



H3U

H3U High Performance Small PLC

Part I Marketing

PART 1

Product Overview

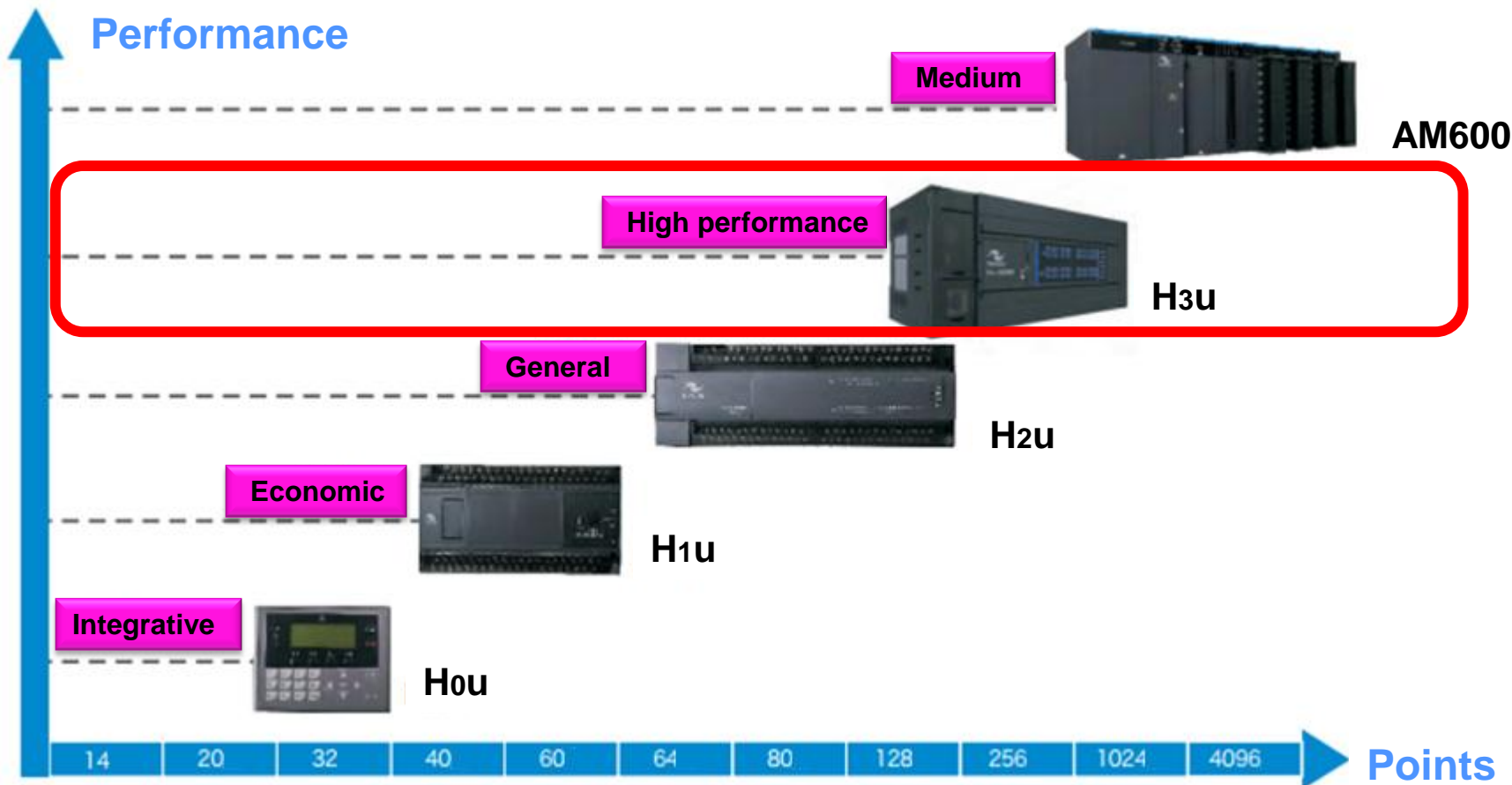
PART 2

H3U Highlight

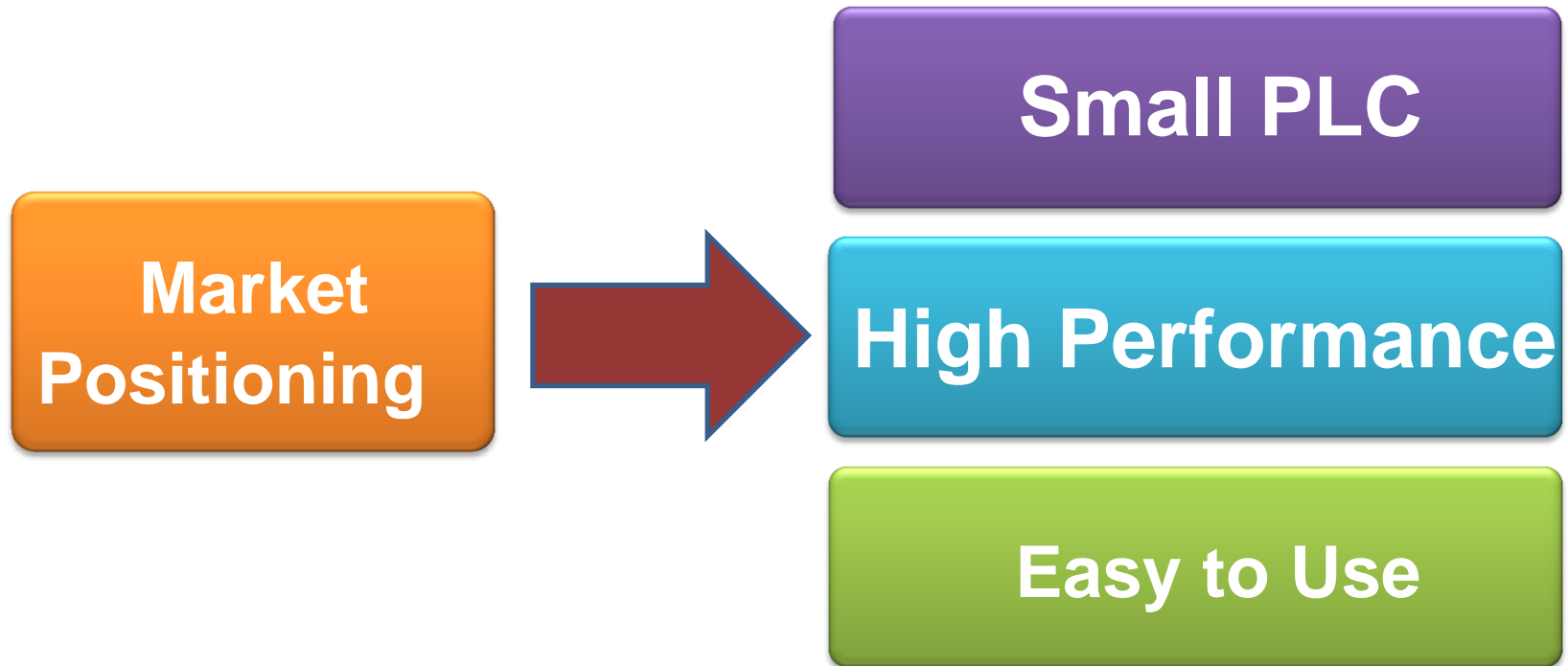
PART 3

System Application

