

H3U Series PLC

High performance with motion control

Features & functions

- All in one CPU and power supply supporting local and remote I/O
- Basic instruction: 100 ns/instruction
- Program capacity: 64 K steps
- Device memory
 - Auxiliary relays 9,216 points
 - Timers 512 points
 - Counters 256 points
 - Data registers 9,552 points
 - File registers 32,768 points
- High speed inputs: up to 200 kHz
- High speed outputs: up to 500 kHz^{*1}
- Three axes electronic cam (only available on the high-end motion model)
- Standard motion: two-axes circular and point to point interpolated
- High-end motion: three-axes point to point interpolated and spiral curve^{*1}
- Supports Ethernet (MODBUS-TCP), RS485 (MODBUS-RTU), CANopen, CANlink (Inovance proprietary) communication
- Maximum of 192 digital I/O (local), 24 analog I/O (local), 7,936 digital I/O (remote), 1,488 analog I/O (remote)
- Programming language conforms to IEC 61131-3:
 - Ladder diagram (LD)
 - Instruction list (IL)
 - Sequential function chart (SFC)

Note: *1. Available in H3U-0808PMRTA.

NEW

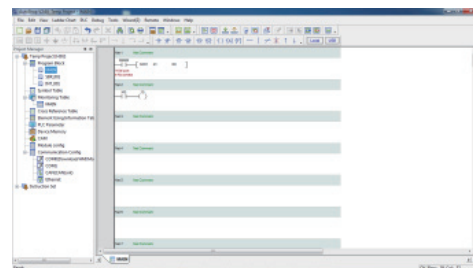
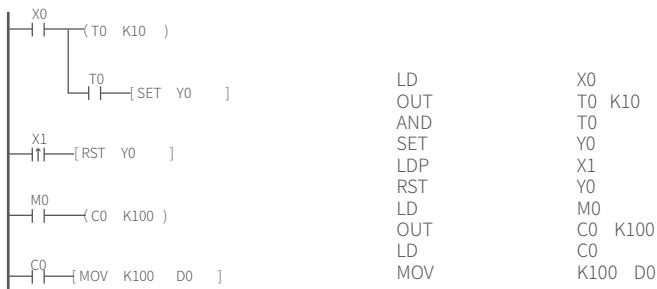
Up to three-axes electronic cam, with flexible and easy setup



Operation in high ambient temperature $\pm 55^{\circ}\text{C}$
Please note: If operating above 40°C derating is required

NEW

Built-in multiple communication ports including Ethernet, CAN, serial, USB ports, supporting program download/upload via serial/USB/Ethernet ports



PC-based software AutoShop
easy programming tool



General specifications

PLC model		H3U-1616MT-XP/ H3U-2416MT-XP	H3U-1616MR-XP/ H3U-2416MR-XP	H3U-3232MT/ H3U-3624MT	H3U-3232MR/ H3U-3624MR	H3U-0808PMRTA
Category		Standard motion ^[5]				High-end motion ^[6]
Dimensions	Height	[H] : 90 mm		[H] : 90 mm		
	Width	[W] : 170 mm		[W] : 230 mm		
	Depth	[D] : 90 mm		[D] : 95 mm		
Local extension I/O		Maximum of 128 DI/DO or 24 AD/DA, see local extension modules on page 4				
Remote extension I/O		Maximum of 7,936 DI/DO or 1,488 AD/DA, see remote extension modules on page 4				
Power supply		85~264 Vac				
Built-in inputs	Total inputs	16 24	16 24	32 36	32 36	8 ^[1]
	High-speed inputs	8 x 200 kHz ^[2]	8 x 200 kHz ^[2]	8 x 200 kHz ^[2]	8 x 200 kHz ^[2]	3 x 200 kHz ^[3]
Built-in outputs	Total outputs	16 16	16 16	32 24	32 24	8 ^[4]
	High-speed outputs	5 x 200 kHz ^[7]	N/A	5 x 200 kHz ^[7]	N/A	3 x 500 kHz ^[8]
	Output type	Transistor (NPN)	Relay ^[9]	Transistor (NPN)	Relay ^[9]	4 x Relays ^[9] 4 x Transistors (NPN)
Built-in ports	Serial port	COM0 (RS422/RS485), COM1 (RS485), Modbus-RTU, DB9				
	CAN port	CANopen/CANlink				
	Ethernet port	Modbus TCP, RJ45				
	USB (device)	Mini-B				

