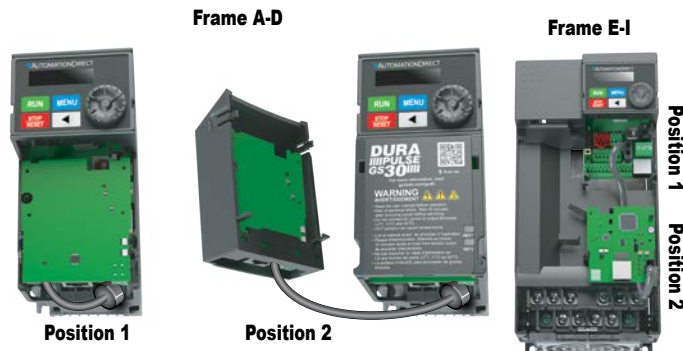


# GS30 Optional Accessories – Expansion Cards

## GS30 Optional Modules

The GS30A-CM-EIP1 and GS30A-CM-EIP2 are communication modules that can be used for either Modbus TCP or EtherNet/IP communication. The GS30A-CM-ECAT module is used for EtherCAT communications. The GS30A-BPS is a backup power supply option card that can maintain basic drive (not motor) functionality when external power is unavailable. Note that only one communication module can be installed at a time, but the BPS card can be installed with a communication card or any of the I/O cards. Please see the GS30 User Manual for additional information and installation instructions.



| GS30 DURApulse Drives I/O and Communication Cards |          |   |   |          |
|---|----------|---|---|----------|
| Part Number                                       | Price    | Description   | Features/Specifications   | Position |
| <a href="#"><u>GS30A-CM-EIP1</u></a>              | \$92.00  | DURApulse GS30 series communication module, EtherNet/IP and Modbus TCP, 1 port, (1) Ethernet (RJ45) port(s). For use with GS30 series AC drives.  | <b>Features:</b> <ul style="list-style-type: none"> <li>• Supports Modbus TCP and EtherNet/IP protocol</li> <li>• 32/32 words read/write parameters correspondence</li> <li>• User-defined corresponding parameters</li> <li>• MDI/MDI-X auto-detect</li> <li>• IP filter simple firewall function</li> </ul> <b>Specifications:</b> <ul style="list-style-type: none"> <li>• RJ45 with Auto MDI/MDIX interface</li> <li>• 1 port (EIP1) or 2 ports (EIP2)</li> <li>• IEEE 802.3, IEEE 802.3u transmission method with Cat 5e shielding 100MHz cable at 10/100 Mbps Auto-detect transmission speed</li> <li>• Network protocol: ICMP, IP, TCP, UDP, DHCP, HTTP, SMTP, Modbus over TCP/IP, EtherNet/IP, BOOTP</li> <li>• Requires 15VDC provided by AC drive</li> <li>• 500VDC insulation voltage</li> <li>• 0.8 W power consumption</li> <li>• 25g (EIP1) or 30g (EIP2) weight</li> </ul> | 1 or 2   |
| <a href="#"><u>GS30A-CM-EIP2</u></a>              | \$99.00  | DURApulse GS30 series communication module, EtherNet/IP and Modbus TCP, 2 ports, (2) Ethernet (RJ45) port(s). For use with GS30 series AC drives. |   |          |
| <a href="#"><u>GS30A-CM-ECAT</u></a>              | \$130.00 | DURApulse GS30 series communication module, EtherCAT Slave, 2 ports, (2) Ethernet (RJ45) port(s). For use with GS30 series AC drives.             | <b>Features:</b> <ul style="list-style-type: none"> <li>• Enables EtherCAT communications</li> <li>• Supports speed mode</li> <li>• Supports reading and writing parameters</li> <li>• Supports stop during disconnection</li> </ul> <b>Specifications:</b> <ul style="list-style-type: none"> <li>• RJ45 interface</li> <li>• 2 ports</li> <li>• IEEE 802.3, IEEE 802.3u transmission method with Cat 5e shielding 100MHz cable at 100 Mbps transmission speed</li> <li>• Requires 15VDC provided by AC drive</li> <li>• 500VDC insulation voltage</li> <li>• 0.8 W power consumption</li> <li>• 27g weight</li> </ul>   | 1 or 2   |
| <a href="#"><u>GS30A-BPS</u></a>                  | \$135.00 | DURApulse GS30 series backup power supply module, for use with GS30 series AC drives.   | Provides external power supply and supports 24VDC input. Supports parameter read/write and drive status monitoring. When providing backup power, the following functions work normally: <ul style="list-style-type: none"> <li>• Parameter reading and writing</li> <li>• Keypad display</li> <li>• Keys on the keyboard panel (except the RUN key)</li> <li>• Analog input with +10V terminal supply power</li> <li>• Multi-function inputs with +24V terminal or external power supply</li> <li>• Relay output</li> <li>• Pulse sequence frequency command</li> <li>• Testing RS485 and Ethernet communications</li> </ul>  | 1 or 2   |