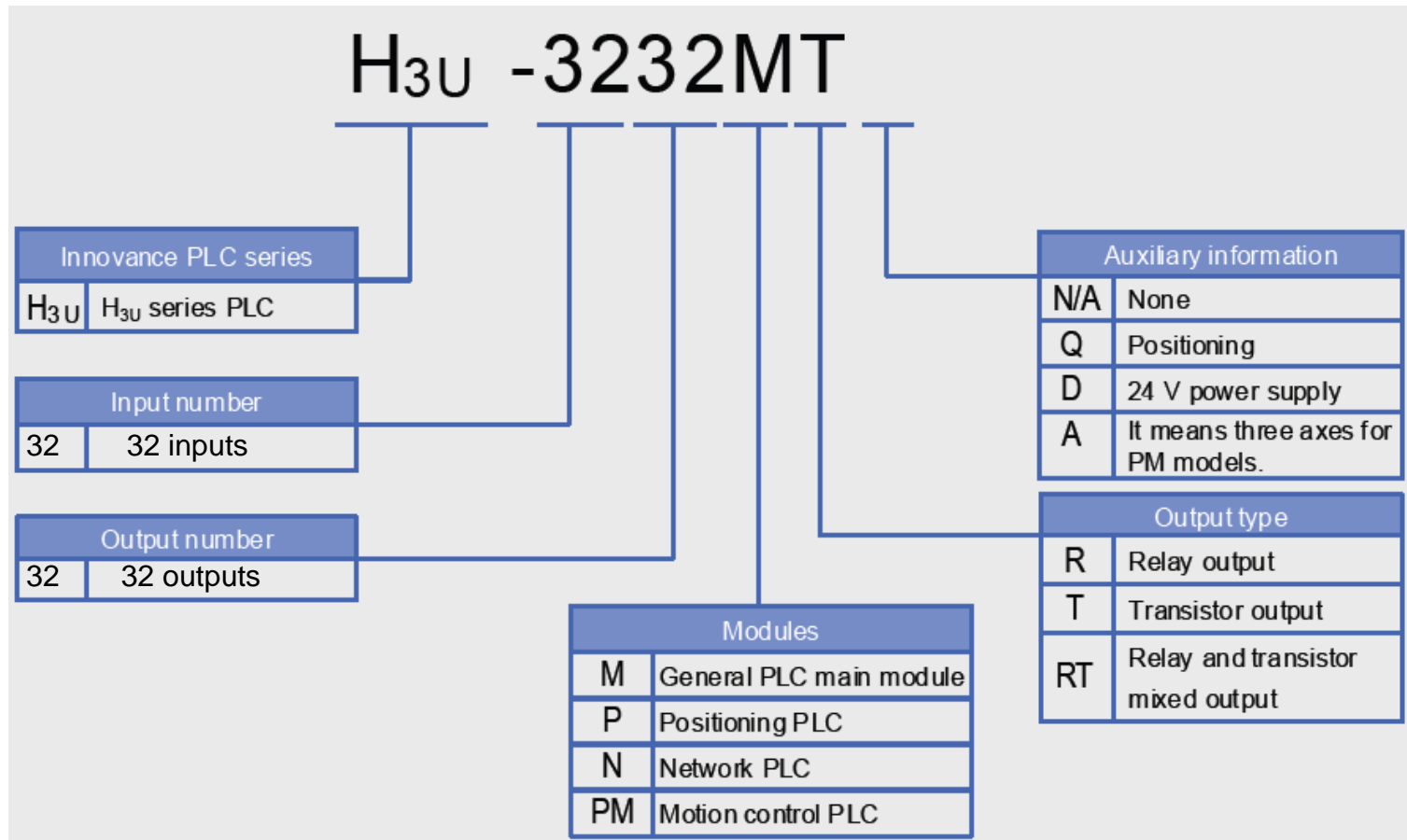
Market Positioning



Market Positioning



