

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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DeviceNet Communications Unit

DeviceNet-compliant Interface Unit with up to 1,024 I/O Points at **One Node**

- Connect up to 64 SmartSlice I/O Units.
- Consolidate a large capacity of I/O points into one Slave (up to 1,024 I/O points).
- Save space by configuring different I/O types using one Slave Unit.
- · Easily get the system started simply by setting the node addresses.
- Replace SmartSlice I/O Units online while maintaining communications. This helps minimize equipment downtime.
- Smart functions for monitoring equipment operating status. This helps improve preventive maintenance and the utilization rate.
- Registering SmartSlice I/O for planned future expansion decreases design work when changes are made. (Supported for unit version 2.0 or higher.)



Ordering Information

Name	Specifications	Model
DeviceNet Communications Unit	Up to 64 Slice I/O Units can be connected. (1,024 I/O points max.)	GRT1-DRT

General Specifications

Item Model	GRT1-DRT	
Network power supply voltage	11 to 25 V DC (Supplied from the communications connector)	
Unit power supply voltage	20.4 to 26.4 VDC (24 VDC -15%/+10%)	
I/O power supply voltage	20.4 to 26.4 VDC * (24 V +10%/-15%)	
Noise immunity	Conforms to IEC 61000-4-4, 2 kV (power line)	
Vibration resistance	stance 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 M Ω min. between isolated circuits	
Ambient operating temperature	-10°C to 55°C (with no icing or condensation)	
Ambient operating humidity	25% to 85%	
Ambient operating atmosphere	erating atmosphere No corrosive gases	
Ambient storage temperature	-25°C to 65°C (with no icing or condensation)	
Mounting method	DIN 35 mm-track mounting	

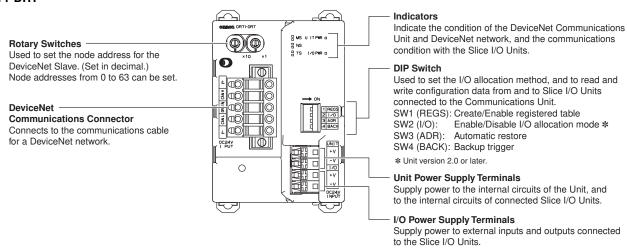
For power supply input to the Slice I/O Units.

DeviceNet Communications Unit Specifications

Item Model	GRT1-DRT	
I/O points	1,024 max. (128 bytes), including inputs and outputs	
Connectable Slice I/O Units	64 max.	
Communications with Slice I/O Units	64 Units max. in a horizontal connection configuration (for an extension of approx. 2 m max.) Power consumption is limited to 80 W per block, and the extension must be done using Turnback Cables (two 1-m cables max., for a distance of 2 m max.)	
Slice I/O Unit data capacity	(1) 0, 2, or 4 bits (2) 0 to 16 words (in word increments)	
Status flags	One word is allocated (Communications Unit Status Flags)	
Parameter back-up and restore functions	2 KB of data can be backed up and restored per Unit	
Message communications function	Supported	
Automatic baud rate detection	Supported	
Connector	1 DeviceNet open connector with screws Connectable with multi-drop connector	
Terminals	2 terminals for I/O power supply, 2 terminals for Unit power supply	
Power supply per 1 block	ly per 1 block 80 W max. (Unit power supply)	
I/O power supply consumption current	pply consumption current 4 A max.	
Weight	137 g	

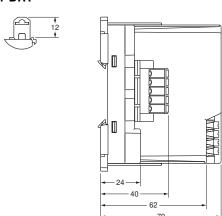
Nomenclature and Functions

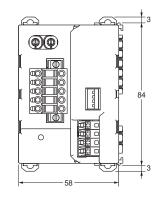
GRT1-DRT

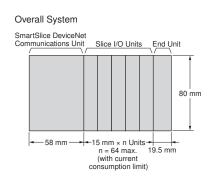


Dimensions (Unit: mm)

GRT1-DRT







Ordering Information

	Name	Appearance	Specifications	Model
DeviceNet (Communications Unit		Up to 64 SmartSlice I/O Units can be connected (1,024 I/O points).	GRT1-DRT
			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
	Digital I/O Units		8 inputs, PNP	GRT1-ID8-1
		1	8 outputs, NPN	GRT1-OD8
			8 outputs, PNP	GRT1-OD8-1
	1		2 relay outputs	GRT1-ROS2
			4 AC inputs	GRT1-IA4-1
SmartSlice			4 Ao Iliputo	GRT1-IA4-2
I/O Units			2 inputs (current or voltage)	GRT1-AD2
	Analog I/O Units		2 outputs (current)	GRT1-DA2C
		- 1	2 outputs (voltage)	GRT1-DA2V
		100	2 temperature inputs (Pt100 resistance thermometer)	GRT1-TS2P
	Temperature Input Unit (resistance thermometer)		2 temperature inputs (Pt1000 resistance thermometer)	GRT1-TS2PK
	,		2 thermocouple inputs	GRT1-TS2T
Counter Units	0		1 counter input, 1 external output, NPN	GRT1-CT1
	Counter Units		1 counter input, 1 external output, PNP	GRT1-CT1-1
	Turnback Units		For right-side turnback (Used to divide a SmartSlice I/O Terminal into blocks)	GRT1-TBR
			For left-side turnback (Used to divide a SmartSlice I/O Terminal into blocks)	GRT1-TBL
	Turnback Cable		Length: 1 m	GCN2-100
System Units	I/O Power Feed Unit		Used if the total current consumption of the I/O Power Supply exceeds 4 A or to use a separate I/O power supply.	GRT1-PD2
Units				GRT1-PD2G
				GRT1-PD8
				GRT1-PD8-1
			Used to add V and G terminals for the I/O power supply.	GRT1-PC8
				GRT1-PC8-1
	End Unit *1		Required at the end of SmartSlice I/O Terminals.	GRT1-END
Option	Terminal blocks		Terminal blocks (5 blocks)	GRT1-BT1-5
•	<u> </u>			-

^{*1.} The End Unit is sold separately. (End Units are not included with Communications Units.)
*2. Use the GCN2-100 as a set with the GRT1-TBR and GRT1-TBL.

Read and Understand This Catalog

Please read and understand this catalog before purchasing the products. Please consult your OMRON representative if you have any questions or comments

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