SmartSlice CompoNet Communications Unit

GRT1-CRT

The CompoNet-compliant unit can interface up to 256 inputs and 256 outputs at one node.

- Connects to up to 64 SmartSlice I/O Units.
- Concentrate I/O at one Slave: Up to 256 inputs and 256 outputs.
- Mix different I/O types at one Slave to help save space.
- Just set the node address for easy startup.
- Replace SmartSlice I/O Units online while continuing communications, minimizing system downtime.
- Smart function provided to monitor operating status, facilitating preventive maintenance and increasing operating rates.
- Register dummy SmartSlice I/O to reduce design work for future expansions.

Ordering Information

Name	Specifications	Model
CompoNet Communications Unit	Connects to up 64 SmartSlice I/O Units (Inputs: 32 bytes maximum, Outputs: 32 bytes maximum)	GRT1-CRT

Specifications

Item / Model	GRT1-DRT
Network power supply voltage	14 to 26.4 V DC
Unit power supply voltage	20.4 to 26.4 V DC (24 V +10%/−15%)
I/O power supply voltage	20.4 to 26.4 V DC * (24 V +10%/−15%)
Noise immunity	Conforms to IEC 61000-4-4, 2 kV (power line)
Vibration resistance+	10 to 60 Hz, 0.7-mm double amplitude 60 to 150 Hz: 50 m/s^2
Shock resistance	150 m/s^2
Dielectric strength	500 V AC between isolated circuits
Insulation resistance	20 MΩ min. between isolated circuits
Ambient operating temperature	−10 to 55°C (with no icing or condensation)
Ambient operating humidity	25% to 85%
Ambient operating environment	No corrosive gases
Ambient storage temperature	−25 to 65°C (with no icing or condensation)
Mounting method	35-mm DIN track mounting

* For power supply input to the Slice I/O Units.

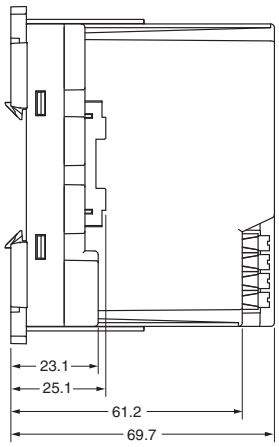
Specifications of the CompoNet Communications Unit

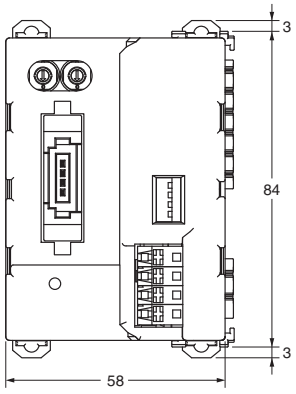
Item	Specification
I/O points	Inputs: 32 bytes maximum (including status and areas which the Unit does not use) Output: 32 bytes maximum (including areas which the Unit does not use)
Maximum number of SmartSlice I/O Units	64 (Do not count the End Unit.)
Status area	1 word (This word shows the status of the CompoNet Communications Unit.)
Parameter backup and restore	You can back up or restore a maximum of 2 KB of data for one CompoNet Communications Unit.
Baud rate	The CompoNet Communications Unit uses the baud rate of the CompoNet Master Unit (93. 75 kbps, 1.5 Mbps, 3 Mbps, or 4 Mbps).
Communications media	You can use these cables: Round Cable I (JIS C 3306, VCTF 2-core 0.75-mm^2 twisted-pair cable) Round Cable II (JIS C 3306, VCTF 4-core 0.75-mm^2 twisted-pair cable) Flat Cable I (without sheath, DCA4-4F10) **Note:** The Round Cable I, Round Cable II and Flat Cable I are different types of cable. You must use a Repeater to divide a branch line from the main line to use more than one type of cable.
Indicators	MS (green/red): This indicator shows the status of the CompoNet Communications Unit. NS (green/red): This indicator shows the communications status of the CompoNet network. TS (green/red): This indicator shows the status of the SmartSlice I/O Terminal. UNIT PWR (green): This indicator shows the status of the Unit power supply. I/O PWR (green): This indicator shows the status of the I/O power supply.
Switches	Rotary switches: There are two rotary switches. You use them to set the node address. DIP switch: There is one DIP switch with four pins. You use them to set the operating mode.
Connectors	There is one CompoNet communications connector.
Terminals	Clamp terminals for Unit power supply (24 VDC) Clamp terminals for I/O power supply (24 VDC)
Power consumption	2.5 W
Power consumption for each SmartSlice I/O Terminal block	80 W max. (You must divide the I/O Terminal into blocks to use more than 80 W.)
SmartSlice I/O Terminal blocks	Main block and a maximum of two expansion blocks
Current consumption for I/O power supply	4 A max.
Weight	137 g
Accessories	None

Dimensions

(Unit: mm)

GRT1-CRT





SmartSlice Ordering Information

Name		Appearance	Specifications	Model
CompoNet Communication Unit			Up to 64 Slice I/O Units can be connected (Inputs: 32 bytes maximum, Output: 32 bytes maximum)	GRT1-CRT
Slice I/O Units	Digital I/O Units		4 inputs NPN	GRT1-ID4
			4 inputs PNP	GRT1-ID4-1
			4 outputs NPN	GRT1-OD4
			4 outputs PNP	GRT1-OD4-1
			8 inputs NPN	GRT1-ID8
			8 inputs PNP	GRT1-ID8-1
			8 outputs NPN	GRT1-OD8
			8 outputs PNP	GRT1-OD8-1
			Relay Outputs 2 points	GRT1-ROS2
			AC Input 4 points	GRT1-IA4-1
				GRT1-IA4-2
	Analog I/O Units		Analog inputs (current/voltage)	GRT1-AD2
			Analog outputs (current)	GRT1-DA2C
			Analog output (voltage)	GRT1-DA2V
	Temperature Input (Resistance Thermometers)		Temperature input (Resistance thermometer:Pt100) 2 points	GRT1-TS2P
			Temperature input (Resistance thermometer:Pt1000) 2 points	GRT1-TS2PK
			Thermocouple Input 2 points	GRT1-TS2T
	Counter Units		Counter inputs: 1, External outputs: 1 NPN	GRT1-CT1
			Counter inputs: 1, External outputs: 1 PNP	GRT1-CT1-1
System Units	Turnback Units		Right Turnback Unit (Mounts to the right side of Slice I/O Terminal.)	GRT1-TBR
			Left Turnback Unit (Mounts to the left side of Slice I/O Terminal. Can supply power to I/O Units.)	GRT1-TBL
	Turnback Cable *1	---	1 m	GCN2-100
	I/O Power Feed Unit		Use when the total current consumption of the I/O Power Supply exceeds 4 A, or to make the I/O Power Supply a separate system.	GRT1-PD2
				GRT1-PD2G
				GRT1-PD8
				GRT1-PD8-1
			Use to add V/G terminals for I/O power supply.	GRT1-PC8
				GRT1-PC8-1
	End Unit *2		Necessary for terminating the Slice I/O Terminal.	GRT1-END
Option	Terminal Block	---	Package of 5 Terminal Blocks	GRT1-BT1-5

*1 Use the Turnback Cable together with the Turnback Units.
*2 The End Unit is sold separately. It is not provided with the Communications Unit.

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