



for a greener tomorrow

GOC

Graphic Operation Controller



ALL-IN-ONE CONTROLLER

MAKE IN INDIA
MADE FOR THE WORLD

IIoT DRIVEN
TRANSFORMATION

ALL-IN-ONE CONTROLLER

- PLC with abundant built-in functions in compact body
- Large memory for complex programs
- Display - 4.3" Graphical TFT LCD Display with 64k colour, 480 X 272 pixels
- Wide communication options
- Configurable annunciator panel
- IP65 front panel

“ An all-in-one controller for all automation needs ”

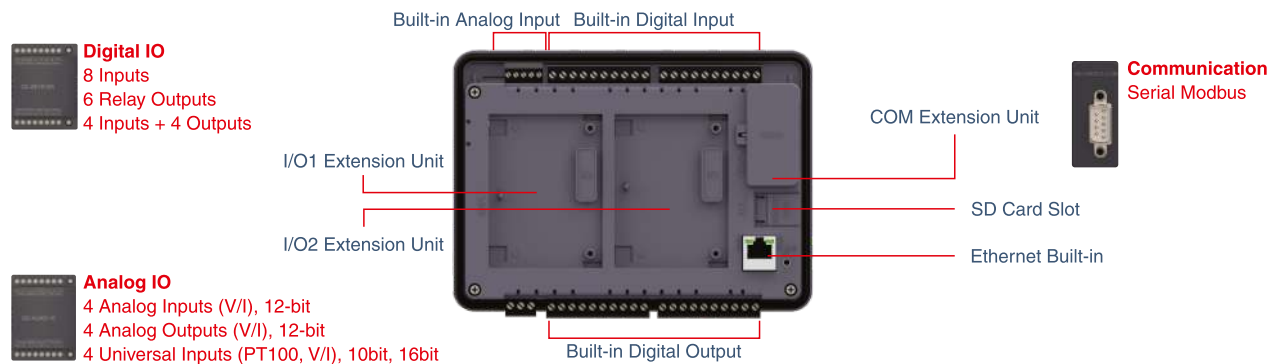


FLEXIBLE INTEGRATED DESIGN

- I/O Capacity - 50
- Main Unit - 16 and 32 I/O with 2 AI built-in
- I/O Extension Unit- Analog, DI/DO

“ GOC is compact and it reduces Assembly Time by eliminating separate wiring of PLC and HMI ”

- Built-in Ethernet
- Serial Communication Options
- Slot for SD Card (up to 32GB)
 1. Data Logging
 2. Program backup and restore

