

Features

- Wiring reduction and real time control of distributed I/O
- Supporting Rnet, DeviceNet, Profibus-DP, MODBUS(RS-422/485), RAPIEnet(RJ-45)
- Various I/O (DC/TR/Relay) modules with the unit of 16/32 points



Digital I/O Specifications

Item	Input		Output			Mixed Module		
	DC (Sink/Source)		Transistor (Sink)		Relay	DC (Sink/Source)	Transistor (Sink)	
No. of Point	16	32	16	32	16	16	16	
Rated Input (Load Voltage)	DC 24 V		DC 24 V		DC 24 V/AC 110 V/220 V	DC 24 V	DC 24 V	
Input Current (Load Current)	7 mA		0.1 A/2 A, 0.5 A/3 A		2 A/5 A	7 mA 0.1 A/2 A, 0.5 A/3 A		
Response	Off → On	3 ms or less	3 ms or less		3 ms or less	3 ms or less	3 ms or less	
Time	On → Off	3 ms or less	3 ms or less		3 ms or less	3 ms or less	3 ms or less	
Common	16 points/COM		16 points/COM		16 points/COM	16 points/COM	16 points/COM	
Current Consumption	200 mA	300 mA	280 mA	380 mA	550 mA	350 mA		
Network	Rnet	GRL-D22C	GRL-D24C	GRL-TR2C1	GRL-TR4C1	GRL-RY2C	GRL-DT4C1	
	Profibus-DP	GPL-D22C	GPL-D24C	GPL-TR2C/TR2C1	GPL-TR4C/TR4C1	GPL-RY2C	GPL-DT4C/DT4C1	
	DeviceNet	GDL-D22C	GDL-D24C	GDL-TR2C/TR2C1	GDL-TR4C/TR4C1	GDL-RY2C	GDL-DT4C/DT4C1	
	Modbus	GSL-D22C	GSL-D24C	GSL-TR2C1	GSL-TR4C1	GSL-RY2C	GSL-DT4C1	
RAPIEnet	-	GEL-D24C	-	GEL-TR4C1	GEL-RY2C	-	GEL-DT4C1	

Note1) C Source, Rated current: 0.5A, terminal separated type
C1 Sink, Rated current: 0.5A terminal separated type

Analog I/O Specifications

Item	GPL-AV8C/GEL-AV8C	GPL-AC8C/GEL-AC8C	Item	GPL-DV4C/GEL-DV4C	GPL-DC4C/GEL-DC4C
Input Channels	8 channels		Output Channels	4 channels	
Analog Input	DC 1-5 V, 0-5 V, 0-10 V, -10-+10 V	0-20 mA, 4-20 mA, -20-20 mA	Digital Input	0-4000, 0-8000, -8000-8000	0-8000
Digital Output	0-4000, 0-8000, -8000-8000	0-4000, -8000-8000	Analog Output	DC 1-5 V, 0-5 V, 0-10 V, -10-+10 V	0-20 mA, 4-20 mA
Input Impedance	1 MΩ	250 Ω	Load Impedance	1 KΩ or more (0-5 V or 1-5 V) 2 KΩ or more (0-10 V or -10-10 V)	500 Ω or less
Max. Resolution	±15 V 1.25 mV	±30 mA 2.5 μA	Resolution	1.25 mV	2.5 μA
Accuracy	±0.3% (full scale, Ta=0-55 °C)	±0.3% (full scale, Ta=23 °C±5 °C) ±0.4% (full scale, Ta=0-55 °C)	Accuracy	±0.3% (full scale, Ta=0-55 °C)	±0.3% (full scale, Ta=23 °C±5 °C) ±0.4% (full scale, Ta=0-55 °C)
Conversion Speed	10 ms or less/8 channel		Conversion Speed	10 ms or less/4 channel	
Response Period	10 ms or less/8 channels + Transmission period [ms] Analog input/output terminal with FG→Insulation		Response Period	10 ms or less/8 channels + Transmission period [ms] Analog input/output terminal with FG→Insulation	
Insulation Method	Analog input/output terminal with Communication terminal→Insulation Analog input/output terminal with each channel→No insulation		Insulation Method	Analog input/output terminal with Communication terminal→Insulation Analog input/output terminal with each channel→No insulation	
External Power Supply	DC 24 V (21.6 ~ 26.4)		External Power Supply	DC 24 V (20.4 ~ 28.8)	
External Current Consumption	DC 24 V : 220 mA		External Current Consumption	210 mA	240 mA
Weight (kg)	0.313	0.313	Weight (kg)	0.314	0.322

Communication Specifications

Item	Rnet (LS Dedicated Network)	Profibus-DP	DeviceNet	MODBUS	RAPIEnet(RJ-45)
Protocol	LSIS dedicated protocol (Fnet for Remote)	Profibus-DP (RS-485/EN50170)	DeviceNet (CAN)	MODBUS (RS-422/485)	Fast Ethernet
Transmission Speed	1 Mbps	9.6 Kbps ~ 12 Mbps	125/250/500 Kbps	2.4 Kbps ~ 38.4 Kbps	100Mbps
Transmission Distance	750 m/segment	100 m ~ 1.2 km	500/250/125 m (Thin cable: 100 m)	500 m	100M
Topology	Bus Token	Bus	Trunk & Drop	Bus	CRC32
Transmission	Pass & Broadcast	Token Pass & Master/Slave (Poll)	CSMA/NBA (Poll, Cyclic, COS, Bit Strobel)	Master/Slave (Poll)	CSMA/CD
No. of Stations	32/segment (Input: 32, Output: 32)	32/segment, 99/network	64	32	64