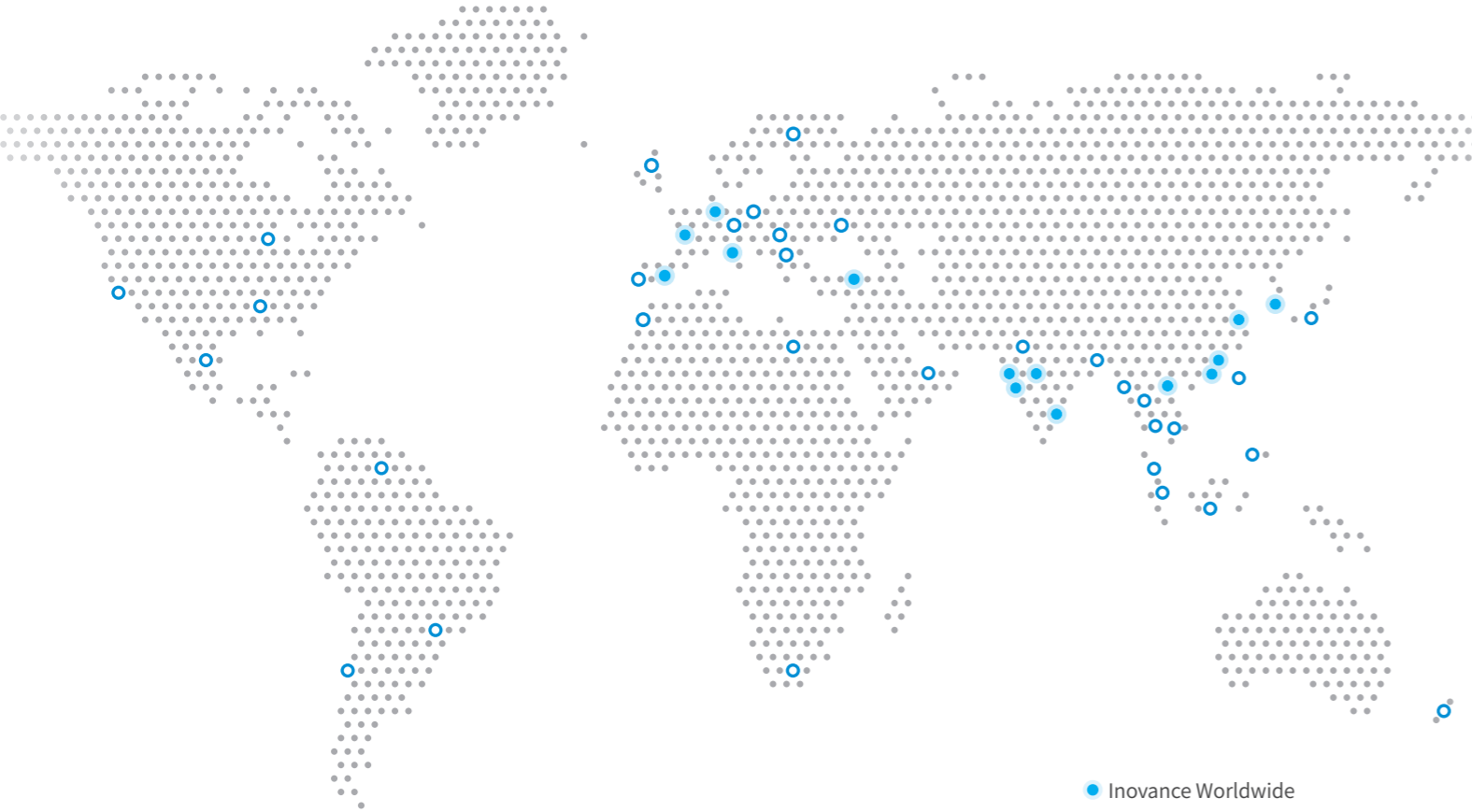




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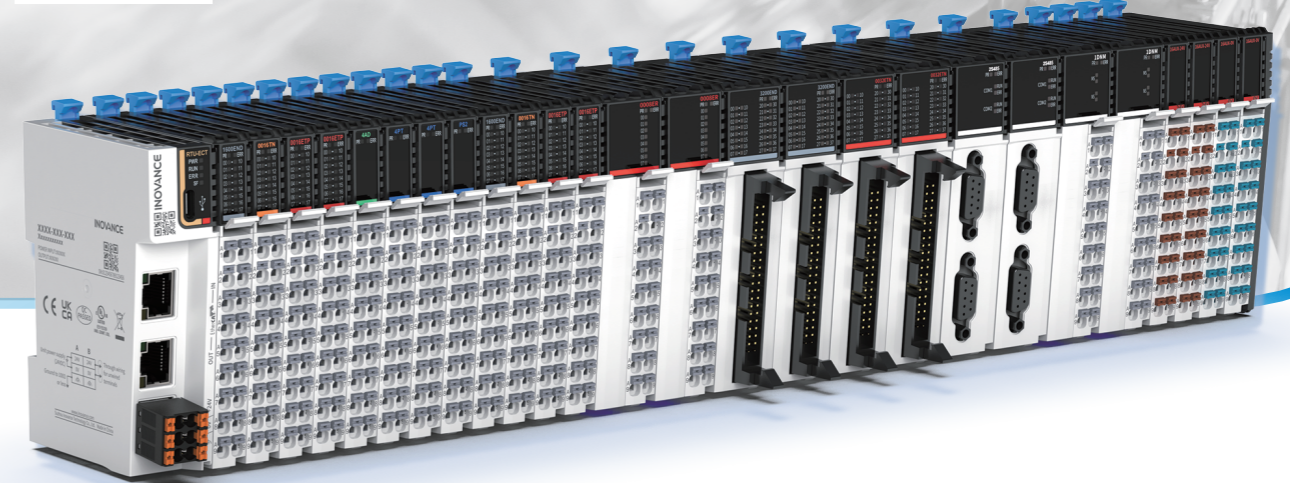
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INOVANCE

GL20 Series

Compact, flexible, high-speed distributed I/O system



Features & functions

- Compact footprint
- Easy installation, wiring and replacement
- Microsecond range response
- Conformal coating - compliant with 3C3 and 3S2
- Multiprotocol supported

EtherNet/IP™

EtherCAT™



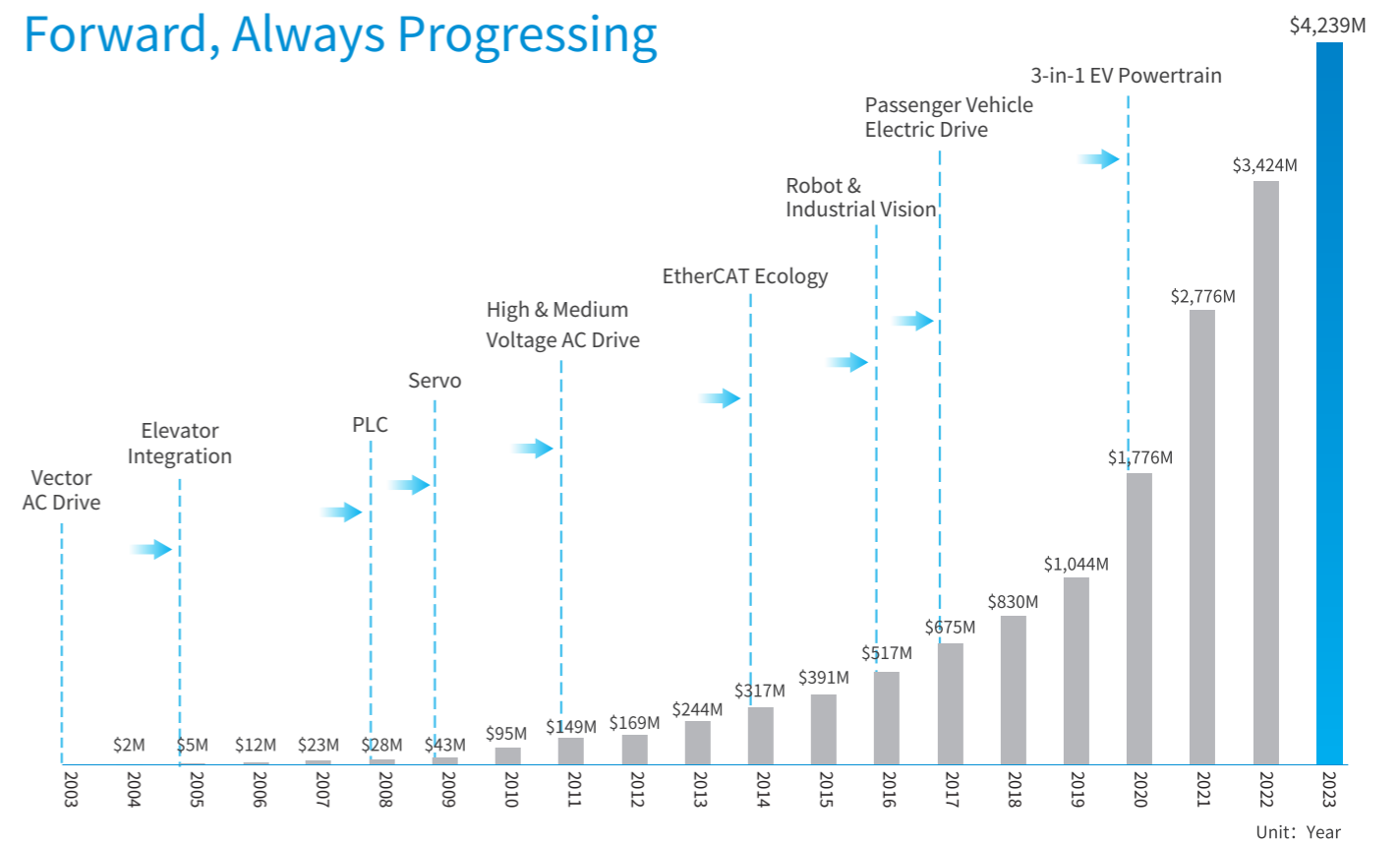


About Inovance

The Inovance Group, founded in 2003, is a rising star in the global industrial automation business and has revenues of \$4.2 in 2023. Inovance is headquartered in Shenzhen, China, and has built a global operation with offices and facilities in Germany, France, Italy, Spain, Turkey, India, and South Korea. Additionally, the company has a strong network of distribution partners around the world.

