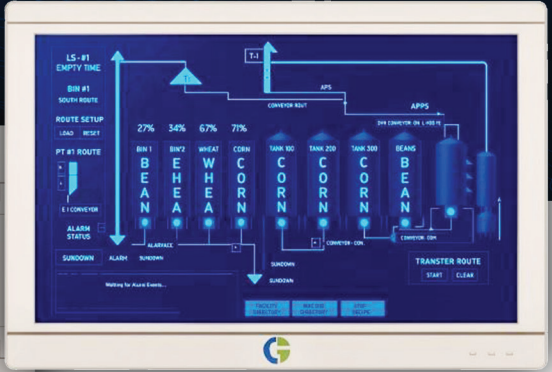
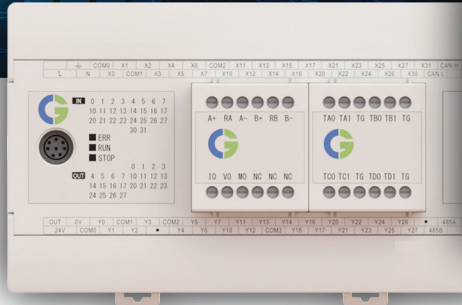




Smart solutions.
Strong relationships.

PLC & HMI FOR MODERN AUTOMATION

Smart Control, Seamless Automation



murugappa

PLC Series:

Compact PLCs for next-generation Automation



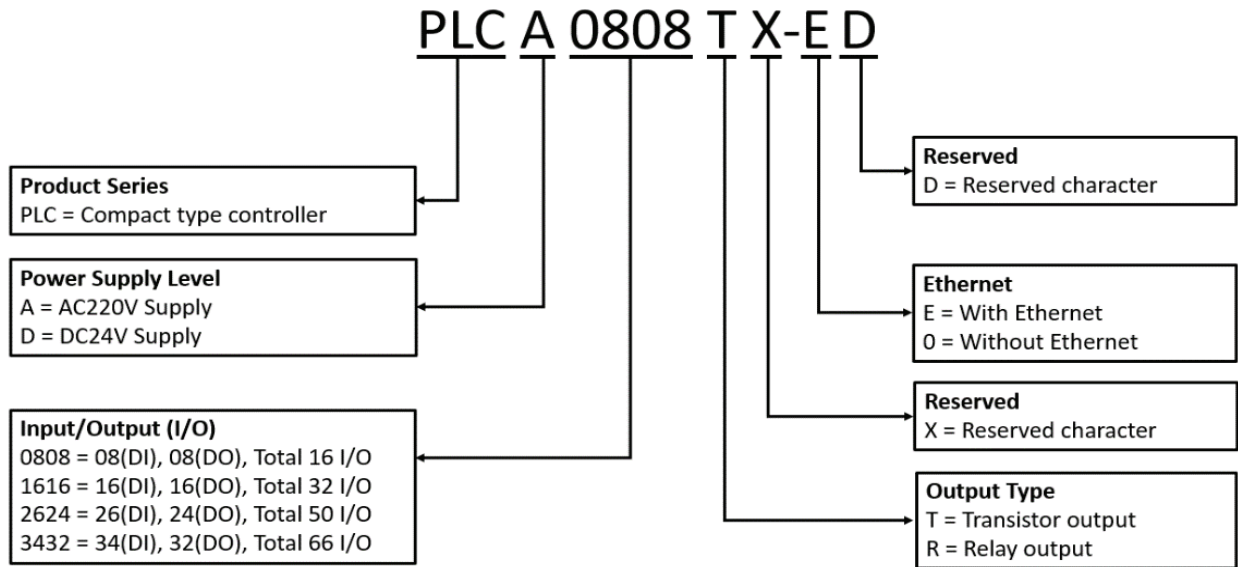
The CG Programmable Logic Controller (PLC) series is a high-performance, compact PLC designed for automation processes. It is widely applicable across various manufacturing industries, including Manufacturing & Production Lines, Process Industries, Heavy Machinery & Robotics, Logistics & Warehouse Automation and more.