Note:

[1] 8 inputs = X0~X7, normal inputs

[2] 8 x 200 kHz: 8 open-collector high-speed (pulse train) inputs

[3] 3 x 200 kHz = 3-channel A/B phase differential high-speed inputs

[4] 8 outputs = Y0~Y7, normal outputs

[5] Supports two-axes circular and point to point interpolated

[6] Supports three-axes point to point interpolated and spiral curve

[7] 5 x 200 kHz = 5 open-collector high-speed (pulse train) outputs

[8] 3 x 500 kHz = 3-axes (channels) differential high speed (pulse train) outputs

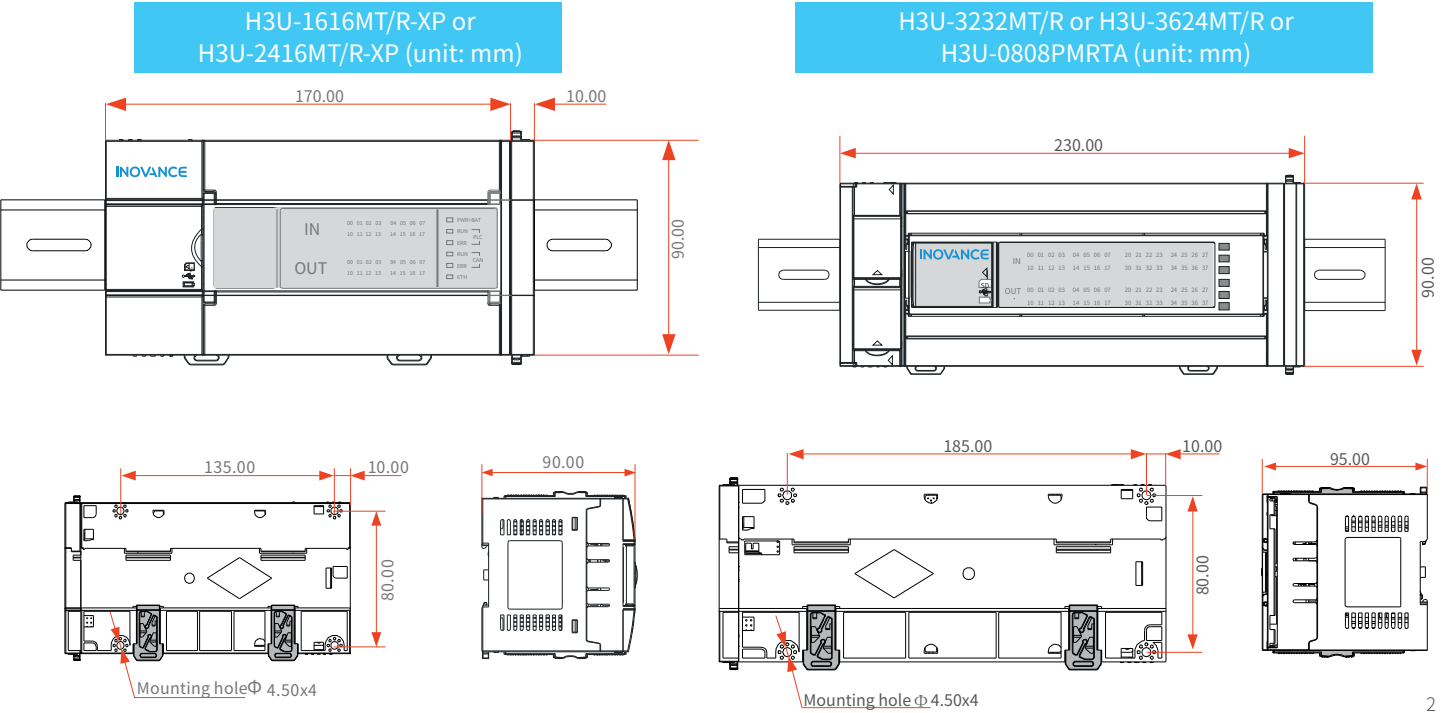
[9] Maximum output current:

Resistive load: 2 A/1 point (maximum current of the common terminal is 8 A)