The company's flexible production techniques and expert understanding of all industry sectors - from plastics to printing to packaging to iron & steel production - have allowed it to establish globally leading industry-specific business units. Over the years, Inovance has built an engineering team with specialist expertise in industrial automation. This knowledge allows it to form strong partnerships with OEMs and end users, providing ongoing advice about how to get the most out of their automation solutions today, and how to stay prepared for the market and technology changes that are coming in future.

Forward, Always Progressing



| | | | | |
|------------------------|------------------------------------|----------------------------|--|-------------------------------------|
| | | | | |
| 2003 founded | IPO:2010 Shenzhen, China | 20,000 employees | Global network of offices and distributors | \$4.2+bn revenues in 2023 |

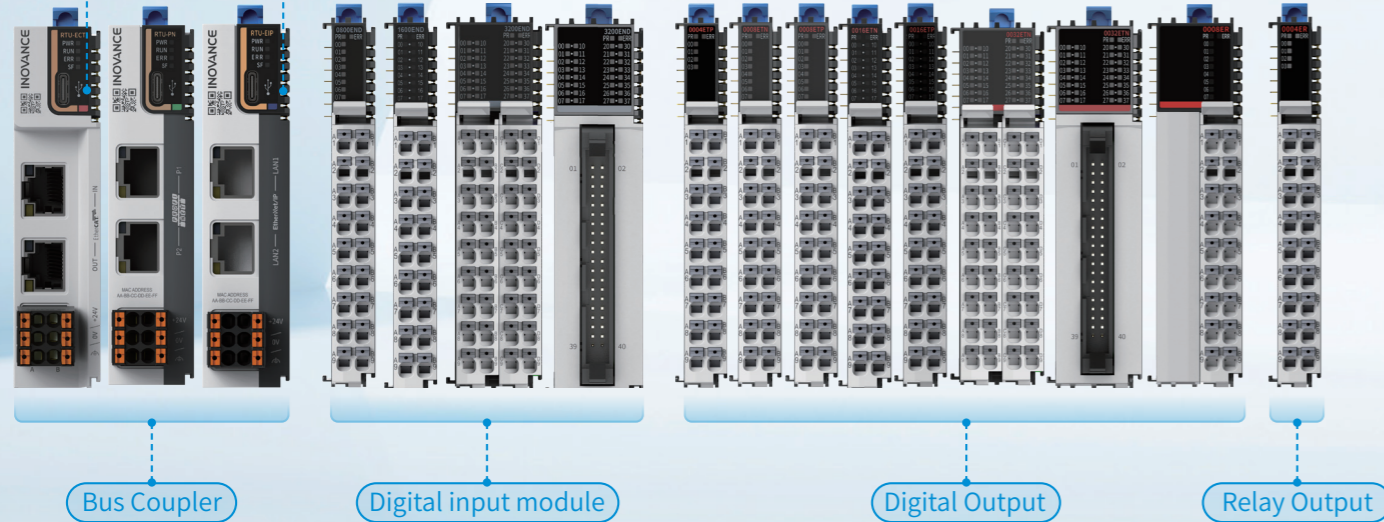
| | | | |
|---|--|--|---|
| Servo System | AC Drive | Industrial Robot | Controller |
| 4,500,000+ sets delivered in 2023 | 2,20,000+ sets delivered in 2023 | 22,000+ sets delivered in 2023 | 3,400,000+ sets delivered in 2023 |

GL20 Series I/O Module

Powerful, Stable, and Efficient Distributed I/O System

User guides and documents available by scanning the QR code

Firmware update available by connecting firmware update tools to the Type-C port

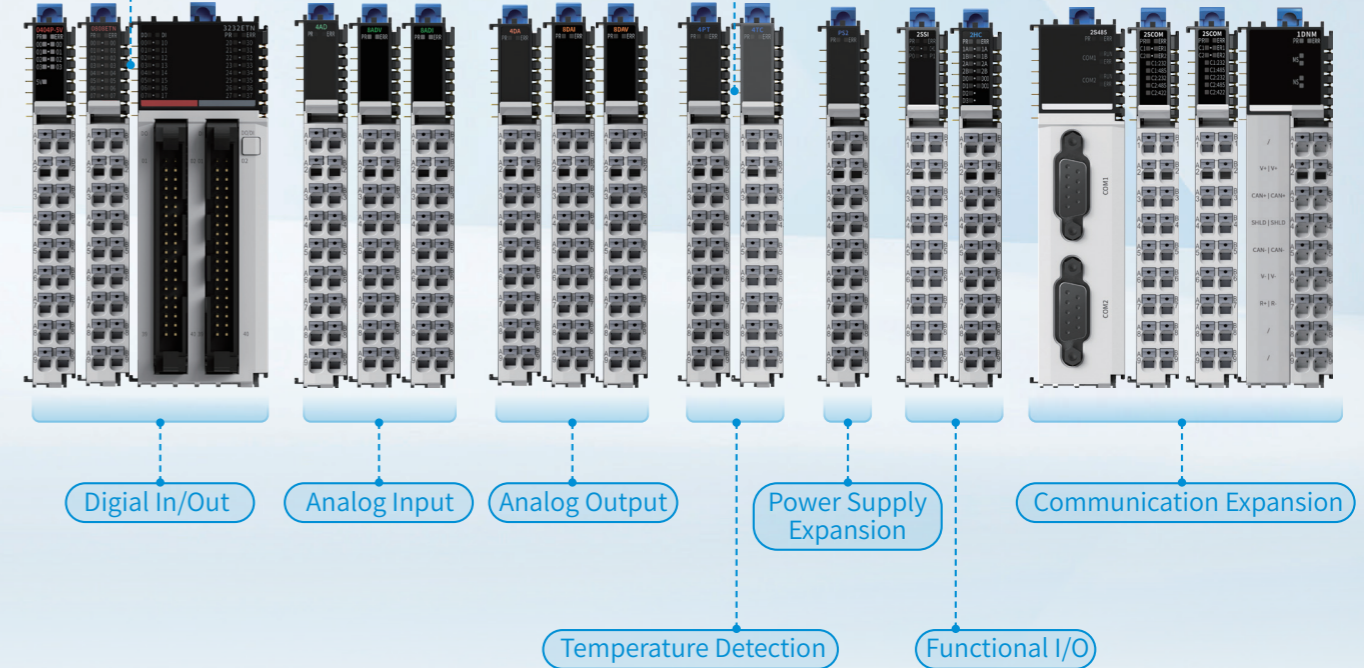


Independent status diagnosis and LED indicators; Colored letters for quick identification of I/O functions; Clear codes for easy wiring

D-BUS connector design with high reliability, protecting the connector from sweat corrosion



100 Mbit/s local bus



Colored coding for modules

■ DO
 ■ AO
 ■ DI
 ■ AI
 ■ Communication
 ■ Others



Compact Design

with a width as narrow as 12mm



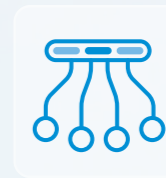
Screw-Free Wiring

using 1.5mm² push-in terminals



Stable & Reliable Connection

with a 10-year lifetime design



Multi-Protocol Support

providing a wide selection of devices

Functions and Features

Design lifetime up to ten years to guard long-term stable operation of the product

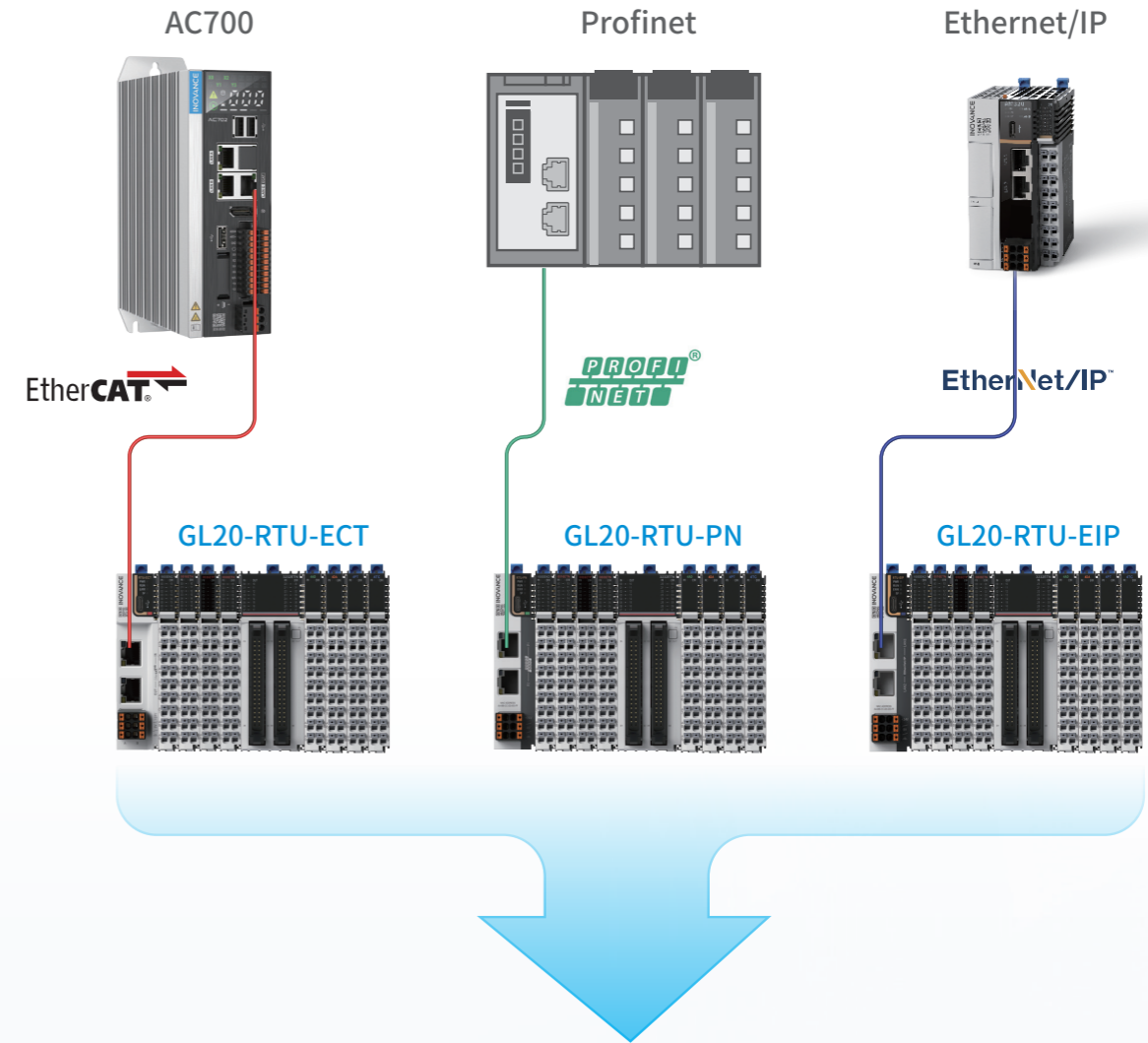
Terminals with large aperture to allow forcible wiring

