

# GS4-Specific Optional Accessories – Input/Output Expansion Cards

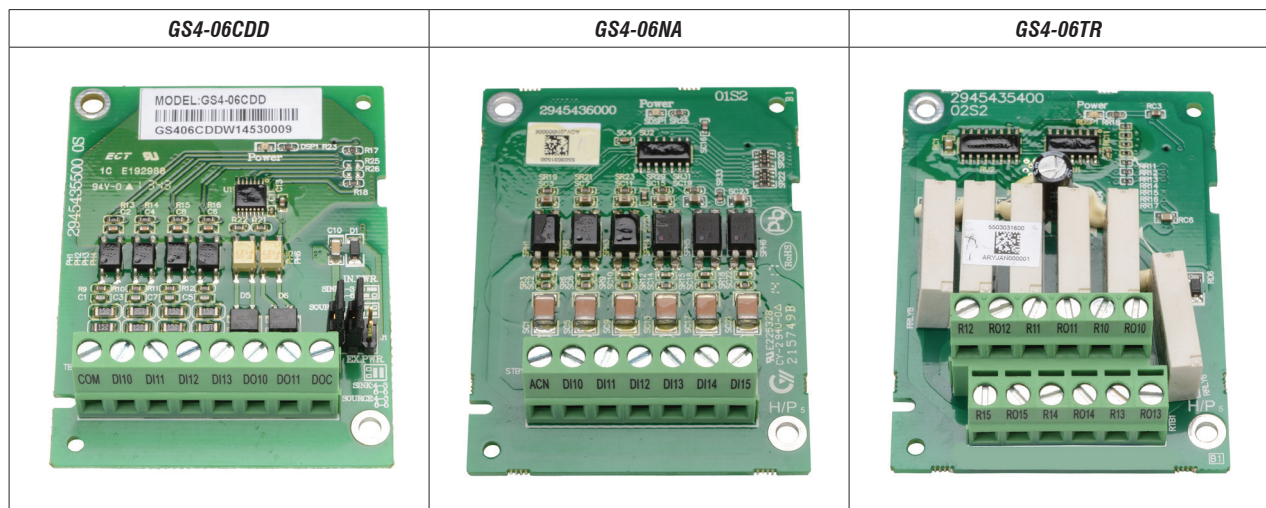
## Accessories Applicable Only to GS4 AC Drives

Please refer to the "GS/DURApulse AC Drives – Accessories" section for accessories applicable to multiple families of GS/DURApulse AC Drives, including GS4.

## Input/Output Expansion Cards

Optional I/O cards allow additional inputs and outputs to be added to the GS4 internal I/O. (Only one I/O card can be installed at a time.)

| GS4 DURAPULSE Drives Input/Output Expansion Cards                                                                                                                                                    |         |                                                                                                                                                                                                           |           |                                                                                                                                                                                                                    |           |            |           |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------|-----------|
| Part Number                                                                                                                                                                                          | Price   | Description                                                                                                                                                                                               | Terminals | Specifications                                                                                                                                                                                                     | Wire Size | Placement* | GS Drive  |
| <u>GS4-06CDD*</u>                                                                                                                                                                                    | \$33.50 | DURAPULSE combination discrete I/O module, selectable sinking or sourcing 24VDC input, 24VDC output, 4-point input, 2-point output, 1 input common(s), 1 output common(s), 50mA resistive output current. | COM       | (1) Common for Input Terminals                                                                                                                                                                                     | 20~24 AWG | slot #3    | GS4 – all |
|                                                                                                                                                                                                      |         |                                                                                                                                                                                                           | DI10–DI13 | (4) Discrete Inputs; selectable sinking or sourcing<br>Internal power available: 24VDC ±5% 200mA, 5W<br>External power: 24VDC (30V max, 19V min), 30W<br>ON: activation 6.5mA @ ≥ 9VDC<br>OFF: leakage 10µA ≤ 3VDC |           |            |           |
|                                                                                                                                                                                                      |         |                                                                                                                                                                                                           | DO10–DO11 | (2) Discrete Outputs (photocoupler)<br>Duty-cycle: 50%<br>Max. output frequency: 100Hz<br>Max. current: 50mA resistive<br>Max. voltage: 48VDC                                                                      |           |            |           |
|                                                                                                                                                                                                      |         |                                                                                                                                                                                                           | DOC       | (1) Common for Output Terminals                                                                                                                                                                                    |           |            |           |
| <u>GS4-06NA*</u>                                                                                                                                                                                     | \$36.00 | DURAPULSE discrete input module, sinking 120VAC input, 6-point input, 1 input common(s).                                                                                                                  | ACN       | (1) AC power common for Input Terminal (Neutral)                                                                                                                                                                   | 20~24 AWG | slot #3    | GS4 – all |
|                                                                                                                                                                                                      |         |                                                                                                                                                                                                           | DI10–DI15 | (6) Discrete Inputs; sinking<br>Input voltage: 100–130 VAC<br>Input frequency: 47–63 Hz<br>Input impedance: 27kΩ<br>Terminal response time: ON: 10ms<br>OFF: 20ms                                                  |           |            |           |
| <u>GS4-06TR*</u>                                                                                                                                                                                     | \$55.00 | DURAPULSE relay output module, Form A (SPST-NO) relays, 6-point output, 6 output common(s), 3 Amps resistive output current, 1.2 Amps inductive output current, 250VAC/30VDC input.                       | R10–R15   | (6) separate commons for each relay                                                                                                                                                                                | 20~26 AWG | slot #3    | GS4 – all |
|                                                                                                                                                                                                      |         |                                                                                                                                                                                                           | RO10–RO15 | (6) normally open relay output<br>Resistive load: 5A(NO) / 250VAC<br>5A(NO) / 30VDC<br>Inductive load (COSØ 0.4)<br>2A(NO) / 250VAC                                                                                |           |            |           |
| * GS4 AC drives have three option card slots; each slot will hold only one option card designed for that particular slot.<br>I/O cards are designed for slot #3, and will not fit in any other slot. |         |                                                                                                                                                                                                           |           |                                                                                                                                                                                                                    |           |            |           |