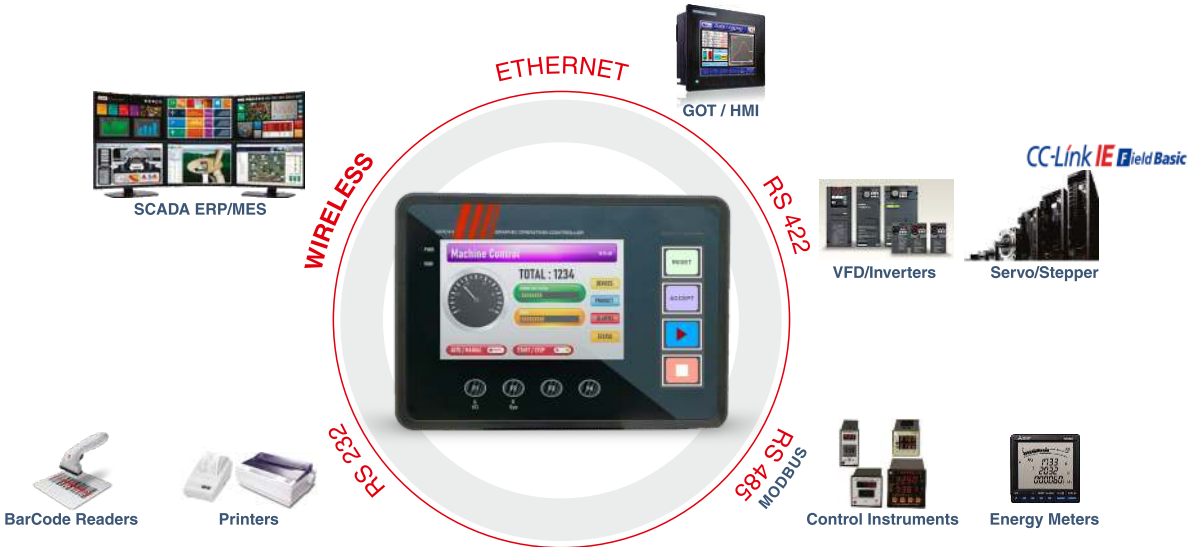


IIoT CONNECTIVITY*

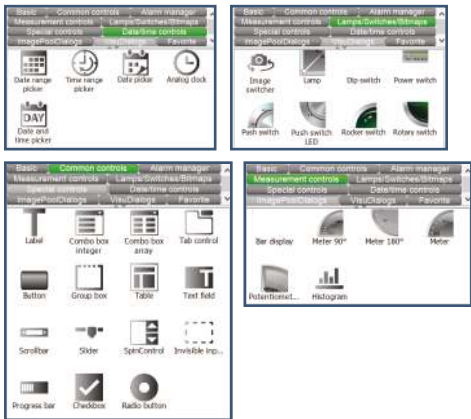
- GSM / GPRS connectivity
- 2G / 3G / 4G Network
- MQTT protocol
- Smart Remote Monitoring



SEAMLESS CONNECTIVITY



VIVID VISUALIZATIONS



EASE OF CUSTOMIZATION

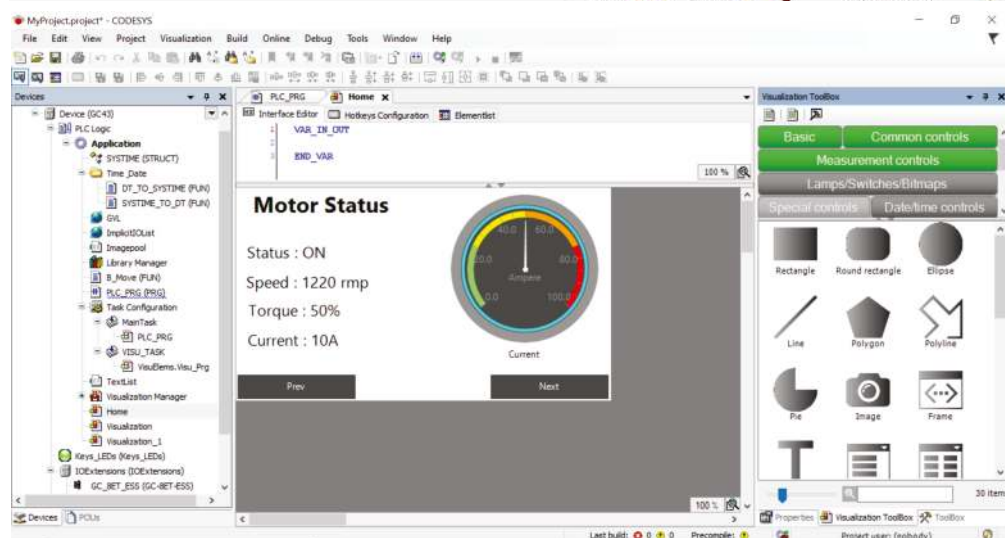
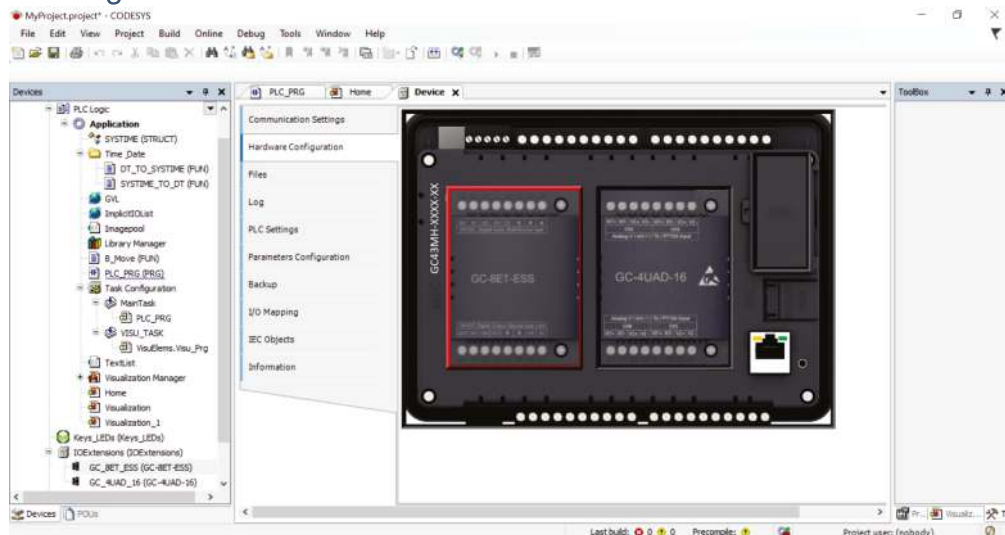
- 4 Illuminated Keys (keys with dual colour bright LEDs)
- User configurable operation Inch / Toggle / GoTo Screen
- LED control Red / Green / Yellow ON / OFF / Blink Slow / Blink Fast
- Multi-fold usage combined with slide-in label