D-BUS design with both sides clamped to improve reliability

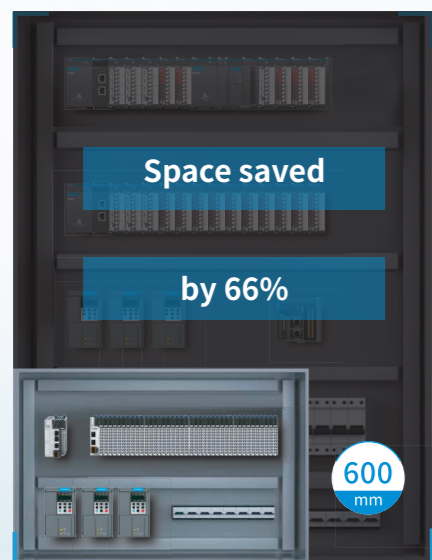
Wiring diagram printed on the module

Related documents available through scanning the QR code

Flexible system integration



Compact design and screw-free wiring



Original plan
1800 mm

Thickness reduced to 12 mm
2/3 cabinet space saved
Space utilization maximized



Groove-type mounting terminals to allow tool-free installation



Push-in terminals to allow easy wiring with a gentle push

Terminals with large aperture, 1.5 mm³ cable, to support forcible wiring



GL20 Series I/O Module Overview

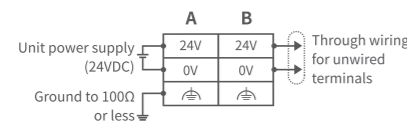
| Type | Model | Description | Terminal type | Certification |
|-----------------------|---------------------|---|----------------|------------------|
| Bus Coupler | GL20-RTU-ECT32-INT | EtherCAT bus coupler module, supports up to 32 expansion modules. | Push-in | CE, UL, UKCA, KC |
| | GL20-RTU-PN-INT | PROFINET bus coupler module, supports up to 32 expansion modules | Push-in | CE, UL, UKCA, KC |
| | GL20-RTU-EIP-INT | EtherNET/IP bus coupler module, supports up to 16 expansion modules | Push-in | CE |
| Digital Input | GL20-0800END-INT | 8 channel digital input module | Push-in | CE, UL, UKCA |
| | GL20-1600END-INT | 16 channel digital input module (NPN/PNP) | Push-in | CE, UL, UKCA, KC |
| | GL20-3200END-INT | 32 channel digital input module | Push-in | CE, KC |
| | GL20-3200END-M-INT | 32 channel digital input module (operated with the cable: XA3210A-40-L0.5M-01, T024-K) | Ejector header | CE, KC |
| Digital Output | GL20-0004ETP-2A-INT | 4 channel digital output module (PNP) | Push-in | CE |
| | GL20-0008ETN-INT | 8 channel digital output module (NPN) | Push-in | CE, UL, UKCA |
| | GL20-0008ETP-INT | 8 channel digital output module (PNP) | Push-in | CE, UL, UKCA |
| | GL20-0016ETN-INT | 16 channel digital output module (NPN) | Push-in | CE, UL, UKCA, KC |
| | GL20-0016ETP-INT | 16 channel digital output module (PNP) | Push-in | CE, UL, UKCA, KC |
| | GL20-0032ETN-INT | 32 channel digital output module (NPN) | Push-in | CE, KC |
| | GL20-0032ETN-M-INT | 32 channel digital output module (NPN) (operated with the cable: XA3210A-40-L0.5M-01, T024-K) | Ejector header | CE, KC |
| | GL20-0008ER-INT | 8 channel digital output module | Push-in | CE |
| Relay Output | GL20-0004ER-INT | 4 channel relay output module (channel separation) | Push-in | CE, UL, UKCA, KC |
| Digial In/Out | GL20-0404ETP-5V-INT | 4 channel DI/DO module(PNP) | Push-in | CE |
| | GL20-0808ETN-INT | 8 channel DI/DO module(NPN) | Push-in | CE, UL, UKCA, KC |
| | GL20-3232ETN-M-INT | 32 channel DI/DO module(NPN)(operated with the cable: XA3210A-40-L0.5M-01, T024-K) | Ejector header | CE, KC |
| Analog Input | GL20-4AD-INT | 4 channel analog input module (Resolution 16 bits, sampling time 250 μs) | Push-in | CE, UL, UKCA, KC |
| | GL20-8ADV-INT | 8 channel analog input module-voltage type | Push-in | CE |
| | GL20-8ADI-INT | 8 channel analog input module-current type | Push-in | CE |
| Analog Output | GL20-4DA-INT | 4 channel analog output module (Resolution 16 bits, sampling time 250 μs) | Push-in | CE, UL, UKCA, KC |
| | GL20-8DAI-INT | 8 channel analog output module-voltage type | Push-in | CE |
| | GL20-8DAV-INT | 8 channel analog output module-current type | Push-in | CE |
| Temperature Detection | GL20-4PT-INT | 4 channel thermal resistance inputs temperature detection module (Pt 100, Pt 500, Pt 1000, Cu 100, KTY 84, NTC 5K, NTC 10K) | Push-in | CE, UL, UKCA, KC |
| | GL20-4TC-INT | 4 channel thermocouple inputs temperature detection module (Thermocouple type: B,E,N,J,K,R,S,T) | Push-in | CE, UL, UKCA, KC |

| Type | Model | Description | Terminal type | Certification |
|-------------------------|---------------------|---|---------------|------------------|
| Power Supply Expansion | GL20-PS2-INT | Extra power supply module. The rated current of the internal bus of the coupler is 2A. If a higher current is required,a combination of the coupler and the power supply unit GL20-PS2 should be used | Push-in | CE, UL, UKCA, KC |
| Functional I/O | GL20-2SSI-INT | 2 channel encoder input module (SSI protocol) | Push-in | CE |
| | GL20-2HC-INT | 2 channel high-speed counting module | Push-in | CE |
| Communication Expansion | GL20-2S485-INT | 2 channel RS485 communication expansion module (Support Inovance PLC) | DB9 | CE, UL, KC |
| | GL20-2S485-MDB-INT | 2 channel RS485 communication expansion module (Support third-party PLC) | DB9 | CE, UL |
| | GL20-2SCOM-INT | 2 channel RS232/RS485/RS422 communication expansion module (Support Inovance PLC) | Push-in | CE |
| | GL20-2SCOM-MDB-INT | 2 channel RS232/RS485/RS422 communication expansion module (Support third-party PLC) | Push-in | CE |
| | GL20-1DNM-INT | 1 channel DeviceNet master station communication module | Push-in | CE |
| Options | XA3210A-40-L0.5M-01 | 40 Pin-I/O extension cable - 0.5m length (Required for GL20-XXXX-M) | - | CE |
| | XA3210A-40-L2M-01 | 40 Pin-I/O extension cable - 2m length (Required for GL20-XXXX-M) | - | CE |
| | T024-K | 32 point screw terminal block (Required for GL20-XXXX-M) | - | CE |

GL20 Coupler Modules

EtherCAT

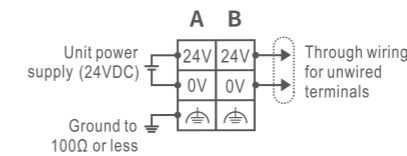
GL20-RTU-ECT32-INT



| Item | Specification |
|--|--|
| Certification | CE, UL, UKCA, KC |
| IP rating | IP20 |
| Dimensions (W × H × D) | 24mm × 100mm × 75mm |
| Weight | 91g |
| Ambient operating temperature | -20° C to 55° C (10% RH to 90% RH, non-condensing) |
| Rated voltage of terminal input power supply | 24V DC (20.4V DC to 28.8V DC) |
| Rated current of terminal input power supply | 0.6A (typical @ 24V) |
| Rated voltage of bus output power supply | 5V DC (4.75V DC to 5.25V DC) |
| Rated current of bus output power supply | 2A (typical @ 5V) |
| Power supply protection | Overcurrent protection, reverse-connection-proof, surge protection |
| Transmission distance | 100m |
| Minimum scan cycle | 125µs |
| Pollution degree | PD2 |
| Overvoltage category | I |
| Altitude | ≤ 2,000m (80 kPa) |
| EMC immunity level | Zone B, IEC 61131-2 |
| Input PDO | 1024 Byte |
| Output PDO | 1024 Byte |
| I/O Expansion | Up to 32 modules |

EtherNet/IP™

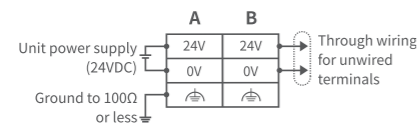
GL20-RTU-EIP-INT



| Item | Specification |
|--|--|
| Certification | CE |
| IP rating | IP20 |
| Dimensions (W × H × D) | 24mm × 100mm × 83mm |
| Weight | 123g |
| Ambient operating temperature | -20° C to 55° C (10% RH to 90% RH, non-condensing) |
| Rated voltage of terminal input power supply | 24V DC (20.4V DC to 28.8V DC) |
| Rated current of terminal input power supply | 0.6A (typical@24V) |
| Rated voltage of bus output power supply | 5V DC (4.75V DC to 5.25V DC) |
| Rated current of bus output power supply | 2A (typical@ 5V) |
| Power supply protection | Overcurrent protection, reverse-connection-proof, surge protection |
| Transmission distance | 100m |
| Minimum communication cycle | 1ms |
| Pollution degree | PD2 |
| Overvoltage category | I |
| Altitude | ≤ 2,000m (80kPa) |
| EMC immunity level | Zone B, IEC 61131-2 |
| Input PDO | 504 Byte |
| Output PDO | 504 Byte |
| I/O Expansion | Up to 16 modules |