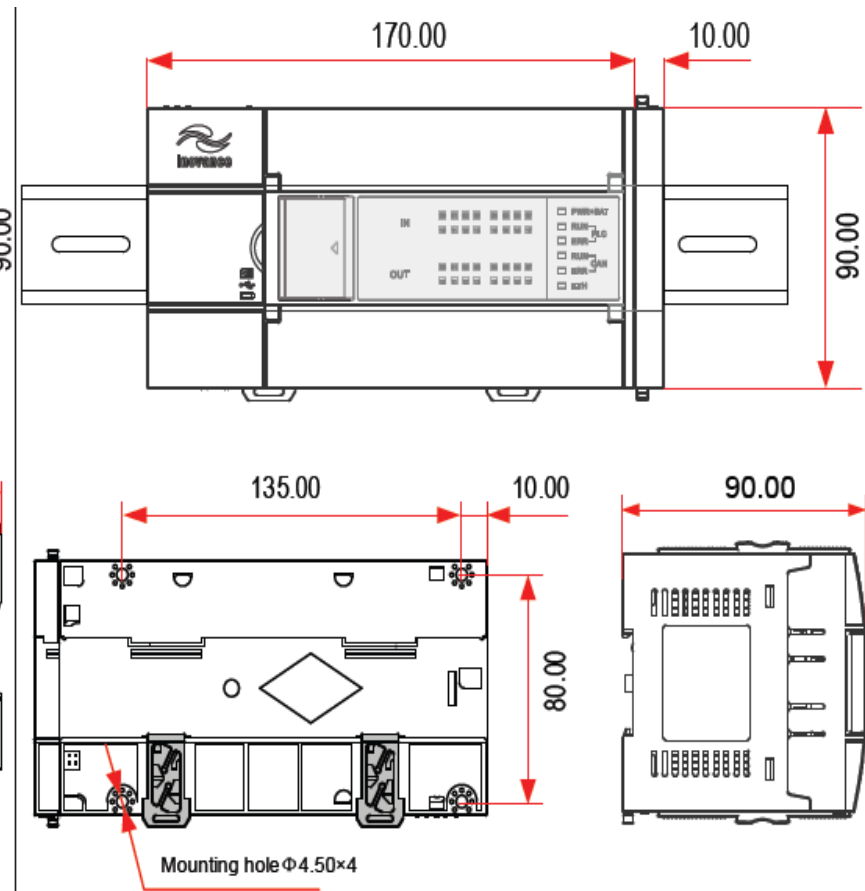
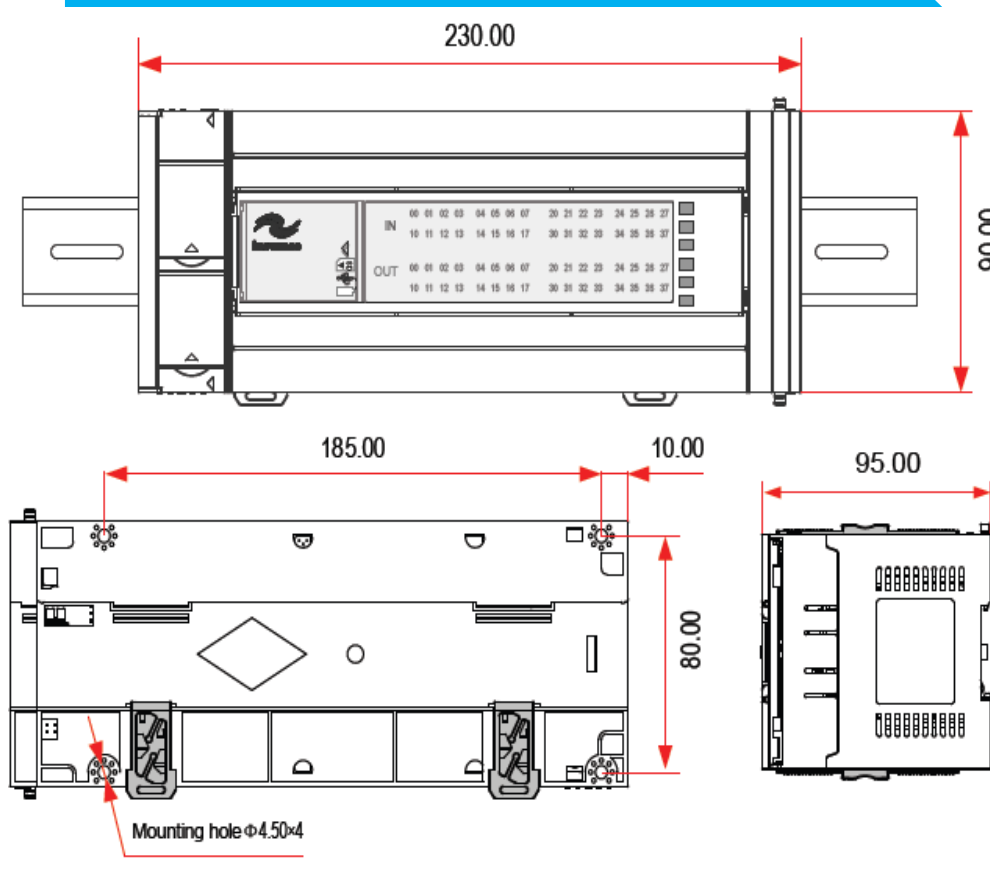
Nameplate and Designation Rule