IEC 61131-3 PROGRAMMING PLATFORM

SINGLE PROGRAMMING PLATFORM FOR PLC AND HMI

Hardware Configuration



“ **Powerful programming platform reduces the engineering time** ”

SPECIFICATIONS

Main Unit

MODEL		GC35MH-16MT-DS GC35MH-16MR-D GC35MH-16MT-DSS	GC35MH-32MT-DS GC35MH-32MR-D GC35MH-32MT-DSS	GC43MH-16MR-D GC43MH-16MT-DSS	GC43MH-32MR-D GC43MH-32MT-DSS
IO Range (Input, Output)		16 (8,8)	32 (16,16)	18I/O- 8DI, 8DO, 2AI	34 I/O- 16DI, 16DO, 2AI
Maximum IO Range		48		50	
CPU Performance	BOOL	0.3 µsec		1.2 µsec	
	MOVE (BYTE, WORD)	0.3 µsec		1.2 µsec, 1.2 µsec	
	MOVE (DWORD, REAL)	0.1 µsec		1.3 µsec, 1.5 µsec	
Memory Size	Program	192 KBytes		8 Mbytes	
	Source Code & Comments	1.5 MBytes		40 Mbytes	
	Data Memory	24 KBytes		32 KBytes	
	Retain Memory	1 KBytes		4 KBytes	
Power		24 VDC, 400 mA, 9.6 Watt		24 VDC, 600 mA, 12 Watt	
Built-In Analog Inputs		Not supported		2 Ch (12 bit V/I)	
Output Type		GC35MH-16MT-DS: Transistor (sink)	GC35MH-32MT-DS: Transistor (sink)	GC43MH-16MR-D: Relay	GC43MH-32MR-D: Relay
		GC35MH-16MR-D: Relay	GC35MH-32MR-D: Relay	GC43MH-16MT-DSS: Transistor (Source)	GC43MH-32MT-DSS: Transistor (Source)
		GC35MH-16MT-DSS: Transistor (source)	GC35MH-32MT-DSS: Transistor (source)		
	Single Phase Counter	20 KHz (2 Nos.)		20 KHz max	
	Encoder Interface	10 KHz (2 Nos.)		10 KHz max	
Integrated Functions	Real Time Clock	Retained up to 2 weeks with super capacitor backup		Supported	
	Communication	Rs232, RS422/RS485, Ethernet* (Via com Extension Unit)		Ethernet (Built-in), RS232, RS422/RS485 (Via COM Extension Unit)	
	Communication Protocols	Modbus RTU Master/Slave, Modbus TCP Slave, CC-Link IE Field Basic Master/Slave		Modbus RTU Master/ Slave, Modbus TCP Master/ Slave, CC-Link IE Field Basic*	
	Display	Graphic LCD Display, 128 x 64 pixels White characters on blue background		4.3", 480 x 272 pixel, TFT, 64K Colour, Touch LCD with backlit	
HMI	Keys	10 keys for display navigation and data entry (User configurable functionality for 5 keys)		4 (User configurable)	
	Illuminated Keys	8 (Keys with bicolor LEDs, Slide-in label)		4 (Keys with bi-colour LEDs, slide-in label)	
IO Expandability		2 IO Extension Slots		2 I/O Extension slots	
Communication Expandability		2 COM Extension Slots		1 COM Extension Slots	
Programming	Software	GOC Toolkit (Includes CoDesys for programming and other configuration tools)		GOC Toolkit (Includes CoDesys for programming and other configuration tools)	
	IEC 61131-3 Languages	Ladder, ST, SFC, FBD, IL		Ladder, ST, SFC, FBD, IL	
	User Defined Function Blocks	Yes		Yes	
Environmentals	IP Level	IP65 from front. IP20 from rear		IP65 from Front, IP20 from Rear	
	Temperature Range	Operating: 0 to 55 °C, Storage: -20 to 75 °C		Operating: 0 to 55 °C. Storage: -20 to 75 °C	
	Dimensions	Cut Out : 166.5 (W) x 107.5 (H), Rear : 177.0 (W) x 123.0 (H) x 42.3 (D)		Cut-out: 166.5 (W) x 107.5 (H), Rear : 177 (W) x 127 (H) x 47.2 (D)	
Approvals	CE, ROHS	Yes		Yes**	