GL20-RTU-PN-INT

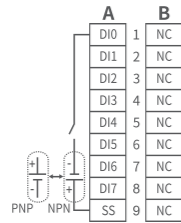
PROFINET



| Item | Specification |
|--|---|
| Certification | CE, UL, UKCA, KC |
| IP rating | IP20 |
| Dimensions (W × H × D) | 24mm × 100mm × 83mm |
| Weight | 100g |
| Ambient operating temperature | -20° C to 55° C (10% RH to 90% RH, non-condensing) |
| Rated voltage of terminal input power supply | 24V DC (20.4V DC to 28.8V DC) |
| Rated current of terminal input power supply | 0.6 A (typical@24 V) |
| Rated voltage of bus output power supply | 5V DC (4.75V DC to 5.25V DC) |
| Rated current of bus output power supply | 2 A (typical@ 5 V) |
| Power supply protection | Reverse-connection-proof, surge protection |
| Transmission distance | 100 m |
| Minimum communication cycle | 1ms |
| Pollution degree | PD2 |
| Overvoltage category | I |
| Altitude | ≤ 2,000 m (80 kPa) |
| EMC immunity level | Zone B, IEC 61131-2 |
| Input PDO | 1440 Byte |
| Output PDO | 1440 Byte |
| I/O Expansion | Up to 32 modules |

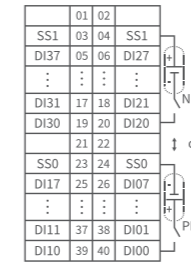
GL20 Digital Input Modules

GL20-0800END-INT



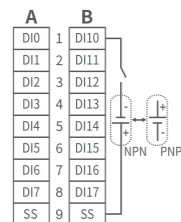
| Item | Specification |
|---------------------------------|---|
| Certification | CE, UL, UKCA |
| IP rating | IP20 |
| Dimensions (W × H × D) | 12mm × 100mm × 75mm |
| Ambient operating temperature | -20° C to 55° C (10% RH to 90% RH, non-condensing) |
| Rated bus input voltage | 5V DC (4.75V DC to 5.25V DC) |
| Rated bus input current | 100mA (typical@5V DC) |
| Input mode | Digital input |
| Input type | PNP/NPN |
| Input channels | 8 |
| Input voltage class | 24V DC ± 10% (21.6V DC to 26.4V DC) |
| Input current (typical) | 4mA (typical value at 24V) |
| ON voltage | > 15V DC |
| OFF Voltage | < 5V DC |
| Hardware response time (ON/OFF) | 100µs/100µs |
| Input impedance | Reference value 5.3k to 5.6k |
| Module power | 105mA |
| I/O bus coupler supports | GL20-RTU-ECT32-INT, GL20-RTU-EIP-INT, GL20-RTU-PN-INT |

GL20-3200END-INT



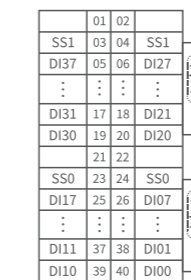
| Item | Specification |
|---------------------------------|---|
| Certification | CE, KC |
| IP rating | IP20 |
| Dimensions (W × H × D) | 24mm × 100mm × 75mm |
| Ambient operating temperature | -20° C to 55° C (10% RH to 90% RH, non-condensing) |
| Rated bus input voltage | 5V DC (4.75V DC to 5.25V DC) |
| Rated bus input current | 85mA (typical@5V DC) |
| Input mode | Digital input |
| Input type | PNP/NPN |
| Input channels | 32 |
| Input voltage class | 24V DC ± 10% (21.6V DC to 26.4V DC) |
| Input current (typical) | 4mA (typical value at 24V) |
| ON voltage | > 15V DC |
| OFF Voltage | < 5V DC |
| Hardware response time (ON/OFF) | 100µs/100µs |
| Input impedance | Reference value 5.3k to 5.6k |
| Module power | 85mA |
| I/O bus coupler supports | GL20-RTU-ECT32-INT, GL20-RTU-EIP-INT, GL20-RTU-PN-INT |

GL20-1600END-INT



| Item | Specification |
|---------------------------------|---|
| Certification | CE, UL, UKCA, KC |
| IP rating | IP20 |
| Dimensions (W × H × D) | 12mm × 100mm × 75mm |
| Ambient operating temperature | -20° C to 55° C (10% RH to 90% RH, non-condensing) |
| Rated bus input voltage | 5V DC (4.75V DC to 5.25V DC) |
| Rated bus input current | 60mA (typical@5V DC) |
| Input mode | Digital input |
| Input type | PNP/NPN |
| Input channels | 16 |
| Input voltage class | 24V DC ± 10% (21.6V DC to 26.4V DC) |
| Input current (typical) | 4mA (typical value at 24V) |
| ON voltage | > 15V DC |
| OFF Voltage | < 5V DC |
| Hardware response time (ON/OFF) | 100µs/100µs |
| Input impedance | Reference value 5.3k to 5.6k |
| Module power | 120mA |
| I/O bus coupler supports | GL20-RTU-ECT32-INT, GL20-RTU-EIP-INT, GL20-RTU-PN-INT |

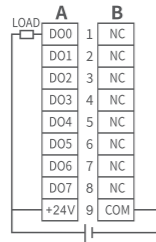
GL20-3200END-M-INT



| Item | Specification |
|---------------------------------|---|
| Certification | CE, KC |
| IP rating | IP20 |
| Dimensions (W × H × D) | 24mm × 100mm × 75mm |
| Ambient operating temperature | -20° C to 55° C (10% RH to 90% RH, non-condensing) |
| Rated bus input voltage | 5V DC (4.75V DC to 5.25V DC) |
| Rated bus input current | 125mA (typical@5V DC) |
| Input mode | Digital input |
| Input type | PNP/NPN |
| Input channels | 32 |
| Input voltage class | 24V DC ± 10% (21.6V DC to 26.4V DC) |
| Input current (typical) | 4mA (typical value at 24V) |
| ON voltage | > 15V DC |
| OFF Voltage | < 5V DC |
| Hardware response time (ON/OFF) | 100µs/100µs |
| Input impedance | Reference value 5.3k to 5.6k |
| Module power | 95mA |
| I/O bus coupler supports | GL20-RTU-ECT32-INT, GL20-RTU-EIP-INT, GL20-RTU-PN-INT |

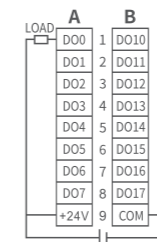
GL20 Digital Output Modules

GL20-0008ETN-INT



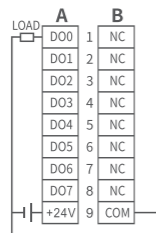
| Item | Specification |
|---------------------------------|---|
| Certification | CE, UL, UKCA |
| IP rating | IP20 |
| Dimensions (W × H × D) | 12mm × 100mm × 75mm |
| Ambient operating temperature | -20° C to 55° C (10% RH to 90% RH, non-condensing) |
| Rated bus input voltage | 5V DC (4.75V DC to 5.25V DC) |
| Rated bus input current | 100mA (typical@5V) |
| Rated terminal input voltage | 24V DC (20.4V DC to 28.8V DC) |
| Rated terminal input current | 50mA (typical@24V) |
| Output mode | Digital Output, Transistor Low Side Output |
| Output type | NPN |
| Output channels | 8 |
| Hardware response time (ON/OFF) | 100µs/100µs |
| Output voltage class | 24V DC ± 10% (21.6V DC to 26.4V DC) |
| Output load (resistive load) | 0.5A/point, 2A/module |
| Output load (inductive load) | 7.2W/point, 12W/module |
| Output load (lamp load) | 5W/point, 9W/module |
| Module power | 115mA |
| I/O bus coupler supports | GL20-RTU-ECT32-INT, GL20-RTU-EIP-INT, GL20-RTU-PN-INT |

GL20-0016ETN-INT



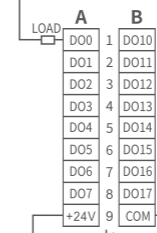
| Item | Specification |
|---------------------------------|---|
| Certification | CE, UL, UKCA |
| IP rating | IP20 |
| Dimensions (W × H × D) | 12mm × 100mm × 75mm |
| Ambient operating temperature | -20° C to 55° C (10% RH to 90% RH, non-condensing) |
| Rated bus input voltage | 5V DC (4.75V DC to 5.25V DC) |
| Rated bus input current | 145mA (typical@5V) |
| Rated terminal input voltage | 24V DC (20.4V DC to 28.8V DC) |
| Rated terminal input current | 100mA |
| Output mode | Digital Output, Transistor Low Side Output |
| Output type | NPN |
| Output channels | 16 |
| Hardware response time (ON/OFF) | 100µs/100µs |
| Output voltage class | 24V DC ± 10% (21.6V DC to 26.4V DC) |
| Output load (resistive load) | 0.5A/point, 4A/module |
| Output load (inductive load) | 7.2W/point, 24W/module |
| Output load (lamp load) | 5W/point, 18W/module |
| Module power | 145mA |
| I/O bus coupler supports | GL20-RTU-ECT32-INT, GL20-RTU-EIP-INT, GL20-RTU-PN-INT |

GL20-0008ETP-INT



| Item | Specification |
|---------------------------------|---|
| Certification | CE, UL, UKCA |
| IP rating | IP20 |
| Dimensions (W × H × D) | 12mm × 100mm × 75mm |
| Ambient operating temperature | -20° C to 55° C (10% RH to 90% RH, non-condensing) |
| Rated bus input voltage | 5V DC (4.75V DC to 5.25V DC) |
| Rated bus input current | 85mA (typical@5V) |
| Rated terminal input voltage | 24V DC (20.4V DC to 28.8V DC) |
| Rated terminal input current | 1A (typical@24V) |
| Output mode | Digital output, Transistor High Side Output |
| Output type | PNP |
| Output channels | 8 |
| Hardware response time (ON/OFF) | 100 µs/100 µs |
| Output voltage class | 24V DC ± 10% (21.6V DC to 26.4V DC) |
| Output load (resistive load) | 0.5A/point, 1A/module |
| Output load (inductive load) | 7.2W/point, 7.2W/module |
| Output load (lamp load) | 5 W/point, 5 W/module |
| Module power | 80mA |
| I/O bus coupler supports | GL20-RTU-ECT32-INT, GL20-RTU-EIP-INT, GL20-RTU-PN-INT |

