

# 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<sup>\*1</sup>
- 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<sup>\*1</sup>
- 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**

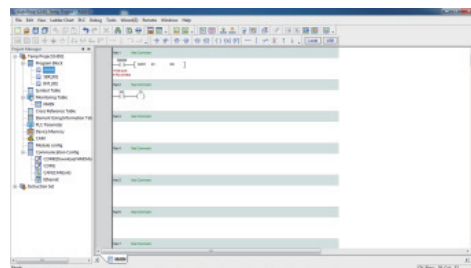
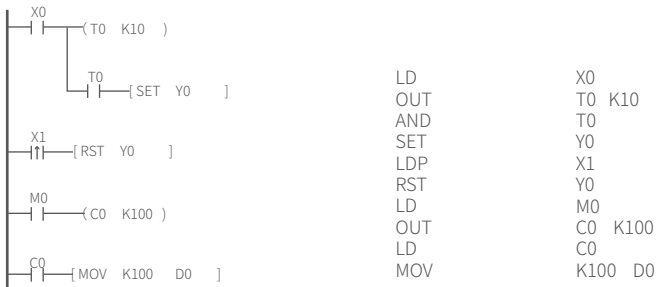
Up to three-axes electronic cam, with flexible and easy setup



Operation in high ambient temperature  $\leq 55^{\circ}\text{C}$   
Please note: If operating above  $40^{\circ}\text{C}$  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 <sup>[5]</sup>				High-end motion <sup>[6]</sup>	
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	16	32	32	8 <sup>[1]</sup>	
	High-speed inputs	8 x 200 kHz <sup>[2]</sup>	8 x 200 kHz <sup>[2]</sup>	8 x 200 kHz <sup>[2]</sup>	8 x 200 kHz <sup>[2]</sup>	3 x 200 kHz <sup>[3]</sup>	
Built-in outputs	Total outputs	16	16	32	32	8 <sup>[4]</sup>	
	High-speed outputs	5 x 200 kHz <sup>[7]</sup>	N/A	5 x 200 kHz <sup>[7]</sup>	N/A	3 x 500 kHz <sup>[8]</sup>	
	Output type	Transistor (NPN)	Relay <sup>[9]</sup>	Transistor (NPN)	Relay <sup>[9]</sup>	4 x Relays <sup>[9]</sup> 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

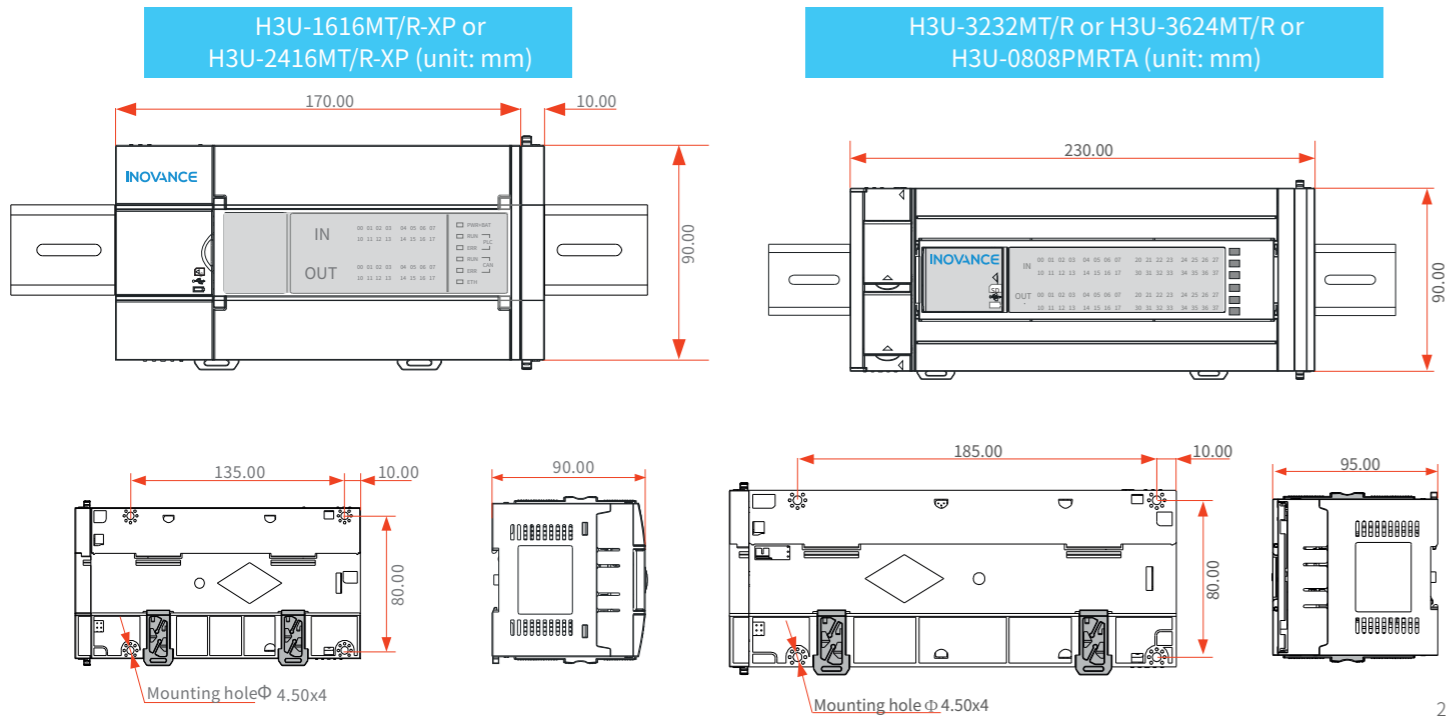
[9] Maximum output current:

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

Inductive load: AC 220 V, 80 VA

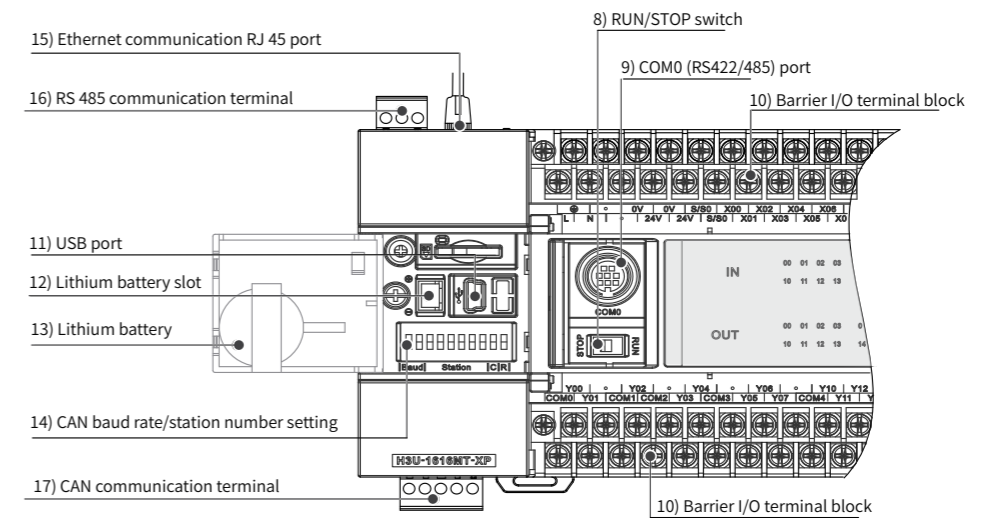
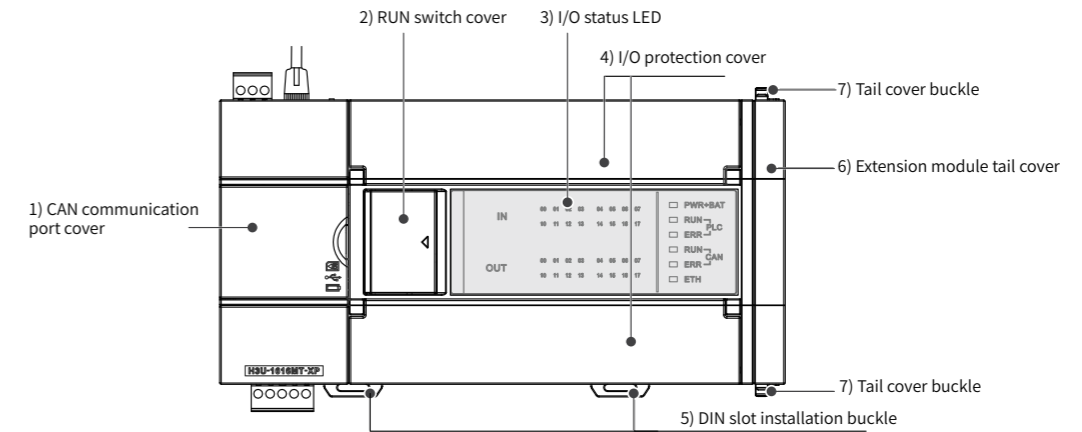
Lamp load: AC 220 V, 100 W