*Coming soon

**In process

SPECIFICATIONS

IO Extension Unit

	GC-8EX-ES	GC-6EYR-ES	GC-8ET-ESS	GC-4AD-12	GC-4DA-12	GC-4UAD-10	GC-4UAD-10E	GC-4UAD-16	GC-4A-12	GC-4HSXPTY
IO Extension Type	Digital			Analog						High Speed Digital
Input Points	8	0	4	4	0	4	4	4	2	2 Ch HSC/Encoder, 100/50KHz max
Output Points	0	6	4	0	4	0	0	0	2	2 Ch PTO, 100 KHz max
Input Type	24VDC, Sink/Source	-	24VDC, Sink/Source	Voltage: 0 to 10V/-10 to 10V Current: 0 to 20mA/4-20mA	-	Voltage: 0 to 10V Current: 0 to 20mA RTD PT100: -50°C to 150°C	Voltage: 0 to 10V/DC Current: 0 to 20mA PT100: -50°C to 450°C	Voltage: 0 to 10V/DC Current: 0 to 20mA PT100, Pt1000 thermocouple	Voltage: 0 to 10V/-10 to 10V Current: 0 to 20mA/4-20mA	24 VDC Sink/Source
Output Type	-	Relay (500 mA at 250 VAC and 30 VDC)	24VDC, Source Type 1.5A/output	-	Voltage: 0 to 10V/-10 to 10V Current: 0 to 20mA/4-20mA	-	-	-	Voltage: 0 to 10V/-10 to 10V Current: 0 to 20mA/4-20mA	5 VDC Differential
Resolution	-	-	-	12 Bit	12 Bit	GOC35: 10 bit, GOC 43: 12 bit		16 Bit	12 Bit	-
Isolation	Optical 1.5 KV between input & internal circuit	Galvanic between output & internal circuit	Optical 1.5KV between input/output and internal circuit	No Isolation	No Isolation	No Isolation	No Isolation	No Isolation	No Isolation	Optical 1.5 KV between input & internal circuit. No isolation between PTO & internal circuit
Protections	-	-	Short circuit protection for output	-	Short circuit protection for voltage output	-	-	-	Short circuit protection for voltage output	No short circuit protection for PTO
GOC35*	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓
GOC43*	✓	✓	✓	✗	✓	✓	✓	✓	✓	✗

COM Extension Unit

	GC-RS232-COM	GC-RS422-COM	*GC-ENET-COM
Hardware Interface	RS232	RS422/485	10/100 Base-TX
Number of COM Ports	1	1	1
Communication Speed (BPS)	9600, 19200, 38400, 57600, 115200		10/100 Mbps
Connector Type	9-pin D male	5-pin removable terminal block	RJ45 female, Shielded
GOC35*	✓	✓	✓
GOC43*	✓	✓	✗

*Ethernet is trademark of xerox corporation | *Base Unit Supported



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For downloading GOC programming software and related information, scan the QR code for more details.