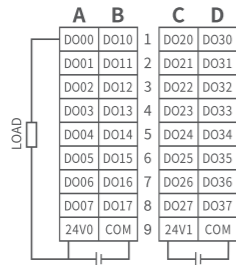
GL20-0016ETP-INT



| Item | Specification |
|---------------------------------|---|
| Certification | CE, UL, UKCA, KC |
| IP rating | IP20 |
| Dimensions (W × H × D) | 12mm × 100mm × 75mm |
| Ambient operating temperature | -20° C to 55° C (10% RH to 90% RH, non-condensing) |
| Rated bus input voltage | 5V DC (4.75V DC to 5.25V DC) |
| Rated bus input current | 100 mA (typical@5 V) |
| Rated terminal input voltage | 24V DC (20.4V DC to 28.8V DC) |
| Rated terminal input current | 2 A (typical@24 V) |
| Output mode | Digital output, Transistor High Side Output |
| Output type | PNP |
| Output channels | 16 |
| Hardware response time (ON/OFF) | 100µs/100µs |
| Output voltage class | 24V DC ± 10% (21.6V DC to 26.4V DC) |
| Output load (resistive load) | 0.5A/point, 2A/module |
| Output load (inductive load) | 7.2W/point, 12W/module |
| Output load (lamp load) | 5W/point, 18W/module |
| Module power | 100mA |
| I/O bus coupler supports | GL20-RTU-ECT32-INT, GL20-RTU-EIP-INT, GL20-RTU-PN-INT |

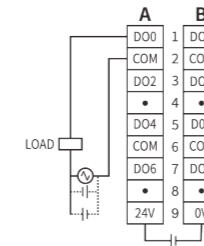
GL20 Digital Output Modules

GL20-0032ETN-INT



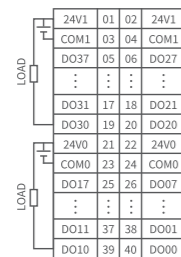
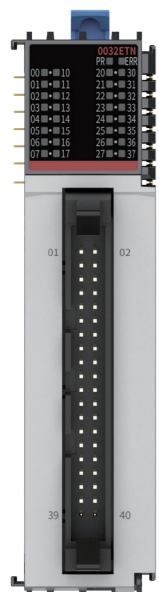
| Item | Specification |
|---------------------------------|---|
| Certification | CE, KC |
| IP rating | IP20 |
| Dimensions (W × H × D) | 24mm × 100mm × 75mm |
| Ambient operating temperature | -20° C to 55° C (10% RH to 90% RH, non-condensing) |
| Rated bus input voltage | 5V DC (4.75V DC to 5.25V DC) |
| Rated bus input current | 80 mA (typical@5 V) |
| Rated terminal input voltage | 24V DC (20.4V DC to 28.8V DC) |
| Rated terminal input current | 100 mA (typical@24 V) |
| Output mode | Digital Output, Transistor Low Side Output |
| Output type | NPN |
| Output channels | 32 |
| Hardware response time (ON/OFF) | 100 μs/100 μs |
| Output voltage class | 24V DC ±10% (21.6V DC to 26.4V DC) |
| Output load (resistive load) | 0.5 A/point, 8 A/module |
| Output load (inductive load) | 7.2 W/point, 48 W/module |
| Output load (lamp load) | 5 W/point, 36 W/module |
| Module power | 80 mA |
| I/O bus coupler supports | GL20-RTU-ECT32-INT, GL20-RTU-EIP-INT, GL20-RTU-PN-INT |

GL20-0008ER-INT



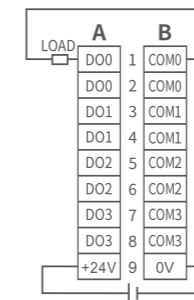
| Item | Specification |
|---------------------------------|---|
| Certification | CE, UL, UKCA, KC |
| IP rating | IP20 |
| Dimensions (W × H × D) | 24mm × 100mm × 75mm |
| Ambient operating temperature | -20° C to 55° C (10% RH to 90% RH, non-condensing) |
| Rated bus input voltage | 5V DC (4.75V DC to 5.25V DC) |
| Rated bus input current | 110mA (typical@5V) |
| Rated terminal input voltage | 24V DC (21.6V DC to 26.4V DC) |
| Rated terminal input current | 60mA (typical@24V) |
| Output mode | Digital Output, Relay Output |
| Output type | Dry contact |
| Output channels | 8 |
| Hardware response time (ON/OFF) | 15ms/15ms |
| Output voltage class | 250V AC/30V DC |
| Output load (resistive load) | 2A/point, 8A/module |
| Output load (inductive load) | 1A/point, 4A/module |
| Output load (lamp load) | 30W/point, 120W/module |
| Module power | 110mA |
| I/O bus coupler supports | GL20-RTU-ECT32-INT, GL20-RTU-EIP-INT, GL20-RTU-PN-INT |

GL20-0032ETN-M-INT



| Item | Specification |
|---------------------------------|---|
| Certification | CE, KC |
| IP rating | IP20 |
| Dimensions (W × H × D) | 24mm × 100mm × 75mm |
| Ambient operating temperature | -20° C to 55° C (10% RH to 90% RH, non-condensing) |
| Rated bus input voltage | 5V DC (4.75V DC to 5.25V DC) |
| Rated bus input current | 85 mA (typical@5 V) |
| Rated terminal input voltage | 24V DC (20.4V DC to 28.8V DC) |
| Rated terminal input current | 100 mA (typical@24 V) |
| Output mode | Digital Output, Transistor Low Side Output |
| Output type | NPN |
| Output channels | 32 |
| Hardware response time (ON/OFF) | 100 μs/100 μs |
| Output voltage class | 24V DC ±10% (21.6V DC to 26.4V DC) |
| Output load (resistive load) | 0.5 A/point, 8 A/module |
| Output load (inductive load) | 7.2 W/point, 48 W/module |
| Output load (lamp load) | 5 W/point, 36 W/module |
| Module power | 85 mA |
| I/O bus coupler supports | GL20-RTU-ECT32-INT, GL20-RTU-EIP-INT, GL20-RTU-PN-INT |

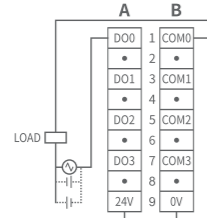
GL20-0004ETP-2A-INT



| Item | Specification |
|---------------------------------|---|
| Certification | CE |
| IP rating | IP20 |
| Dimensions (W × H × D) | 12mm × 100mm × 75mm |
| Ambient operating temperature | -20° C to 55° C (10% RH to 90% RH, non-condensing) |
| Rated bus input voltage | 5V DC (4.75V DC to 5.25V DC) |
| Rated bus input current | < 100 mA (typical@5 V) |
| Rated terminal input voltage | 24V DC (20.4V DC to 28.8V DC) |
| Rated terminal input current | 8 A (typical@24 V) |
| Output mode | Digital output, Transistor High Side Output |
| Output type | PNP |
| Output channels | 4 |
| Hardware response time (ON/OFF) | 100 μs/100 μs |
| Output voltage class | 24V DC (20.4V DC to 28.8V DC) |
| Output current (typical) | 8 A (typical value at 24 V) |
| Output load (resistive load) | 2 A/point, 8 A/module |
| Output load (inductive load) | 28.8 W/point, 57.6 W/module |
| Output load (lamp load) | 10 W/point |
| Module power | 80 mA |
| I/O bus coupler supports | GL20-RTU-ECT32-INT, GL20-RTU-EIP-INT, GL20-RTU-PN-INT |

GL20 Relay Output Module

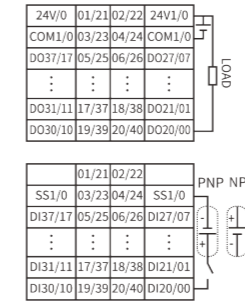
GL20-0004ER-INT



| Item | Specification |
|---------------------------------|---|
| Certification | CE, UL, UKCA |
| IP rating | IP20 |
| Dimensions (W × H × D) | 12mm × 100mm × 75mm |
| Ambient operating temperature | -20° C to 55° C (10% RH to 90% RH, non-condensing) |
| Rated bus input voltage | 5V DC (4.75V DC to 5.25V DC) |
| Rated bus input current | 85 mA (typical@5 V) |
| Rated terminal input voltage | 24V DC (20.4V DC to 28.8V DC) |
| Rated terminal input current | 30mA (typical@24V) |
| Output mode | Digital Output, Relay Output |
| Output type | Dry contact |
| Output channels | 4 |
| Hardware response time (ON/OFF) | 15ms/15ms |
| Output voltage class | 250V AC/30V DC |
| Output load (resistive load) | 2A/point, 8A/module |
| Output load (inductive load) | 1A/point, 4A/module |
| Output load (lamp load) | 30W/point, 120W/module |
| Module power | 90 mA |
| I/O bus coupler supports | GL20-RTU-ECT32-INT, GL20-RTU-EIP-INT, GL20-RTU-PN-INT |

GL20 DI/DO Modules

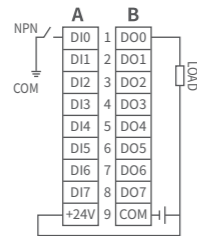
GL20-3232ETN-M-INT



| Item | Specification |
|---------------------------------|---|
| Certification | CE, KC |
| IP rating | IP20 |
| Dimensions (W × H × D) | 36mm × 100mm × 76.1mm |
| Ambient operating temperature | -20° C to 55° C (10% RH to 90% RH, non-condensing) |
| Rated bus input voltage | 5V DC (4.75V DC to 5.25V DC) |
| Rated bus input current | 250 mA (typical@5 V) |
| Rated terminal input voltage | 24V DC (20.4V DC to 28.8V DC) |
| Rated terminal input current | 24 mA (typical@24 V) |
| Input/Output mode | Digital input/ Digital output, transistor low-side output |
| Input/Output channels | 32 input/32 output |
| Input/Output type | NPN, PNP input/NPN output |
| Hardware response time (ON/OFF) | 100 μs/100 μs |
| Input/Output voltage class | 24 V DC ± 10% (21.6 V DC to 26.4 V DC) |
| Input current (typical) | 4 mA (typical@24 V) |
| Output load (resistive load) | 0.5 A/point, 8 A/module |
| Output load (inductive load) | 7.2 A/point, 48 A/module |
| Output load (lamp load) | 5 W/point, 36 W/module |
| Module power | 250 mA |
| I/O bus coupler supports | GL20-RTU-ECT32-INT, GL20-RTU-EIP-INT, GL20-RTU-PN-INT |