Specifications

PLC Model		H3U-1616MT-XP ^[6]	H3U-1616MR-XP ^[6]	H3U-3232MT ^[6]	H3U-3232MR ^[6]	H3U-0808PMRTA ^[5]
Dimension	Height	[H] : 90 mm			[H] : 90 mm	
	Width	[W] : 170 mm			[W] : 230 mm	
	Depth	[D] : 90 mm			[D] : 95 mm	
Power Supply		100~240VAC(+10% / -15%)				
Integrated Inputs	Total inputs	16	16	32	32	8 ^[1]
	High-speed inputs	8x200kHz	8x200kHz	8x200kHz	8x200kHz	3x200kHz ^[2]
Integrated Outputs	Total outputs	16	16	32	32	8 ^[3]
	High-speed outputs	5x200kHz	N/A	5x200kHz	N/A	3x500kHz ^[4]
	Output Type	Transistor(NPN)	Relay	Transistor(NPN)	Relay	4 x Relay 4 x Transistor(NPN)
In-built Port	Serial Port	COM0(RS422/RS485), COM1(RS485), MODBUS-RTU, DB9				
	CAN Port	CANopen/CANlink				
	Ethernet Port	MODBUS-TCP, RJ45				
	USB(Device)	Mini-B				

Dimensions (unit : mm)

