GS30 Optional Accessories – Expansion Cards

GS30 Optional Modules

The <u>GS30A-CM-EIP1</u> and <u>GS30A-CM-EIP2</u> are communication modules that can be used for either Modbus TCP or EtherNet/ IP communication. The <u>GS30A-CM-ECAT</u> module is used for EtherCAT communications. The <u>GS30A-BPS</u> 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.



Frame A-D

YALITOMATIONDISECT



POSITION 2

Frame E-I

Position 2

GS30 DURAPULSE Drives I/O and Communication Cards					
Part Number	Price	Description	Features/Specifications	Position	
<u>GS30A-CM-EIP1</u>	\$5_ze:	DURApulse GS30 series communication module, EtherNet/IP and Modbus TCP, 1 port, (1) Ethernet (RJ45) port(s). For use with GS30 series AC drives.	Features: Supports Modbus TCP and EtherNet/IP protocol 32/32 words read/write parameters correspondence User-defined corresponding parameters MDI/MDI-X auto-detect IP filter simple firewall function Specifications: RJ45 with Auto MDI/MDIX interface		
GS30A-CM-EIP2	\$;5_zf:	DURApulse GS30 series communication module, EtherNet/IP and Modbus TCP, 2 ports, (2) Ethernet (RJ45) port(s). For use with GS30 series AC drives.	1 port (EIP1) or 2 ports (EIP2) IEEE 802.3, IEEE 802.3 u transmission method with Cat 5e shielding 100MHz cable at 10/100 Mbps Auto-detect transmission speed Network protocol: ICMP, IP, TCP, UDP, DHCP, HTTP, SMTP, Modbus over TCP/IP, EtherNet/IP, BOOTP Requires 15VDC provided by AC drive 500VDC insulation voltage 0.8 W power consumption 25g (EIP1) or 30g (EIP2) weight	1 or 2	
GS30A-CM-ECAT	\$05_zc:	DURApulse GS30 series communication module, EtherCAT Slave, 2 ports, (2) Ethernet (RJ45) port(s). For use with GS30 series AC drives.	Features: • Enables EtherCAT communications • Supports speed mode • Supports reading and writing parameters • Supports stop during disconnection Specifications: • RJ45 interface • 2 ports • IEEE 802.3, IEEE 802.3u transmission method with Cat 5e shielding 100MHz cable at 100 Mbps transmission speed • Requires 15VDC provided by AC drive • 500VDC insulation voltage • 0.8 W power consumption • 27g weight	1 or 2	
GS30A-BPS	\$05_z7:	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: Parameter reading and writing Keypad display Keys on the keyboard panel (except the RUN key) Analog input with +10V terminal supply power Multi-function inputs with +24V terminal or external power supply Relay output Pulse sequence frequency command Testing RS485 and Ethernet communications	1 or 2	







GS30A-BPS GS30A-CM-EIPX GS30A-CM-ECAT

www.automationdirect.com

GS20/GS30 Optional Accessories – Expansion Cards

GS20/GS30 Optional Modules

The GS30A-CM-EIPKITP2 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 DURAPULSE Drives Communication Card Mounting					
Part Number	Price	Description	Features/Specifications	Position	
GS30A-CM- EIPKITP2	\$5_zb:	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-EIPKITP2



Drive with GS30A-CM-EIPKITP2 installed

www.automationdirect.com

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		
<u>GS30A-06CDD</u>	\$5_z0:	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 ±5% < 30mA			
			DI10-DI12	Choose SINK (NPN) / SOURCE (PNP) by SWW1 Internal power is supplied by terminal 24V: +24VDC ±5% If external power is +24VDC, the maximum voltage is 30VDC and the minimum voltage is 19VDC ON: activation current is 6.5 mA OFF: leakage current tolerance is 10µA	1		
			DO10-DO12	The motor drive outputs various monitor signals, such as drive in operation, frequency reached and overload indication through the transistor (open collector) Do output signal: each DO terminal needs a pull-up resistor, the maximum external power voltage is 48VDC / 50mA			
			DCM	Common for digital output terminals DO10–DO12 (photocoupler)			
			PE	Grounding terminals. To decrease noise, properly ground this terminal.			
	\$-5_yl:	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			
GS30A-2AD2DA			Al10, Al11	Two sets of AI ports: SSW3, SSW4 switch for AI1, AI2 (default is AI1) • AI1: input 0–10 V • AI2: input 0–20 mA	1		
			AO10-AO11	Two sets of AO ports: SSW1, SSW2 switch for current (default) or voltage. • Voltage output: 0–10 V • Current output: 0–20 mA			
			PE	Grounding terminal. to decrease noise, properly ground this terminal.			
GS30A-02TRC	\$5_y_:	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) 11NO-11NC-11CM (DO11)	Resistive load: 5A (N.O.) / 250VAC Function: outputs the monitor signals, such as drive in operation, frequency reached, or overload indication.	1		
GS30A-03TRA	\$5_y#:	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) 11NO -11CM (DO11) 12NO -12CM (DO12)	Resistive load: 6A (N.O.) / 250VAC 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

		GS	30 DUR/	PULSE D	Orives I/O Cards	
Part Number	Price	Description	Terminals		Descriptions	Position
<u>GS30A-FB-LD</u>		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	Power output voltage: +5V ±5% or +12V ±5% Maximum output current: 200mA (+5V)	1
				DCM	Common for power and signal	
				A1, <u>A1</u> , B1, <u>B1</u> , Z1, <u>Z</u> 1	Encoder input signal (applicable for line driver or open collector Open collector input voltage +5–24 VDC Supports 1-phase and 2-phase input Maximum input signal: 300kHz	
	\$05_z8:		PG2	A2, <u>A2,</u> B2, <u>B2</u>	 Pulse input signal (applicable for line driver or open collector) Open collector input voltage +5–24 VDC Supports 1-phase and 2-phase input Maximum input signal: 300kHz 	
	φ03_20.		PG OUT	AO, AO, BO, BO, ZO, ZO, SG	Encoder feedback signal output, supports frequency elimination: 1–255 times Maximum output voltage of the line driver: 5VDC Maximum output current: 15mA Maximum output frequency: 300kHz 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	
			Ground	PE	Grounding terminal. To decrease noise, properly ground this terminal.	
GS30A-FB-OC	\$05_z9:	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	 Power output voltage: +5V ±5% or +12V ±5% (Use SSW320 to switch +5V or +12V, the default is +5V) Maximum output current: 200mA (+5V) 	1
				DCM	Common for power and signal	
				A1, <u>A1,</u> B1, <u>B1,</u> Z1, <u>Z1</u>	Encoder input signal (applicable for line driver or open collector Open collector input voltage +5–24 VDC Supports 1-phase and 2-phase input Maximum input signal: 300kHz	
			PG2	A2, <u>Ā2</u> B2, <u>B2</u>	Pulse input signal (applicable for line driver or open collector) Open collector input voltage +5–24 VDC Supports 1-phase and 2-phase input Maximum input signal: 300kHz	
			PG OUT	V+, V+	Needs an external power source for the PG OUT circuit Input voltage: +7–24 V	
				V-	The negative side for external power supply	
				ĀŌ, BŌ, ZŌ	PG feedback signal output: supports frequency elimination: 1–255 times Open collector's output signal: add a pull-up resistor on each PG out external power Maximum input frequency: 300kHz	





GS30A-FB-LD

GS30A-FB-OC