SCU11 Operation Manual (W01E-EN-01).
 - Fixed Communication Blocks are pre-defined I/O blocks designed for the listed Compoway-F devices.
 - Free Communication Blocks require programming in the PROFIBUS master to assemble Compoway-F commands.

Dimensions



Cat. No. P05E-EN-01

In the interest of product improvement, specifications are subject to change without notice.

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