Inductive load: AC 220 V, 80 VA

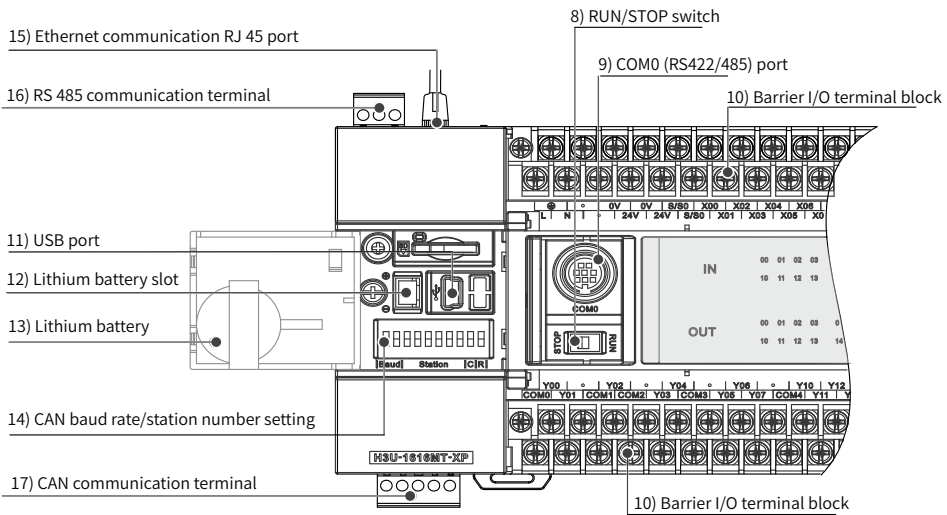
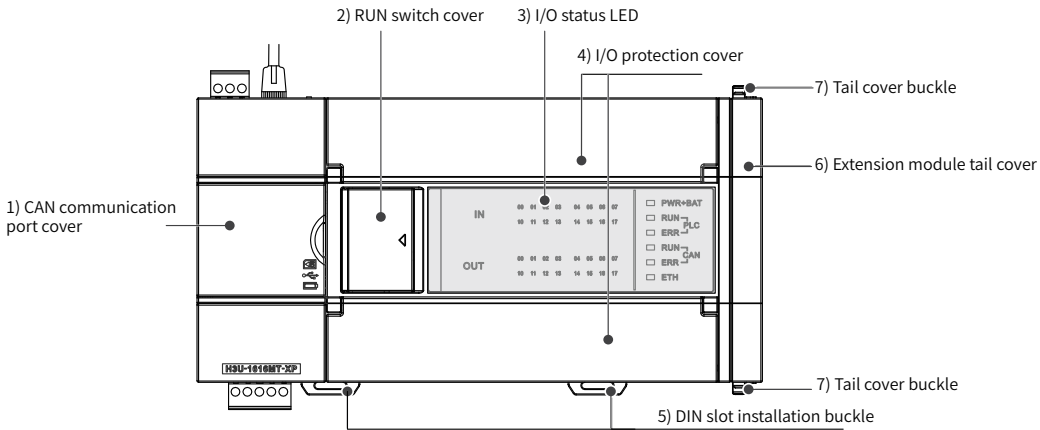
Lamp load: AC 220 V, 100 W