Main Features:

- Compiled software ensures a short scan cycle, executing 10 times faster than interpreted PLCs with similar configurations.
- Supports Ethernet interface for high-speed network communication.
- Supports Modbus TCP/IP protocol, Modbus RTU communication protocols, RS485 communication port for reliable serial communication.
- USB download port for convenient program uploads and updates.
- Allows downloading, monitoring, and debugging of the PLC through any communication port.
- The Ethernet host supports 4 high-speed pulse outputs and 8 high-speed counting inputs.
- Hardware utilises a 32-bit ARM Cortex-M4 microcontroller operating at 200 MHz, offering superior performance.
- Achieves a maximum communication rate of 1 Mbps, supporting up to 16 expansion modules.
- Supports 2 plug-in expansion modules, allowing combinations with digital I/O, analogue, and temperature modules.
- User-friendly programming software for easy development and maintenance.

Model Explanation:

Model shown on the Product Nameplate showcases the following Information.



PLC Selection Guide & Specification:

Model	Power Supply	Digital Input	Digital Output	Output Type	Interfaces	Weight (g)
PLCD0808TX-ED	24 VDC	8	8	Transistor/NPN	RS485, USB, Ethernet	239
PLCD0808TX-0D	24 VDC	8	8	Transistor/NPN	RS485, USB	109
PLCD0808RX-0D	24 VDC	8	8	Relay	RS485, USB	109
PLCA0808TX-0D	220 VAC	8	8	Transistor/NPN	RS485, USB	305
PLCA1616TX-0D	220 VAC	16	16	Transistor/NPN	RS485, USB	500
PLCA1616TX-ED	220 VAC	16	16	Transistor/NPN	RS485, USB, Ethernet	500
PLCA1616RX-0D	220 VAC	16	16	Relay	RS485, USB	500
PLCA1616RX-ED	220 VAC	16	16	Relay	RS485, USB, Ethernet	500
PLCA2624TX-0D	220 VAC	26	24	Transistor/NPN	RS485, USB	580
PLCA2624TX-ED	220 VAC	26	24	Transistor/NPN	RS485, USB, Ethernet	580
PLCA2624RX-0D	220 VAC	26	24	Relay	RS485, USB	580
PLCA2624RX-ED	220 VAC	26	24	Relay	RS485, USB, Ethernet	580
PLCA3432TX-0D	220 VAC	34	32	Transistor/NPN	RS485, USB	690
PLCA3432TX-ED	220 VAC	34	32	Transistor/NPN	RS485, USB, Ethernet	690
PLCA3432RX-0D	220 VAC	34	32	Relay	RS485, USB	690
PLCA3432RX-ED	220 VAC	34	32	Relay	RS485, USB, Ethernet	690

Technical Specifications:

Models		PLCD0808 TX-ED	PLCD0808 TX-0D	PLCD0808 RX-0D	PLCA0808TX-0D	PLCA1616TX-0D	PLCA1616R X-0D
						PLCA1616TX-ED	PLCA1616R X-ED
Power Supply	Power supply voltage	24 VDC			220 VAC		
	Digital input	8			8	16	
Input parameters	High-speed counting	4 No. single-phase (X0, X2, X4 and X6) 200kHz 4 No. single-phase (X1, X3, X5 and X7) 20KHz	2 No. single-phase (X0, X2) 200kHz 2 No. single-phase (X1, X3) 20kHz	2 No. single-phase (X0, X2) 200kHz 2 No. single-phase (X1, X3) 20kHz	2 No. single-phase (X0 and X1) 200kHz	2 No. single-phase (X0 and X2) 200kHz 2 No. single-phase (X1 and X3) 200kHz	
	AB phase counting	4 No. AB phase (X0X1, X2X3, X4X5 and X6X7) 200kHz	2 AB phase count (X0X1, X2X3) 200kHz	2 AB phase count (X0X1, X2X3) 200kHz	1 No. AB phase (X0X1) 100kHz	2 No. AB phase (X0X1 and X2X3) 200kHz	
	Input wiring	Support Sink/Source conversion by internal S/S terminal and external wiring					
	Input signal voltage	24 VDC±20%					
Output parameters	Maximum resistive load	Single point 0.5A, common point 2A	single point 0.3A, total point 1A	single point 0.3A, total point 1A	Single point 0.5A, common point 2A		
	Pulse output	200KHz for 4 channels respectively		-	200KHz for 2 channels respectively	200KHz for 4 channels respectively	-
	Digital output	8			8	16	
	Output type	Transistor/NPN	Transistor/NPN	Relay	Transistor/NPN	Transistor/NPN	Relay
Interfaces	RS485	2 port	1 port	1 port	2 port	2 port	
	USB device port	Support upload and download, online monitoring					
	Ethernet port	Yes	-	-	-	Select “-ED” model for Ethernet port communication	
	Front expansion slot	-	-	-	-	1	
	Right extension module	16-channel standard module	-	-	16-channel standard module		
Other parameters	FCC compatibility	Conform to FCC, Class A					
	CE certification	Conform to the standards of EN55032 and EN55035					
	IP rating	IP30					
	Software	EmoLog+					
	Programming Language	Ladder, Instruction List (IL), FBD, STL, SFC					
Structure	Overall dimensions (W×H×D) (mm)	64 × 97 × 72	30 × 97 × 72	30 × 97 × 72	70 × 97 × 81	125 × 97 × 81	
	Weight (g)	239	109	109	305	500	