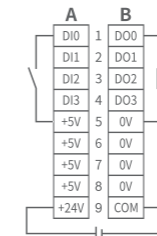
GL20 DI/DO Modules

GL20-0808ETN-INT



| Item | Specification |
|---------------------------------|---|
| Certification | CE, UL, UKCA, KC |
| IP rating | IP20 |
| Dimensions (W × H × D) | 12mm × 100mm × 75mm |
| Ambient operating temperature | -20° C to 55° C (10% RH to 90% RH, non-condensing) |
| Rated bus input voltage | 5V DC (4.75V DC to 5.25V DC) |
| Rated bus input current | 85mA (typical@5V) |
| Rated terminal input voltage | 24V DC (20.4V DC to 28.8V DC) |
| Rated terminal input current | 50mA (typical@24V) |
| Input/Output mode | Digital input/ Digital output, transistor output |
| Input/Output type | Input NPN/Output NPN |
| Input/Output channels | 8 input/8 output |
| Hardware response time (ON/OFF) | 100μs/100μs |
| Input/Output voltage class | 24V DC ± 10% (21.6V DC to 26.4V DC) |
| Input current (typical) | 4mA (typical@24V) |
| Output load (resistive load) | 0.5A/point, 2A/module |
| Output load (inductive load) | 7.2A/point, 12A/module |
| Output load (lamp load) | 5W/point, 9W/module |
| Module power | 130mA |
| I/O bus coupler supports | GL20-RTU-ECT32-INT, GL20-RTU-EIP-INT, GL20-RTU-PN-INT |

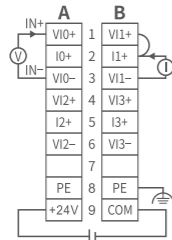
GL20-0404ETP-5V-INT



| Item | Specification |
|---------------------------------|---|
| Certification | CE |
| IP rating | IP20 |
| Dimensions (W × H × D) | 12mm × 100mm × 75mm |
| Ambient operating temperature | -20° C to 55° C (10% RH to 90% RH, non-condensing) |
| Rated bus input voltage | 5V DC (4.75V DC to 5.25V DC) |
| Rated bus input current | 100 mA (typical@5 V) |
| Rated terminal input voltage | 24V DC (20.4V DC to 28.8V DC) |
| Rated terminal input current | 150 mA (typical@24 V) |
| Input/Output mode | Digital input/ Digital output |
| Input/Output channels | 4 input/4 output |
| Input/Output type | NPN input/NPN output |
| Hardware response time (ON/OFF) | 1 μs/1 μs |
| Input/Output voltage class | 5V DC |
| Input current | 50 μA (typical) |
| Input ON/OFF voltage | > 2.4V DC/ < 0.8V DC |
| Output load (resistive load) | 20 mA/point, 80 mA/module |
| Output load (lamp load) | 0.1 W/point, 0.4 W/module |
| Power Output Specifications | Voltage: 5V DC ± 5%; Current: 500mA (Max.) |
| Module power | 90 mA |
| I/O bus coupler supports | GL20-RTU-ECT32-INT, GL20-RTU-EIP-INT, GL20-RTU-PN-INT |

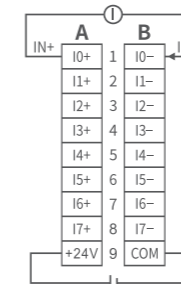
GL20 Analog Input Modules

GL20-4AD-INT



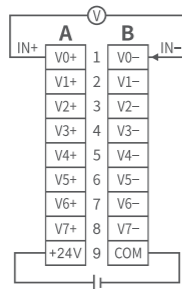
| Item | Specification |
|---|---|
| Certification | CE, UL, UKCA, KC |
| IP rating | IP20 |
| Dimensions (W × H × D) | 12mm × 100mm × 75mm |
| Ambient operating temperature | -20° C to 55° C (10% RH to 90% RH, non-condensing) |
| Rated bus input voltage | 5V DC (4.75V DC to 5.25V DC) |
| Rated bus input current | 95mA (typical@5V) |
| Rated terminal input voltage | 24V DC (20.4V DC to 28.8V DC) |
| Rated terminal input current | 100mA (typical@24V) |
| Input type | Analog input |
| Input mode | Voltage/Current |
| Input channels | 4 |
| Current input range | ±20mA, 0 to 20mA, 4 to 20mA |
| Voltage input range | ±10V, 0 to 10V, ±5V, 0 to 5V, 1 to 5V |
| Conversion time | 1ms/channel |
| Resolution | 16 bits |
| Input PDO data size | Max. 8 Bytes |
| Voltage input accuracy (25° C) | ±0.1% (full range) |
| Current input accuracy (full temperature range) | ±0.2% (full range) |
| Module power | 95mA |
| I/O bus coupler supports | GL20-RTU-ECT32-INT, GL20-RTU-EIP-INT, GL20-RTU-PN-INT |

GL20-8ADI-INT



| Item | Specification |
|---|---|
| Certification | CE |
| IP rating | IP20 |
| Dimensions (W × H × D) | 12mm × 100mm × 75mm |
| Ambient operating temperature | -20° C to 55° C (10% RH to 90% RH, non-condensing) |
| Rated bus input voltage | 5V DC (4.75V DC to 5.25V DC) |
| Rated bus input current | 65mA (typical@5V) |
| Rated terminal input voltage | 24V DC (20.4V DC to 28.8V DC) |
| Rated terminal input current | 50mA (typical@24V) |
| Input mode | Current input |
| Input type | Analog input |
| Input channels | 8 |
| Current input range | ±20mA, 0 to 20mA, 4 to 20mA |
| Conversion time | 125µs/channel |
| Resolution | 16 bits |
| Input PDO data size | Max. 16 Bytes |
| Output PDO data size | 0 byte |
| Voltage input accuracy (25° C) | ±0.2% (full range) |
| Current input accuracy (full temperature range) | ±0.4% (full range) |
| Module power | 65mA |
| I/O bus coupler supports | GL20-RTU-ECT32-INT, GL20-RTU-EIP-INT, GL20-RTU-PN-INT |

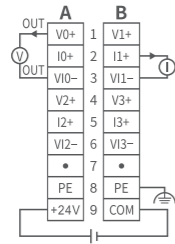
GL20-8ADV-INT



| Item | Specification |
|---|---|
| Certification | CE |
| IP rating | IP20 |
| Dimensions (W × H × D) | 12mm × 100mm × 75mm |
| Ambient operating temperature | -20° C to 55° C (10% RH to 90% RH, non-condensing) |
| Rated bus input voltage | 5V DC (4.75V DC to 5.25V DC) |
| Rated bus input current | 65mA (typical@5V) |
| Rated terminal input voltage | 24V DC (20.4V DC to 28.8V DC) |
| Rated terminal input current | 50mA (typical@24V) |
| Input mode | Voltage input |
| Input type | Analog input |
| Input channels | 8 |
| Voltage input range | ±10V, 0 to 10V, ±5V, 0 to 5V, 1 to 5V |
| Conversion time | 125µs/channel |
| Resolution | 16 bits |
| Input PDO data size | Max. 16 Bytes |
| Output PDO data size | 0 byte |
| Voltage input accuracy (25° C) | ±0.2% (full range) |
| Current input accuracy (full temperature range) | ±0.4% (full range) |
| Module power | 65mA |
| I/O bus coupler supports | GL20-RTU-ECT32-INT, GL20-RTU-EIP-INT, GL20-RTU-PN-INT |

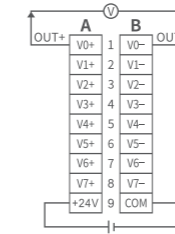
GL20 Analog Output Modules

GL20-4DA-INT



| Item | Specification |
|---|---|
| Certification | CE, UL, UKCA, KC |
| IP rating | IP20 |
| Dimensions (W × H × D) | 12mm × 100mm × 75mm |
| Ambient operating temperature | -20° C to 55° C (10% RH to 90% RH, non-condensing) |
| Rated bus input voltage | 5V DC (4.75V DC to 5.25V DC) |
| Rated bus input current | 70 mA (typical@5V) |
| Rated terminal input voltage | 24V DC (20.4V DC to 28.8V DC) |
| Rated terminal input current | 100mA (typical@24 V) |
| Output type | Analog output |
| Output mode | Voltage output/Current output |
| Output channels | 4 |
| Current output range | 0 to 20mA, 4 to 20mA |
| Voltage output range | ±10V, 0 to 10V, ±5V, 0 to 5V, 1 to 5V |
| Conversion time | 60µs/channel |
| Resolution | 16 bits |
| Voltage/Current input accuracy (25° C) | ±0.1% (full range) |
| Voltage/Current input accuracy (full temperature range) | ±0.5% (full range) |
| Module power | 70mA |
| I/O bus coupler supports | GL20-RTU-ECT32-INT, GL20-RTU-PN-INT, GL20-RTU-EIP-INT |

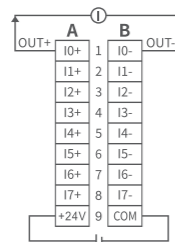
GL20-8DAV-INT



| Item | Specification |
|--------------------------------|---|
| Certification | CE |
| IP rating | IP20 |
| Dimensions (W × H × D) | 12mm × 100mm × 75mm |
| Ambient operating temperature | -20° C to 55° C (10% RH to 90% RH, non-condensing) |
| Output type | Analog output |
| Output mode | Voltage |
| Output channels | 8 |
| Voltage output range | ±10V, 0 to 10V, ±5V, 0 to 5V, 1 to 5V |
| Conversion time | 60 µs/channel |
| Resolution | 16 bits |
| Voltage input accuracy (25° C) | ±0.1% (full range) |
| Module power | 100mA |
| I/O bus coupler supports | GL20-RTU-ECT32-INT, GL20-RTU-PN-INT, GL20-RTU-EIP-INT |

coming soon...