Dimensions

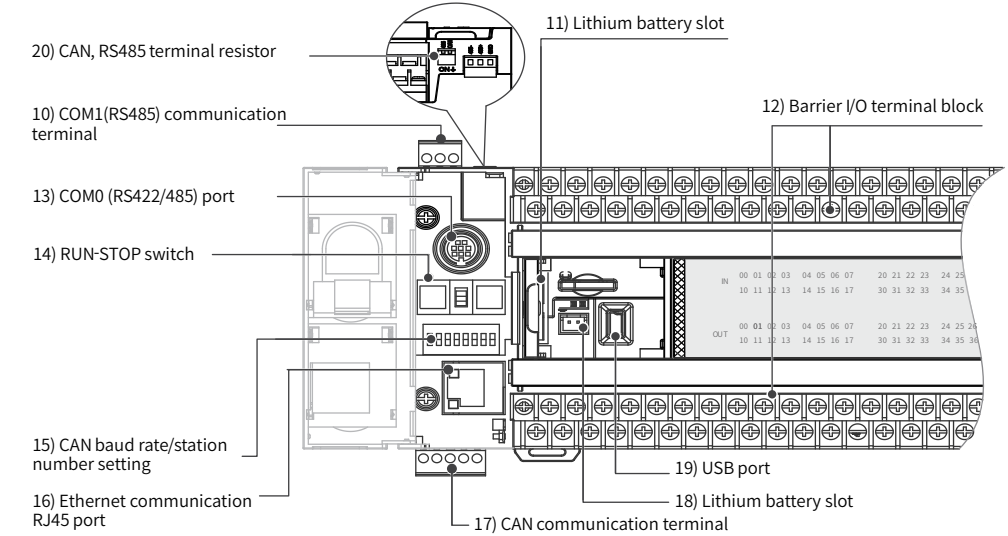
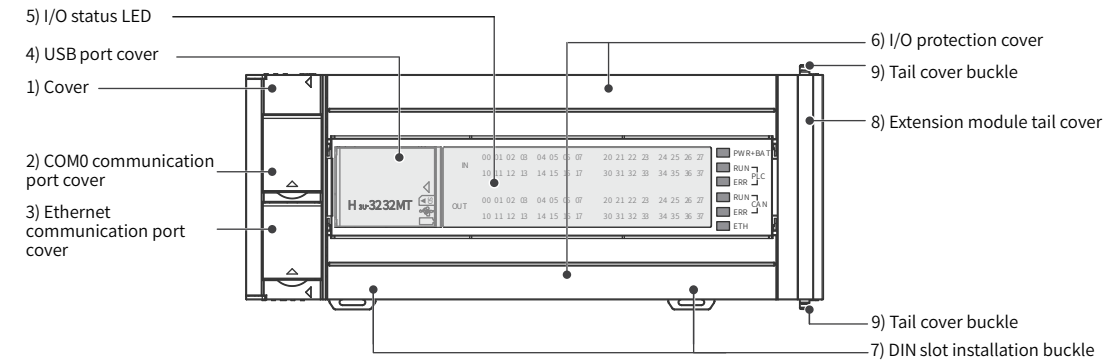


Product overview

H3U-1616MT/R-XP or H3U-2416MT/R-XP



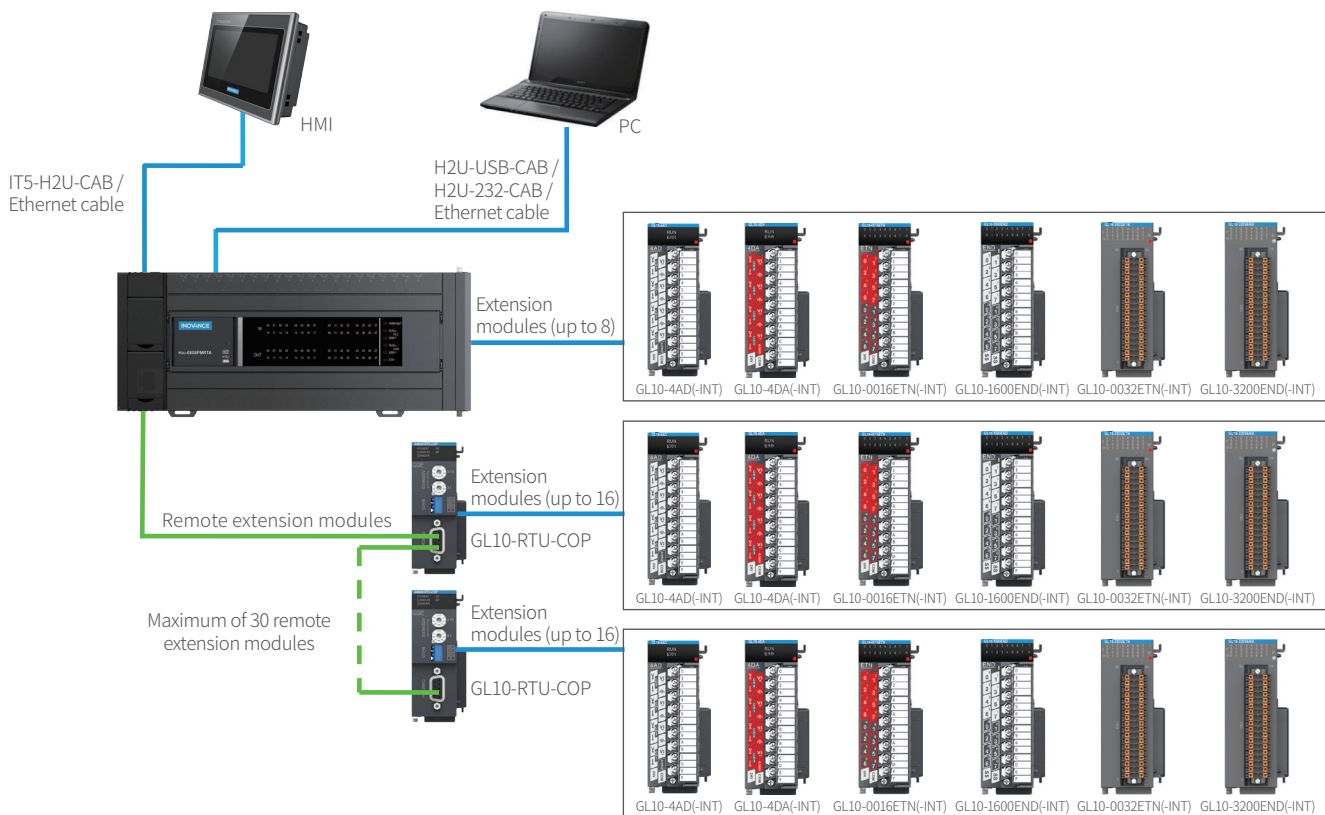
H3U-3232MT/R or H3U-3624MT/R or H3U-0808PMRTA