GS30A-BPS



GS30A-CM-EIPx



GS30A-CM-ECAT

# GS20/GS30 Optional Accessories – Expansion Cards

## GS20/GS30 Optional Modules

The GS30A-CM-EIPKIP2 allows mounting of GS20 and GS30 series communication and expansion cards in Position 2 (on the outside of the drive) for Frames A - D. This gives the benefit of quick removal of the communication card for access to the main power and control terminals. It does add overall depth to the drive unit. The front cover of the kit must be removed to see the comm card status LEDs.

| GS20/GS30 <i>DURApulse</i> Drives Communication Card Mounting |         |  |  |          |
|---|---------|--|--|----------|
| Part Number   | Price   | Description  | Features/Specifications  | Position |
| <b><u>GS30A-CM-EIPKIP2</u></b>                                | \$22.00 | DURApulse GS30 mounting cover, for use with GS20 and GS30 series communication modules. Used when communication module is installed in position 2. | Mounting kit for mounting GS20/GS30 EtherNet/IP communication cards in Position 2 for frames A through D. Not needed for larger frames. GS30A-CM-ECAT comes with a mounting cover. | 2        |



**GS30A-CM-EIPKIP2**



**Drive with GS30A-CM-EIPKIP2 installed**

# GS30 Optional Accessories – I/O Cards

## GS30 Optional I/O Cards

GS30 series drives support a variety of optional input/output cards that can be used to provide additional connection terminals or encoder support.

| GS30 DURApulse Drives I/O Cards |         |  |  |  |          |
|---------------------------------|---------|--|--|--|----------|
| Part Number                     | Price   | Description  | Terminals  | Descriptions   | Position |
| <b><u>GS30A-06CDD</u></b>       | \$53.00 | DURApulse GS30 series discrete combo module, Input: 3-point, 24 VDC, sinking/sourcing selectable, Output: 3-point, 48 VDC, sinking/sourcing selectable, 30 mA/point, 50 mA resistive output current. For use with GS30 series AC drives. | 24V, DCM   | Output power: +24VDC $\pm 5\%$ < 30mA  | 1        |
|                                 |         |  | DI10-DI12  | <ul style="list-style-type: none"> <li>Choose SINK (NPN) / SOURCE (PNP) by SWW1</li> <li>Internal power is supplied by terminal 24V: +24VDC <math>\pm 5\%</math></li> <li>If external power is +24VDC, the maximum voltage is 30VDC and the minimum voltage is 19VDC</li> <li>ON: activation current is 6.5 mA</li> <li>OFF: leakage current tolerance is 10<math>\mu</math>A</li> </ul> |          |
|                                 |         |  | DO10-DO12  | <ul style="list-style-type: none"> <li>The motor drive outputs various monitor signals, such as drive in operation, frequency reached and overload indication through the transistor (open collector)</li> <li>DO output signal: each DO terminal needs a pull-up resistor, the maximum external power voltage is 48VDC / 50mA</li> </ul>  |          |
|                                 |         |  | DCM  | Common for digital output terminals DO10–DO12 (photocoupler)   |          |
|                                 |         |  | PE   | Grounding terminals. To decrease noise, properly ground this terminal.   |          |
| <b><u>GS30A-2AD2DA</u></b>      | \$62.00 | DURApulse GS30 series analog combo module, Input: 2-channel, current/voltage, 0-20 mA and 4-20 mA, 0-10 VDC, Output: 2-channel, current/voltage, 0-20 mA and 4-20 mA, 0-10 VDC.  | ACM  | Common output signal and input signal terminals  | 1        |
|                                 |         |  | AI10, AI11   | Two sets of AI ports: SSW3, SSW4 switch for AI1, AI2 (default is AI1) <ul style="list-style-type: none"> <li>AI1: input 0–10 V</li> <li>AI2: input 0–20 mA</li> </ul>  |          |
|                                 |         |  | AO10–AO11  | Two sets of AO ports: SSW1, SSW2 switch for current (default) or voltage. <ul style="list-style-type: none"> <li>Voltage output: 0–10 V</li> <li>Current output: 0–20 mA</li> </ul>  |          |
|                                 |         |  | PE   | Grounding terminal. to decrease noise, properly ground this terminal.  |          |
| <b><u>GS30A-02TRC</u></b>       | \$59.00 | DURApulse GS30 series relay output module, 2-point, 240 VAC/30 VDC, (2) Form C, 2 isolated common(s), 1 point(s) per common. Screw terminal blocks included.   | 10NO-10NC-10CM (DO10)<br>11NO-11NC-11CM (DO11)             | Resistive load: 5A (N.O.) / 250VAC<br>Function: outputs the monitor signals, such as drive in operation, frequency reached, or overload indication.  | 1        |
| <b><u>GS30A-03TRA</u></b>       | \$63.00 | DURApulse GS30 series relay output module, 3-point, 250 VAC/30 VDC, (3) Form A, 2 isolated common(s), 1 point(s) per common. Screw terminal blocks included.   | 10NO-10CM (DO10)<br>11NO -11CM (DO11)<br>12NO -12CM (DO12) | Resistive load: 6A (N.O.) / 250VAC<br>Function: outputs the monitor signals, such as drive in operation, frequency reached, or overload indication.  | 1        |