GL20-8DAI-INT

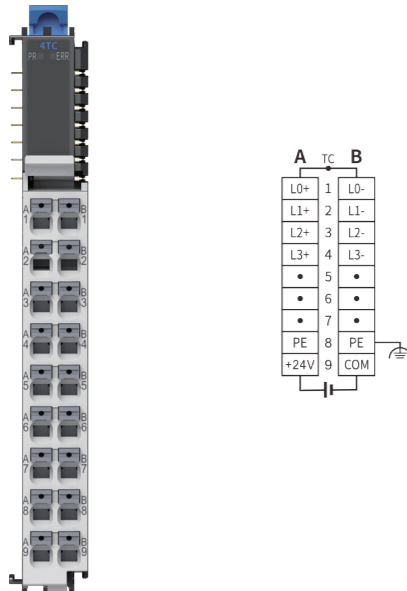


| Item | Specification |
|--------------------------------|---|
| Certification | CE |
| IP rating | IP20 |
| Dimensions (W × H × D) | 12mm × 100mm × 75mm |
| Ambient operating temperature | -20° C to 55° C (10% RH to 90% RH, non-condensing) |
| Output type | Analog output |
| Output mode | Current output |
| Output channels | 8 |
| Current output range | 0 to 20mA, 4 to 20mA |
| Conversion time | 60µs/channel |
| Resolution | 16 bits |
| Voltage input accuracy (25° C) | ±0.1% (full range) |
| Module power | 100mA |
| I/O bus coupler supports | GL20-RTU-ECT32-INT, GL20-RTU-PN-INT, GL20-RTU-EIP-INT |

coming soon...

GL20 Temperature Detection Modules

GL20-4TC-INT

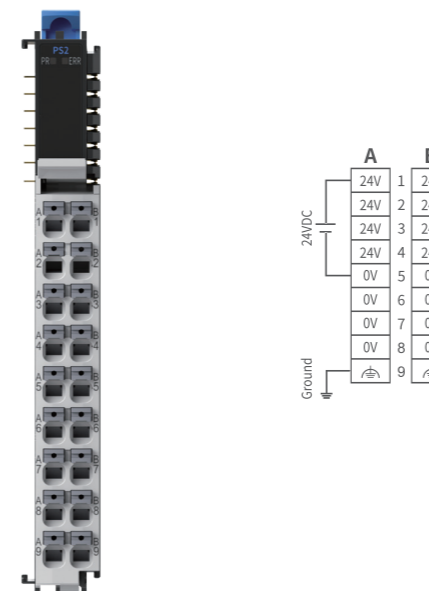


| Item | Specification |
|--|---|
| Certification | CE, UL, UKCA, KC |
| IP rating | IP20 |
| Dimensions (W × H × D) | 12mm × 100mm × 75mm |
| Ambient operating temperature | -20° C to 55° C (10% RH to 90% RH, non-condensing) |
| Rated bus input voltage | 5V DC (4.75V DC to 5.25V DC) |
| Rated bus input current | 95mA (typical@5V) |
| Rated terminal input voltage | 24V DC (20.4V DC to 28.8V DC) |
| Rated terminal input current | 100mA (typical@24V) |
| Input terminal | Thermocouple input, thermocouple type: B, E, N, J, K, R, S, T |
| Compensation method | Internal cold junction compensation |
| Input channels | 4 |
| Display sensitivity | 0.1°C, 0.1 °F |
| Accuracy (room temperature 25° C) | (±0.1%) ±1°C (±100 mV full scale) |
| Accuracy (operating temperature -20° C to 55° C) | (±0.3%) ±1°C (±100 mV full scale) |
| Resolution | 24bits |
| Input PDO data size | Max. 16 Bytes |
| Module power | 95 mA |
| I/O bus coupler supports | GL20-RTU-ECT32-INT, GL20-RTU-PN-INT, GL20-RTU-EIP-INT |

C type thermocouple supporting coming soon...

GL20 Power Supply Expansion Modules

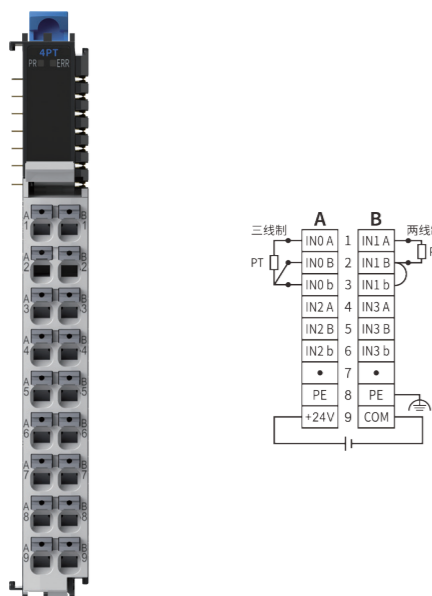
GL20-PS2-INT



| Item | Specification |
|-------------------------------------|--|
| Certification | CE, UL, UKCA, KC |
| IP rating | IP20 |
| Dimensions (W × H × D) | 12mm × 100mm × 75mm |
| Ambient operating temperature | -20° C to 55° C (10% RH to 90% RH, non-condensing) |
| Input terminal | 24V DC (20.4V DC to 28.8V DC) |
| Output bus current | 2A |
| Input/Output | 8 × 24V |
| Bus output power ripple | 3% |
| Power conversion efficiency | 70%, more than 85% @ 2A |
| Bus output short-circuit protection | 3A, hiccup mode protection |
| Bus output derating | 85% derating at 55° C (the output current does not exceed 1.7A), or 45° C derating when output current is 2A |
| I/O bus coupler supports | GL20-RTU-ECT32-INT, GL20-RTU-PN-INT, GL20-RTU-EIP-INT |

GL20-PS2-INT can provide 2A bus current to subsequent modules and can be placed anywhere.

GL20-4PT-INT

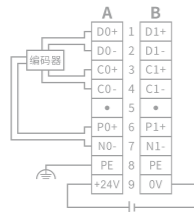
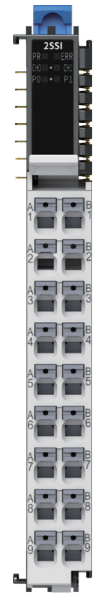


| Item | Specification |
|--|---|
| Certification | CE, UL, UKCA, KC |
| IP rating | IP20 |
| Dimensions (W × H × D) | 12mm × 100mm × 75mm |
| Ambient operating temperature | -20° C to 55° C (10% RH to 90% RH, non-condensing) |
| Rated bus input voltage | 5V DC (4.75V DC to 5.25V DC) |
| Rated bus input current | 95 mA (typical@5 V) |
| Rated terminal input voltage | 24V DC (20.4V DC to 28.8V DC) |
| Rated terminal input current | 100mA (typical@24V) |
| Input terminal | Pt100, Pt500, Pt1000, Cu100, KTY84-130, NTC5K, NTC10K |
| Wiring method | Two wire/Three wire |
| Input channels | 4 |
| Display sensitivity | 0.1°C, 0.1 °F |
| Accuracy (room temperature 25° C) | (±0.1%) ±1°C (±100 mV full scale) |
| Accuracy (operating temperature -20° C to 55° C) | (±0.3%) ±1°C (±100 mV full scale) |
| Resolution | 24bits |
| Input PDO data size | Max. 16 Bytes |
| Module power | 95mA |
| I/O bus coupler supports | GL20-RTU-ECT32-INT, GL20-RTU-PN-INT, GL20-RTU-EIP-INT |

KTY83 type resistance supporting coming soon...

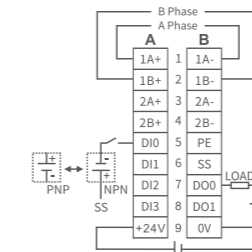
GL20 Functional I/O Modules

GL20-2SSI-INT



| Item | Specification |
|-------------------------------------|---|
| Certification | CE |
| IP rating | IP20 |
| Dimensions (W × H × D) | 12mm × 100mm × 75mm |
| Ambient operating temperature | -20° C to 55° C (10% RH to 90% RH, non-condensing) |
| Rated terminal input voltage | 24V DC (20.4V DC to 28.8V DC) |
| Rated terminal input current | 1 A (Max.) |
| Rated terminal output voltage | 24V DC (20.4V DC to 28.8V DC) |
| Rated terminal output current | 300 mA/channel |
| Channels | 2 |
| Terminal type | SSI |
| Channel interface signal | SSI output: 2, clock output (C+, C-) SSI input: 2, data input (D+, D-) |
| SSI signal voltage | 5 V |
| Output voltage | 2 × 24 V |
| Signal type | Binary/Gray code Default: Gray code |
| Data type | Adjustable length: 10 bits to 32 bits Default: 25 bits |
| Baud rate and transmission distance | 100 kHz - 200 m 200 kHz - 120 m 300 kHz - 100 m 400 kHz - 80 m 500 kHz - 60 m 1 MHz - 25 m 1.25 MHz - 20 m 1.5 MHz - 15 m 2 MHz - 10 m Default: 500 kHz - 60 m |
| Reverse identification | ON/OFF |
| Parity bit | None/Odd/Even |
| Module power | 115 mA |
| I/O bus coupler supports | GL20-RTU-ECT32-INT, GL20-RTU-PN-INT, GL20-RTU-EIP-INT |

GL20-2HC-INT



| Item | Specification |
|---------------------------------|--|
| Certification | CE |
| IP rating | IP20 |
| Dimensions (W × H × D) | 12mm × 100mm × 75mm |
| Ambient operating temperature | -20° C to 55° C (10% RH to 90% RH, non-condensing) |
| Rated bus input voltage | 5V DC (4.75V DC to 5.25V DC) |
| Rated bus input current | Max. 200mA, typical 180mA (typical@5 V) |
| Rated terminal input voltage | 24V DC (20.4V DC to 28.8V DC) |
| Rated terminal input current | 50 mA (typical@24 V) |
| Channels | 2 |
| Input type | Differential interface: Counter Input (Single Phase, Pulse + Direction, AB Phase, CW/CCW) Single ended input: Digital input (NPN/PNP) |
| Output type | Digital output |
| Differential input frequency | 0.04 Hz to 4 MHz |
| Single ended input frequency | 0.04 Hz to 500 KHz |
| Counting range | 32 bits |
| Counting accuracy | 100 ppm |
| Hardware response time (ON/OFF) | Input: differential interface: 100ns/100ns single ended interface: 250ns/250ns Output: 1 μs/1μs |
| Functions support | Count/frequency measure/compare consistent output |
| Module power | 120 mA |
| I/O bus coupler supports | GL20-RTU-ECT32-INT, GL20-RTU-PN-INT |