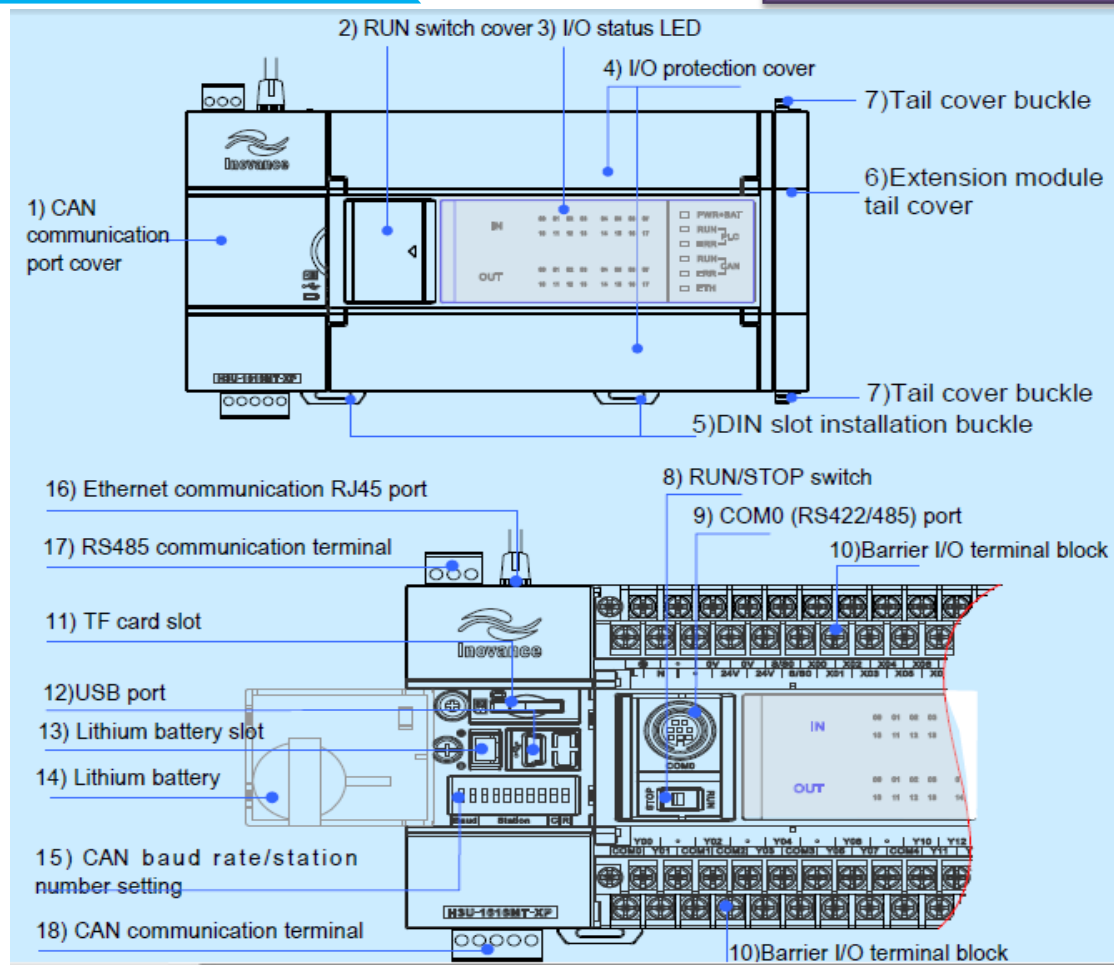


Dimensions of H3U-3232MT/R and H3U-0808PMRTA

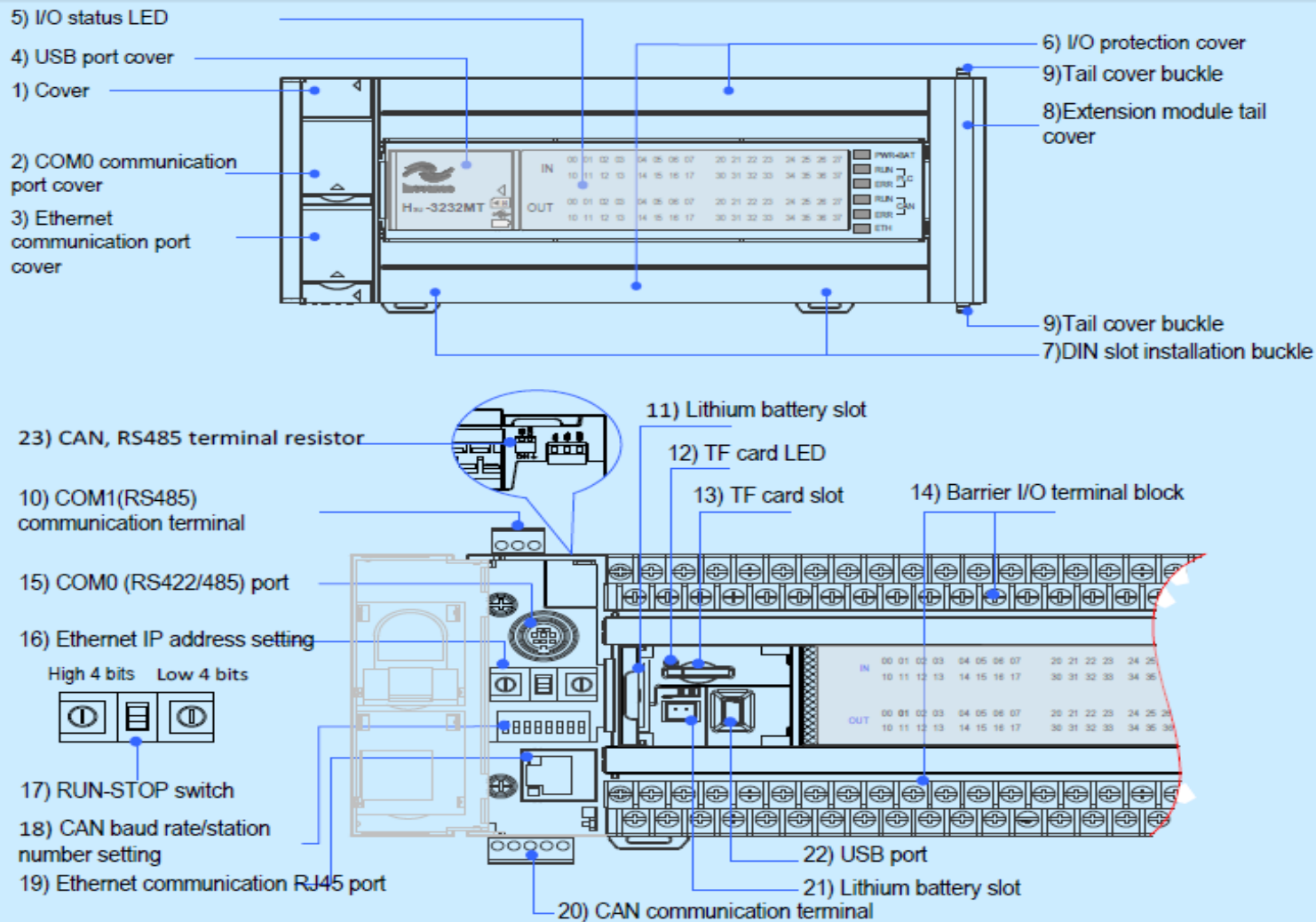
Dimensions of H3U-1616MT/R-XP

Terminals Configuration

H3U-1616MT/R-XP



H3U-3232MT/R or
H3U-0808PMRTA



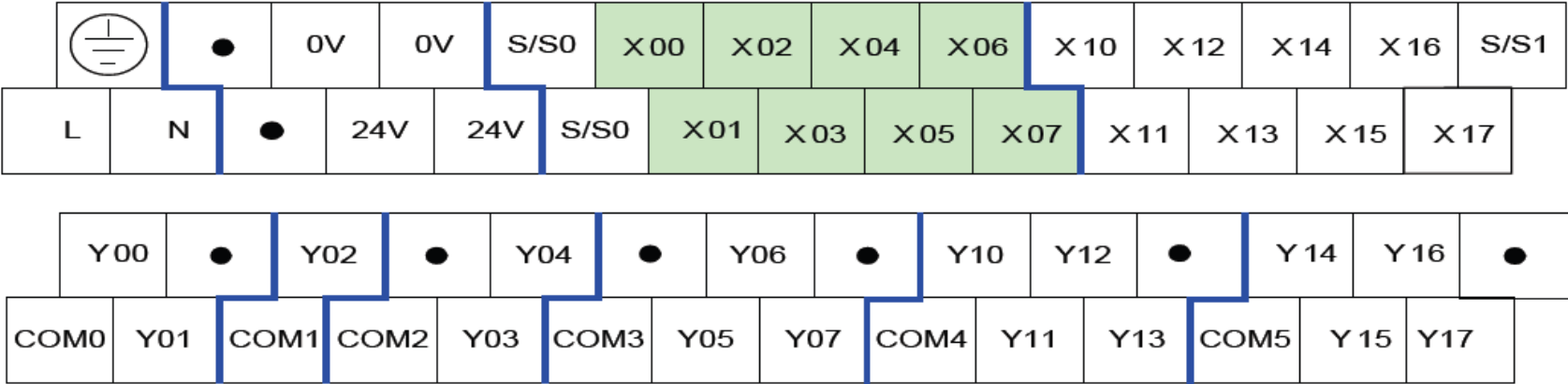
Terminals of H3U-3232MT/R

	S/S0	0V	0V	X00	X02	X04	X06	X10	X12	X14	X16	X20	X22	X24	X26	X30	X32	X34	X36	S/S1
L	N	●	24V	24V	X01	X03	X05	X07	X11	X13	X15	X17	X21	X23	X25	X27	X31	X33	X35	X37
Y00	Y02	Y03	Y04	Y05	Y06	COM5	Y11	Y13	Y14	Y16	COM7	Y21	Y23	Y24	Y26	Y30	Y32	Y34	Y36	COM9
COM0	Y01	COM1	COM2	COM3	COM4	Y07	Y10	Y12	COM6	Y15	Y17	Y20	Y22	COM8	Y25	Y27	Y31	Y33	Y35	Y37

Terminals of H3U-0808PMRTA

	●	0V	S/S0	STOP0	LSP0	PG0-	S/S1	STOP1	LSP1	PG1-	S/S2	STOP2	LSP2	PG2-	S/S3	X01	X03	X05	X07	●
L	N	●	24V	START0	DOG0	LSN0	PG0+	START1	DOG1	LSN1	PG1+	START2	DOG2	LSN2	PG2+	X00	X02	X04	X06	●