Models		PLCA2624TX-0D	PLCA2624RX-0D	PLCA3432TX-0D	PLCA3432RX-0D
		PLCA2624TX-ED	PLCA2624RX-ED	PLCA3432TX-ED	PLCA3432RX-ED
Power Supply	Power supply voltage	220 VAC			
	Digital input	26		34	
Input parameters	High-speed counting	4 No. single-phase (X0, X2, X4 and X6) 200kHz 4 No. single-phase (X1, X3, X5 and X7) 20kHz			
	AB phase counting	4 No. AB phase (X0X1, X2X3, X4X5 and X6X7) 200kHz			
	Input wiring	Support Sink/Source conversion via S/S terminal and external common-line wiring			
	Input signal voltage	24 VDC±20%			
Output parameters	Maximum resistive load	Single point 0.5A, common point 2A			
	Pulse output	200KHz for 4 channels, respectively at maximum	-	200KHz for 4 channels, respectively at maximum	-
	Digital output	24		32	
	Output type	Transistor/NPN	Relay	Transistor/NPN	Relay
Interfaces	RS485	2 port			
	USB device port	Support upload and download, online monitoring			
	Ethernet port	Select the “-ED” model for Ethernet port communication			
	Front expansion slot	2			
	Right extension module	16-channel standard module			
Other parameters	FCC compatibility	Conform to FCC, Class A			
	CE certification	Conform to the standards of EN55032 and EN55035			
	IP rating	IP30			
	Software	EmoLog+			
	Programming Language	Ladder, Instruction List (IL), FBD, STL, SFC			
Structure	Overall dimensions (W×H×D) (mm)	163 × 97 × 81		194 × 97 × 81	
	Weight (g)	580		690	
Environment	Operating ambient temperature	-25 °C ~ 55 °C (no freezing)			
	Operating ambient humidity	5~95%RH (no condensation)			
	Shock resistance intensity	10~25Hz (XYZ direction 2G/30 min)			

PLC plug-in board:

Models	Description	Type	Overall dimensions
ED-8DX	8 channel Digital input	Digital Input	39x46x33 (mm)
ED-8DYT	8 channel Digital output Transistor. NPN type.	Digital Output	
ED-4DX4DYT	4 channel Digital input 4 channel Digital output Transistor. NPN type.	Digital Input/ Digital Output	
ED-4TC	4 channel thermocouple KT types (K type: -50°C~500°C T type: -260°C~400°C).	Temperature input	
ED-4PT	4 channel temperature PT100 (Range: -200°C~850°C).	Temperature input	
ED-4AI	4 channel analog input (0~5V, 0~10V, 4~20mA) Voltage/Current measurement	Analog input	
ED-2AI2AO	2 channel analog input (0~5V, 0~10V, 4~20mA) 2 channel analog output (0~5V, 0~10V, 4~20mA) Voltage/Current measurement	Analog Input/ Analog Output	

PLC Expansion module:

Expansion Module	Description	Power	Overall Dimension
EDP-12DYR	12-channel Digital output Relay	24 VDC	30x97x72 (mm)
EDP-16DX	16-channel Digital input (Sink/Source)	24 VDC	
EDP-16DYT	12-channel Digital output Transistor. NPN type. Negative output	24 VDC	
EDP-4TC4DYT	4-channel thermocouple K,T types (K type: -50°C~500°C, T type: -260°C~400°C). 4 Channel Digital Output Transistor. NPN type.	24 VDC	
EDP-4AI4DYT	4 channel analog input (0~5V, 0~10V, 4~20mA) 4 Channel Digital Output Transistor. NPN type. Voltage/Current measurement	24 VDC	
EDP-4AI2AO	4 channel analog input (0~5V, 0~10V, 4~20mA) 4 channel analog output (0~5V, 0~10V, 4~20mA) Voltage/Current measurement	24 VDC	
EDP-4PT4DYT	4-channel temperature PT100 (Range: -200°C~850°C). 4 Channel Digital Output Transistor. NPN type.	24 VDC	
EDP-8DX8DYT	8-channel Digital input 8-channel Digital output Transistor	24 VDC	

Upgraded Application Software EmoLog+:

- Supports development of applications in Ladder, Instruction List (IL), FBD, STL, and SFC.
- Fast compile (<0.5s), quick download (<3s), and real-time online editing supported.
- Fully compiled architecture is employed to safeguard the program logic, preventing code extraction and tampering.
- PLC logic can be accessed and executed through the display interface, enabling direct programming and monitoring.
- Highly advanced programming interface.
- User-friendly Graphical User Interface.



HMI Series:

Reliable and User-Friendly Human Machine Interface (HMI) Panels



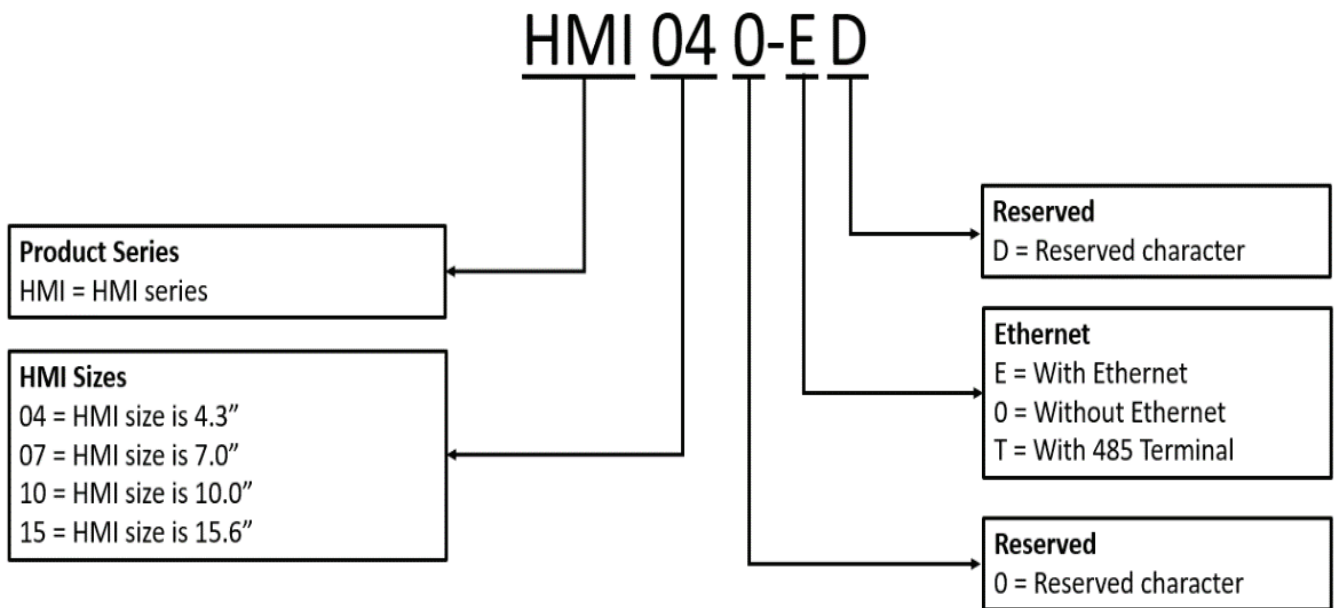
The CG HMI series features a modern, powerful, and user-friendly design. It offers high-resolution displays, ample memory, and a robust configuration, making it ideal for human-machine interaction across various fields and industrial automation.