GS30A-06CDD



GS30A-2AD2DA



GS30A-02TRC



GS30A-03TRA

# GS30 Optional Accessories – I/O Cards

## GS30 Optional I/O Cards, *continued*

| GS30 DURApulse Drives I/O Cards |          |   |           |   |  |          |
|---------------------------------|----------|---|-----------|---|--|----------|
| Part Number                     | Price    | Description   | Terminals |   | Descriptions   | Position |
| <b><u>GS30A-FB-LD</u></b>       | \$115.00 | DURApulse GS30 series encoder module, line driver (differential) encoder input. For use with GS30 series AC drives. Supports 1-phase and 2-phase input and output.                | PG1       | VP  | <ul style="list-style-type: none"> <li>Power output voltage: +5V <math>\pm</math>5% or +12V <math>\pm</math>5%</li> <li>Maximum output current: 200mA (+5V)</li> </ul>   | 1        |
|                                 |          |   |           | DCM   | Common for power and signal  |          |
|                                 |          |   |           | A1, $\overline{A1}$ ,<br>B1, $\overline{B1}$ ,<br>Z1, $\overline{Z1}$         | <ul style="list-style-type: none"> <li>Encoder input signal (applicable for line driver or open collector)</li> <li>Open collector input voltage +5–24 VDC</li> <li>Supports 1-phase and 2-phase input</li> <li>Maximum input signal: 300kHz</li> </ul>  |          |
|                                 |          |   | PG2       | A2, $\overline{A2}$ ,<br>B2, $\overline{B2}$                                  | <ul style="list-style-type: none"> <li>Pulse input signal (applicable for line driver or open collector)</li> <li>Open collector input voltage +5–24 VDC</li> <li>Supports 1-phase and 2-phase input</li> <li>Maximum input signal: 300kHz</li> </ul>  |          |
|                                 |          |   | PG OUT    | AO, $\overline{AO}$ ,<br>BO, $\overline{BO}$ ,<br>ZO, $\overline{ZO}$ ,<br>SG | <ul style="list-style-type: none"> <li>Encoder feedback signal output, supports frequency elimination: 1–255 times</li> <li>Maximum output voltage of the line driver: 5VDC</li> <li>Maximum output current: 15mA</li> <li>Maximum output frequency: 300kHz</li> <li>SG, the referenced electric potential for encoder output signal, serves as the ground for host controller or PLC to make the output signal become the common point. Do not use common grounding with SG and DCM as it may influence the signal quality</li> </ul> |          |
|                                 |          |   | Ground    | PE  | Grounding terminal. To decrease noise, properly ground this terminal.  |          |
| <b><u>GS30A-FB-OC</u></b>       | \$112.00 | DURApulse GS30 series encoder module, NPN open collector and PNP open collector encoder input. For use with GS30 series AC drives. Supports 1-phase and 2-phase input and output. | PG1       | VP  | <ul style="list-style-type: none"> <li>Power output voltage: +5V <math>\pm</math>5% or +12V <math>\pm</math>5% (Use SSW320 to switch +5V or +12V, the default is +5V)</li> <li>Maximum output current: 200mA (+5V)</li> </ul>  | 1        |
|                                 |          |   |           | DCM   | Common for power and signal  |          |
|                                 |          |   |           | A1, $\overline{A1}$ ,<br>B1, $\overline{B1}$ ,<br>Z1, $\overline{Z1}$         | <ul style="list-style-type: none"> <li>Encoder input signal (applicable for line driver or open collector)</li> <li>Open collector input voltage +5–24 VDC</li> <li>Supports 1-phase and 2-phase input</li> <li>Maximum input signal: 300kHz</li> </ul>  |          |
|                                 |          |   | PG2       | A2, $\overline{A2}$ ,<br>B2, $\overline{B2}$                                  | <ul style="list-style-type: none"> <li>Pulse input signal (applicable for line driver or open collector)</li> <li>Open collector input voltage +5–24 VDC</li> <li>Supports 1-phase and 2-phase input</li> <li>Maximum input signal: 300kHz</li> </ul>  |          |
|                                 |          |   | PG OUT    | V+, V+  | <ul style="list-style-type: none"> <li>Needs an external power source for the PG OUT circuit</li> <li>Input voltage: +7–24 V</li> </ul>  |          |
|                                 |          |   |           | V-  | The negative side for external power supply  |          |
|                                 |          |   |           | $\overline{AO}$ , $\overline{BO}$ ,<br>$\overline{ZO}$                        | <ul style="list-style-type: none"> <li>PG feedback signal output: supports frequency elimination: 1–255 times</li> <li>Open collector's output signal: add a pull-up resistor on each PG out external power</li> <li>Maximum input frequency: 300kHz</li> </ul>  |          |



GS30A-FB-LD



GS30A-FB-OC