A0+	B0+	A1+	B1+	A2+	B2+	CLR0+	FP0+	RP0+	CLR1+	FP1+	RP1+	CLR2+	FP2+	RP2+	Y00	Y02	●	Y04	Y06	●
A0-	B0-	A1-	B1-	A2-	B2-	CLR0-	FP0-	RP0-	CLR1-	FP1-	RP1-	CLR2-	FP2-	RP2-	COM0	Y01	Y03	COM1	Y05	Y07

Terminals of H3U-1616MT/R-XP



Terminals Configuration

Function	Terminals of standard models		Terminals of motion control models
	H _{3U} -3232MT/R	H _{3U} -1616MT/R-XP	H _{3U} -0808PMRTA
Power input	L, N, PE		L, N, PE
Power output	24V, 0V		24V, 0V
Normal transistor NPN output	Y05~Y37	Y05~Y17	Y00~Y03
High-speed transistor NPN output	Y00~Y04	Y00~Y04	-
Relay output	Y00~Y37	Y00~Y17	Y04~Y07
High-speed differential output	-		FPx+, FPx-, RPx+, RPx
Normal transistor zero-clearing NPN output	-		CLR _x +, CLR _x - (CLR _x -common terminal)
Normal input	X10~X37	X10~X17	STOP _x , LSP _x , LSN _x , DOG _x , START _x
High-speed input	X00~X07	X00~X07	-
High-speed differential input	-		Ax+, Ax-, Bx+, Bx-, PGx+ and PGx-, leakage-type and source-type input