## Dimensions

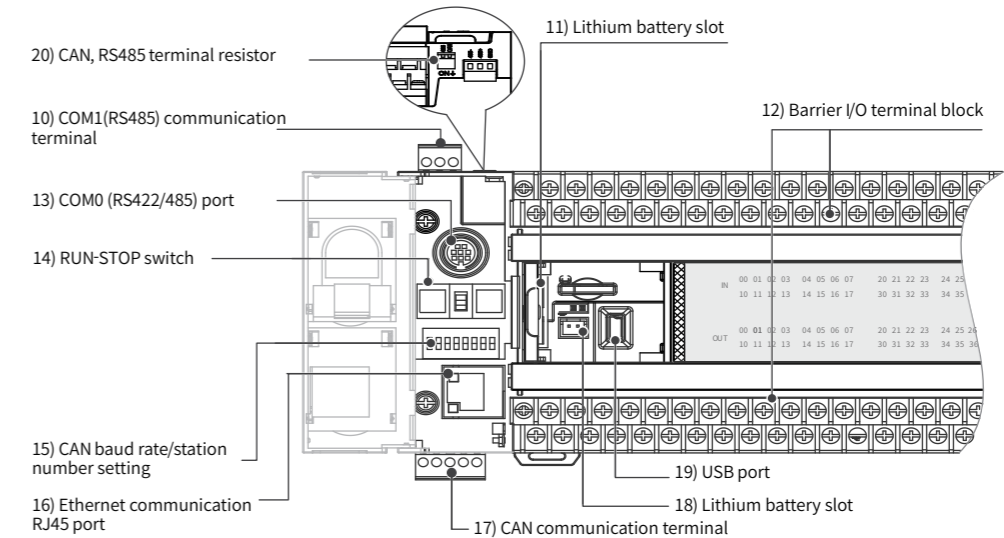
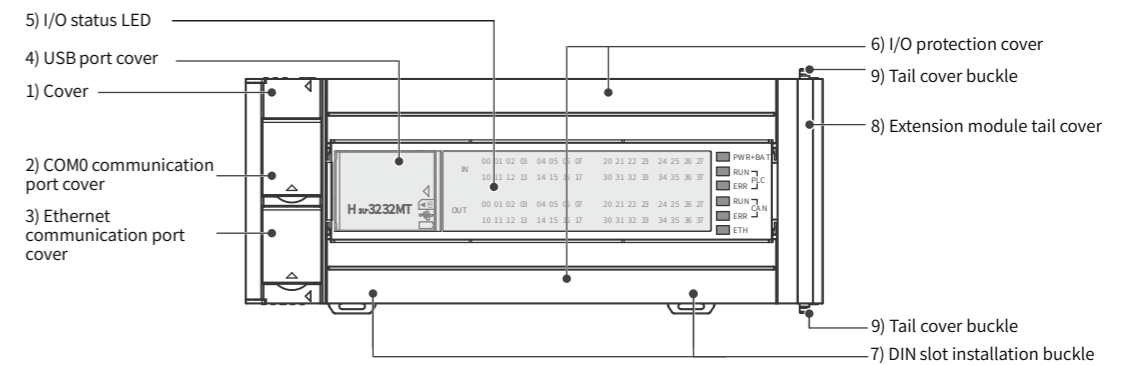