GL20 Communication Expansion Modules

GL20-2S485-INT



| Connector Pins | | COM1/COM2 | |
|----------------|-------|-----------|---|
| COM1 | 1 | 2 | • |
| 6 | 3 | RS485+ | • |
| 5 | 4 | • | • |
| | 5 | GND | • |
| | 6 | • | • |
| COM2 | 7 | RS485- | • |
| 1 | 8 | • | • |
| 5 | 9 | • | • |
| | SHELL | PE | • |

| Item | Specification |
|-------------------------------|---|
| Certification | CE, UL, KC |
| IP rating | IP20 |
| Dimensions (W × H × D) | 24mm × 100mm × 75mm |
| Ambient operating temperature | -20° C to 55° C (10% RH to 90% RH, non-condensing) |
| Channels | 2 channels, no isolation between channels |
| Terminal type | DB9 (female) |
| Communication port | RS485 |
| Communication distance | Max. 1200m |
| Slave station | Up to 31 slaves |
| Baud rate | 4800 bit/s, 9600 bit/s, 19200 bit/s, 38400 bit/s, 57600 bit/s, 115200 bit/s |
| Parity bit | None/Odd/Even |
| Termination resistor | Not available. When the module is at either end of the network, an external matching resistor can be added. |
| Module power | 155 mA |
| I/O bus coupler supports | GL20-RTU-ECT32-INT (Only for Inovance PLC) |

GL20-2SCOM-INT



| A | | B | |
|---------|---|---------|---|
| TXD1 | 1 | RXD1 | • |
| GND | 2 | GND | • |
| TX- D1- | 3 | TX+ D1+ | • |
| R1- | 4 | R1+ | • |
| TXD2 | 5 | RXD2 | • |
| GND | 6 | GND | • |
| RX- D2- | 7 | RX+ D2+ | • |
| R2- | 8 | R2+ | • |
| • | 9 | • | • |

| Item | Specification |
|-------------------------------|--|
| Certification | CE |
| IP rating | IP20 |
| Dimensions (W × H × D) | 12mm × 100mm × 75mm |
| Ambient operating temperature | -20° C to 55° C (10% RH to 90% RH, non-condensing) |
| Channels | 2 channels, no isolation between channels |
| Signal connection mode | Spring-clamp terminal, pluggable |
| Communication port | RS232, RS422, RS485 The module supports two channels of serial communication simultaneously. • 2 x RS232 • 2 x RS485 • 1 x RS232 and 1 x RS422 Note: Only Port 2 can be configured to RS422 mode, and in this case Port 1 can only be in RS232 mode. Otherwise, a port protocol configuration error occurs. |
| Communication distance | RS232: Max. 15 m RS422/RS485: Max. 1200 m |
| Slave station | • Up to 31 Modbus slaves supported in RS485 mode • Only one Modbus slave supported in RS232/RS422 mode |
| Baud rate | 4800 bit/s, 9600 bit/s, 19200 bit/s, 38400 bit/s, 57600 bit/s, 115200 bit/s |
| Parity bit | None/Odd/Even Default: Even |
| Termination resistor | Supported, shorted the R+ and R- terminals to the termination resistor. |
| Module power | 170 mA |
| I/O bus coupler supports | GL20-RTU-ECT32-INT (Only for Inovance PLC) |

GL20-2S485-MDB-INT



| Connector Pins | | COM1/COM2 | |
|----------------|-------|-----------|---|
| COM1 | 1 | 2 | • |
| 6 | 3 | RS485+ | • |
| 5 | 4 | • | • |
| | 5 | GND | • |
| | 6 | • | • |
| COM2 | 7 | RS485- | • |
| 1 | 8 | • | • |
| 5 | 9 | • | • |
| | SHELL | PE | • |

| Item | Specification |
|-------------------------------|---|
| Certification | CE, UL |
| IP rating | IP20 |
| Dimensions (W × H × D) | 24mm × 100mm × 75mm |
| Ambient operating temperature | -20° C to 55° C (10% RH to 90% RH, non-condensing) |
| Channels | 2 channels, no isolation between channels |
| Terminal type | DB9 (female) |
| Communication port | RS485 |
| Communication distance | Max. 1200m |
| Slave station | Up to 31 slaves |
| Baud rate | 4800 bit/s, 9600 bit/s, 19200 bit/s, 38400 bit/s, 57600 bit/s, 115200 bit/s |
| Parity bit | None/Odd/Even Default: None |
| Termination resistor | Not available. When the module is at either end of the network, an external matching resistor can be added. |
| Module power | 155 mA |
| I/O bus coupler supports | GL20-RTU-ECT32-INT, GL20-RTU-PN-INT (Support third-party PLC, please refer to user guide) |

GL20-2SCOM-MDB-INT



| A | | B | |
|---------|---|---------|---|
| TXD1 | 1 | RXD1 | • |
| GND | 2 | GND | • |
| TX- D1- | 3 | TX+ D1+ | • |
| R1- | 4 | R1+ | • |
| TXD2 | 5 | RXD2 | • |
| GND | 6 | GND | • |
| R2- | 7 | R2+ | • |
| • | 8 | • | • |
| • | 9 | • | • |

| Item | Specification |
|-------------------------------|--|
| Certification | CE |
| IP rating | IP20 |
| Dimensions (W × H × D) | 12mm × 100mm × 75mm |
| Ambient operating temperature | -20° C to 55° C (10% RH to 90% RH, non-condensing) |
| Channels | 2 channels, no isolation between channels |
| Communication protocol | Modbus RTU master/slave, free protocol |
| Communication port | RS232, RS422, RS485 support 2 × serial communication • 2 × RS232 • 2 × RS485 • 1 × RS232 + 1 × RS422 Note: Only port 2 can be configured in RS422 mode, and at this time, port 1 can only be in RS232 mode, otherwise the port protocol configuration will report an error. |
| Communication distance | RS232: Max. 15 m RS422/RS485: Max. 1200 m |
| Slave station | • Up to 31 Modbus slaves supported in RS232/RS422 mode • Only one Modbus slave supported in RS485 mode |
| Baud rate | 4800 bit/s, 9600 bit/s, 19200 bit/s, 38400 bit/s, 57600 bit/s, 115200 bit/s |
| Parity bit | None/Odd/Even Default: None |
| Termination resistor | Supported, shorted the R+ and R- terminals to the termination resistor. |
| Module power | 170 mA |
| I/O bus coupler supports | GL20-RTU-ECT32-INT, GL20-RTU-PN-INT (Support third-party PLC, please refer to user guide) |

GL20 Communication Expansion Modules

GL20-1DNM-INT



| A | | B | |
|---------|---|---------|--|
| TXD1 | 1 | RXD1 | |
| GND | 2 | GND | |
| TX+ D1- | 3 | TX+ D1+ | |
| R1- | 4 | R1+ | |
| TXD2 | 5 | RXD2 | |
| GND | 6 | GND | |
| | 7 | | |
| R2- | 8 | R2+ | |
| • | 9 | • | |

| Item | Specification |
|-------------------------------|---|
| Certification | CE |
| IP rating | IP20 |
| Dimensions (W × H × D) | 24mm × 100mm × 75mm |
| Ambient operating temperature | -20° C to 55° C (10% RH to 90% RH, non-condensing) |
| Channels | 1 × CAN communication channel |
| Communication distance | 4-core flat cable Main cable length: 100m~500m Branch length: 6m Total branch length: 39m~156m 5-core shielded cable Main cable length: 75m~265m Branch length: 6m Total branch length: 35m~135m |
| Slave station | Up tp 63 slaves |
| Baud rate | 125 kbit/s, 250 kbit/s, 500 kbit/s, default 125 kbit/s |
| Termination resistor | Supported, shorted the R+ and R- terminals to the termination resistor. |
| Module power | 100 mA |
| I/O bus coupler supports | GL20-RTU-ECT32-INT (Only for Inovance PLC) |

Dimensions

GL20 Series Modules Dimensions Overview

| | | | |
|----------------------------------|--|----------------------------------|--|
| <p>Front view Side view</p> | <p>The picture shows the GL20-1600END-INT module, and other the consistent size of GL20 modules are showed as below: GL20-0800END-INT / GL20-0004ETP-2A-INT / GL20-0008ETN-INT / GL20-0008ETP-INT / GL20-0016ETN-INT / GL20-0016ETP-INT / GL20-0004ER-INT / GL20-0404ETP-5V-INT / GL20-0808ETN-INT / GL20-4AD-INT / GL20-8ADV-INT / GL20-8ADI-INT / GL20-4DA-INT / GL20-8DAI-INT / GL20-8DAV-INT / GL20-4PT-INT / GL20-4TC-INT / GL20-PS2-INT / xGL20-2SSI-INT / GL20-2HC-INT / GL20-2SCOM-INT / GL20-2SCOM-MDB-INT</p> | <p>Front view Side view</p> | <p>The picture shows the GL20-3232ETN-M-INT module.</p> |
| <p>Front view Side view</p> | <p>The picture shows the GL20-RTU-PN-INT module, and other the consistent size of GL20 modules are showed as below: GL20-RTU-EIP-INT / GL20-RTU-ECT32-INT</p> | <p>Front view Side view</p> | <p>The picture shows the GL20-2S485-INT module, and other the consistent size of GL20 modules are showed as below: GL20-2S485-MDB-INT</p> |
| <p>Front view Side view</p> | <p>The picture shows the GL20-3200END-INT module, and other the consistent size of GL20 modules are showed as below: GL20-0032ETN-INT / GL20-0008ER-INT / GL20-1DNM-INT</p> | <p>Front view Side view</p> | <p>The picture shows the GL20-3200END-M-INT module, and other the consistent size of GL20 modules are showed as below: GL20-0032ETN-M-INT</p> |