# GS4-Specific Optional Accessories – Communication Interface Cards

## Accessories Applicable Only to GS4 AC Drives

Please refer to the "GS/DURApulse AC Drives – Accessories" section for accessories applicable to multiple families of GS/DURApulse AC Drives, including GS4.

## Communication Cards

Communication interface cards provide EtherNet/IP™ or ModbusTCP communication capability. Only one communication card can be installed at a time.

| GS4 DURAPULSE Drives Communication Interface Cards                                                                                                                                                                    |          |                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |            |           |
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| Part Number                                                                                                                                                                                                           | Price    | Description                               | Specifications                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Placement* | GS Drive  |
| <b><u>GS4-CM-ENETIP*</u></b>                                                                                                                                                                                          | \$110.00 | DURAPULSE communication card, EtherNet/IP | Interface: EtherNet/IP RJ45 with MDI/MDIX auto-detect<br>Number of ports: 1 (16 connections max)<br>Transmission method: IEEE 802.3, IEEE 802.3u<br>Transmission cable: Category 5e shielding 100MHz<br>Transmission speed: 10/100 Mbps Auto-Detect<br>Network protocol: ICMP, IP, TCP, UDP, DHCP, Modbus TCP, EtherNet/IP<br>Power supply voltage: 5VDC (supplied by the GS4 AC drive)<br>Insulation voltage: 500VDC<br>Power consumption: 0.8W<br>Weight: 25g<br>Noise immunity<br>ESD (IEC 61800-5-1, IEC 61000-4-2)<br>EFT (IEC 61800-5-1, IEC 61000-4-4)<br>Surge Test (IEC 61800-5-1, IEC 61000-4-5)<br>Conducted Susceptibility Test (IEC 61800-5-1, IEC 61000-4-6)<br>Operation: -10°C to +50°C [14°F to 122°F] (temperature), 90% (humidity)<br>Storage: -25°C to +70°C [-13°F to +158°F] (temperature), 95% (humidity)<br>Vibration / Shock immunity:<br>IEC 61800-5-1, IEC 60068-2-6/IEC 61800-5-1, IEC 60068-2-27<br>Ethernet timeout functionality for EtherNet/IP connections<br>GS4-CM-ENETIP supports 4 EtherNet/IP connections and also supports 4 ModTCP connections. These ModTCP connections cannot start/stop or change command frequency in the drive, but can be used to monitor the drive and change Parameters. Ethernet timeout functionality <u>for ModTCP connections</u> is <u>not</u> supported on the EtherNet/IP card. | slot #1    | GS4 – all |
| <b><u>GS4-CM-MODTCP*</u></b>                                                                                                                                                                                          | \$97.00  | DURAPULSE communication card, ModbusTCP   | Interface: Ethernet RJ45 with MDI/MDX auto-detect<br>Number of ports: 1 (4 connections max)<br>Transmission method: IEEE 802.3, IEEE 802.3u<br>Transmission cable: Category 5e shielding 100MHz<br>Transmission speed: 10/100 Mbps Auto-Detect<br>Network protocol: ICMP, IP, TCP, UDP, DHCP, Modbus TCP<br>Power supply voltage: 5VDC (supplied by the GS4 AC drive)<br>Insulation voltage: 500VDC<br>Power consumption: 0.8W<br>Weight: 25g<br>Noise immunity<br>ESD (IEC 61800-5-1, IEC 61000-4-2)<br>EFT (IEC 61800-5-1, IEC 61000-4-4)<br>Surge Test (IEC 61800-5-1, IEC 61000-4-5)<br>Conducted Susceptibility Test (IEC 61800-5-1, IEC 61000-4-6)<br>Operation: -10°C to +50°C [14°F to 122°F] (temperature), 90% (humidity)<br>Storage: -25°C to +70°C [-13°F to +158°F] (temperature), 95% (humidity)<br>Vibration / Shock immunity:<br>IEC 61800-5-1, IEC 60068-2-6/IEC 61800-5-1, IEC 60068-2-27<br>Ethernet Timeout functionality for ModTCP connections                                                                                                                                                                                                                                                                                                                                                                                   | slot #1    | GS4 – all |
| * GS4 AC drives have three option card slots; each slot will hold only one option card designed for that particular slot. Communication interface cards are designed for slot #1, and will not fit in any other slot. |          |                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |            |           |

**GS4-CM-ENETIP**



**GS4-CM-MODTCP**