## Product overview

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



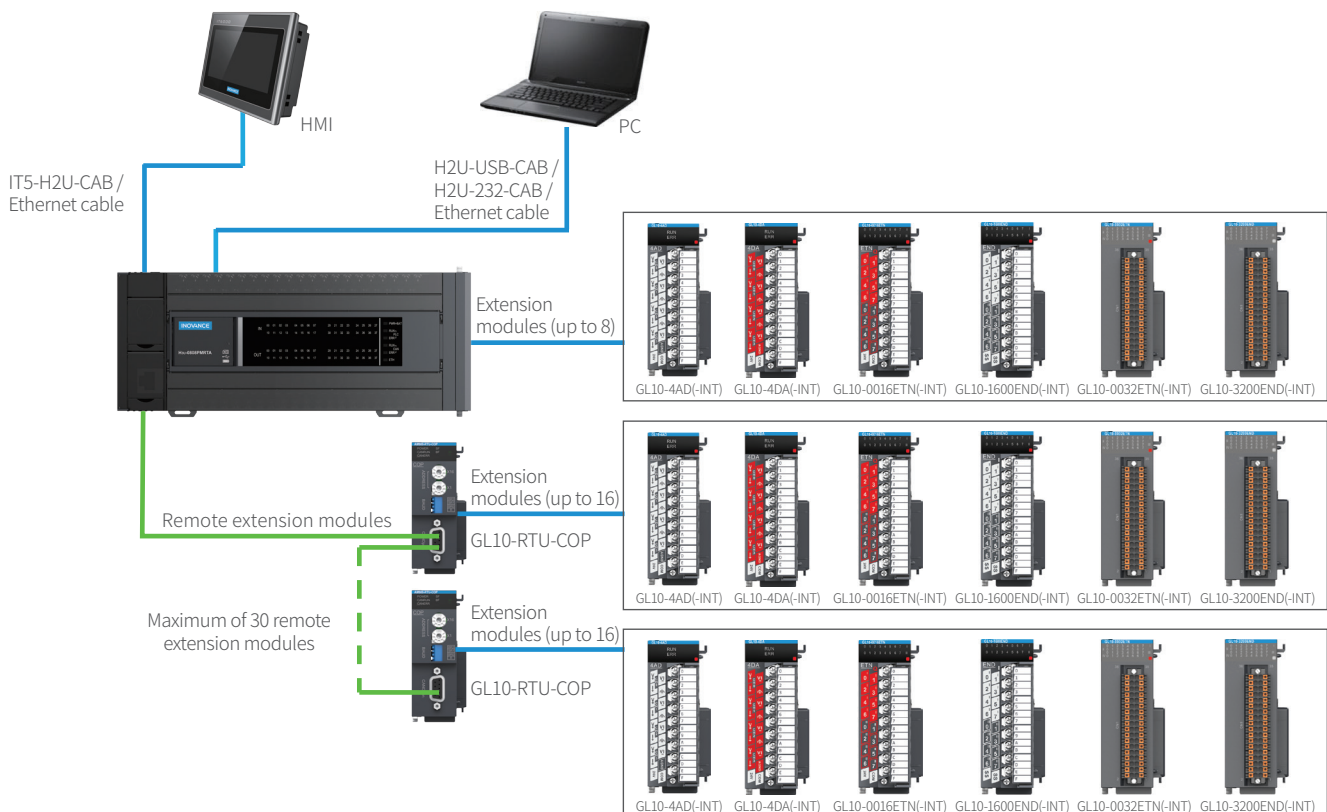
### H3U-3232MT/R or H3U-3624MT/R or H3U-0808PMRTA



## Accessories list

Model	Part no.	Function description
<b>Power supply module</b>		
GL10-PS2-INT	01440196	Power supply module, input: 220 VAC, output: 2 A/ 24 VDC
<b>CANopen coupler module</b>		
GL10-RTU-COP-INT	01440251	CANopen communication module, DB9 female
<b>Digital input modules</b>		
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
<b>Digital output modules</b>		
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
<b>Analog input/output modules</b>		
GL10-4AD-INT	01440197	4 x analog input modules, screw terminals
GL10-4DA-INT	01440192	4 x analog output modules, screw terminals
<b>Temperature detection modules</b>		
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
<b>Positioning modules</b>		
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
<b>Cables</b>		
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
<b>Battery</b>		
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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