Main Features:

- Supports multiple communication modes (RS232/422/485), USB download, and U disk update configuration.
- Industrial high-performance processor of CortexA7 1GHz dual core and CortexA7 1.2GHz in 15.6-inch model.
- Offers stability, efficiency, safety, and reliability.
- PC can directly interface with the PLC or connected devices via HMI, and dual HMIs can concurrently communicate with a single PLC.
- Features multiple security systems, ensuring safety and reliability.
- Adapt to various harsh environments, strong magnetic interference and other working situations.
- Offers higher resolution and contrast for better picture quality.
- User-friendly programming software.

Model Explanation:

Model shown on the Product Nameplate showcases the following Information.



HMI Selection Guide & Specification:

Model	Display Size	Resolution (pixels)	Power Supply	Communication Ports	Processor	Weight (kg)
HMI040-0D	4.3"	480x272	12-24 VDC (±15%)	COM1: RS232; COM2: 422/485	CortexA7 1GHz dual core	0.2
HMI070-ED	7"	800x480	12-24 VDC (±15%)	COM1: RS232; COM2: 422/485	CortexA7 1GHz dual core	0.7
HMI070-0D	7"	800x480	12-24 VDC (±15%)	COM1: RS232; COM2: 422/485	CortexA7 1GHz dual core	0.7
HMI100-ED	10.2"	1024x600	12-24 VDC (±15%)	COM1: RS232; COM2: 422/485	CortexA7 1GHz dual core	1.05
HMI100-0D	10.2"	1024x600	12-24 VDC (±15%)	COM1: RS232; COM2: 422/485	CortexA7 1GHz dual core	1.05
HMI150-ED	15.6"	1920x1080	12-24 VDC (±15%)	COM1: RS232; COM2: 422/485; COM3: 485	CortexA7 1.2GHz	2.3

Technical Specifications:

Models		HMI040-0D	MI070-ED	MI070-0D	MI100-ED	MI100-0D	HMI150-ED
Display	Display size	4.3"	7"		10.2"		15.6"
	Resolution (pixels)	480x272	800x480		1024x600		1920x1080
	Touch panel	4-wire high-precision touch panel					
	Backlight module	LED					
	Display colour	16.77 million					
	Contrast ratio	400:1	400:1			700:1	
	Brightness (cd/m ²)	400	450		450		300
Power supply	Power supply	12-24 VDC (±15%)					
	Power consumption	3W	4W		7W		10W
Product Characteristics	Memory	128MB DDR3					256MB DDR3
	Central processor	CortexA7 1GHz dual core					CortexA7 1.2GHz
	FCC compatibility	Conform to FCC and Class A					
	Withstand voltage test	1000 VAC, 1min					
	CE certification	EN55032 and EN55035 standards					
	IP rating (front panel)	IP65					
	Shell materials	ABS+PC					aluminium alloy galvanised sheet
Interfaces	Serial Interface	COM1:RS232; COM2:422/485					COM1:RS232; COM2:422/485; COM3:485
	USB download port	✓	✓	✓	✓	✓	✓
	USB flash disk port	✓	✓	✓	✓	✓	✓
	Ethernet Port	x	✓	x	✓	x	✓
Structure	Overall dimension (W*H*D) (mm)	139*86*31	203*145*35		273*211*44		395*257*31
	Net weight (kg)	0.2	0.7		1.05		2.3
Computer Software		EmoSmart+					
Environment	Temperature	-20°C to 55°C (no freezing)					
	Humidity	5-95%RH (no condensation)					
	Shock resistance intensity	10-25 Hz (XYZ direction: 2G/30 min)					

Upgraded Application Software EmoSmart+:

- Programming software EmoSmart+ for all HMI series.
- Wide range of animations, recipes, charts and alarms.
- Support macro instruction based on the C-language.
- Multifunctional and control diversification available.



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