Accessories list

Model	Part no.	Function description
Power supply module		
GL10-PS2-INT	01440196	Power supply module, input: 220 VAC, output: 2 A/ 24 VDC
CANopen coupler module		
GL10-RTU-COP-INT	01440251	CANopen communication module, DB9 female
Digital input modules		
GL10-1600END-INT	01440198	16 x source (PNP)/sink (NPN) digital input modules, screw terminals
GL10-3200END-INT	01440216	32 x source (PNP)/sink (NPN) digital input modules, pluggable spring clamp
Digital output modules		
GL10-0016ER-INT	01440193	16 x relay output modules
GL10-0016ETP-INT	01440199	16 x source/PNP transistor output modules, screw terminals
GL10-0016ETN-INT	01440195	16 x sink/NPN transistor output modules, screw terminals
GL10-0032ETN-INT	01440217	32 x sink/NPN transistor output modules, pluggable spring clamp
Analog input/output modules		
GL10-4AD-INT	01440197	4 x analog input modules, screw terminals
GL10-4DA-INT	01440192	4 x analog output modules, screw terminals
Temperature detection modules		
GL10-4PT-INT	01440258	4 x channel thermal resistance input temperature detection modules, screw terminals
GL10-4TC-INT	01440263	4 x channel thermocouple input temperature detection modules, screw terminals
GL10-8TC-INT	01440261	8 x channel thermocouple input temperature detection modules, screw terminals
Positioning modules		
GL10-4PM-INT	01440260	4 x channel pulse output positioning modules, pluggable spring clamp
GL10-2PH-INT	01440253	2 x channel high-speed differential output positioning modules, pluggable spring clamp
Cables		
H2U-232-CAB	15042148	Connection of PC to H1U/H2U/H3U, the cable port is DB9 female, length of 2 m
H2U-USB-CAB	15041200	Connection of PC to controller, the connector on the cable is mini USB, length of 1.5 m
IT5-H2U-CAB	15041140	Connection of IT6000 to H1U/H2U/H3U, the cable port is DB9 male, length of 3 m
S6-L-T04-0.3	15040261	Ethernet cable, length of 0.3 m, speed of up to 100 Mbps, STP
S6-L-T04-3.0	15040262	Ethernet cable, length of 3 m, speed of up to 100 Mbps, STP
Battery		
H2U-BAT	01023010	CR2032 button cell lithium battery for Inovance PLC, 3.0 V, 225 mAh, with attached wire of 55 mm in length

H3U series PLC system configuration



For more information, please contact our local offices.

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