Models

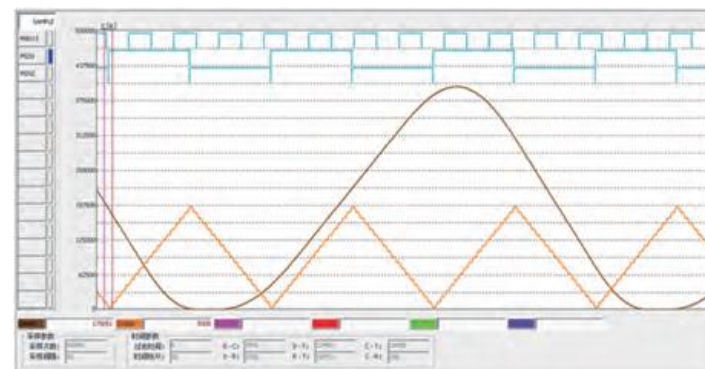
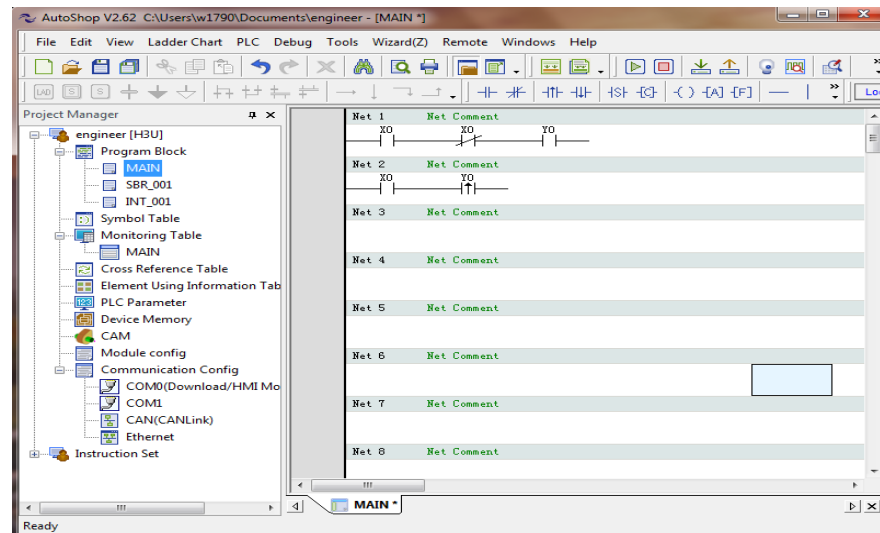
Model	Type	Order code
H _{3U} -0808PMRTA	H _{3U} motion controller main module – 16-point transistor relay mixed output	01440001
H _{3U} -1616MT-XP	H _{3U} standard main module – 32-point transistor output	01440021
H _{3U} -1616MR-XP	H _{3U} standard main module – 32-point relay output	01440022
H _{3U} -3232MT	H _{3U} standard main module – 64-point transistor output	01440015
H _{3U} -3232MR	H _{3U} standard main module – 64-point relay output	01440020
AM600-1600END	16-channel digital input module	01440005
AM600-0016ETN	16-channels transistor output module (NPN)	01440018
AM600-0016ER	16-channels relay output module	01440017
AM600-0016ETP	16-channels transistor output module (PNP)	01440003
AM600-4AD	4-channel analog input module	01440006
AM600-4DA	4-channel analog output module	01440007
AM600-RTU-COP	CANopen communication module	01440011
AM600-PS2	Power supply module	01440010
AM600-4PT	4-channel input thermal resistance temperature detection module	01440008 (under development)
AM600-4TC	4-channel input thermo-couple temperature detection module	01440009 (under development)

Global Design Standards



PC-Based Software

- ❑ PC-based software-**AutoShop** can achieve the PLC programming, parameters upload, download, real-time oscilloscope and other functions.
- ❑ Programming language: ladder、instruction list、SFC
- ❑ Operating in Win7\WinXP



PART 1

Product Overview

PART 2

H3U Highlight

PART 3

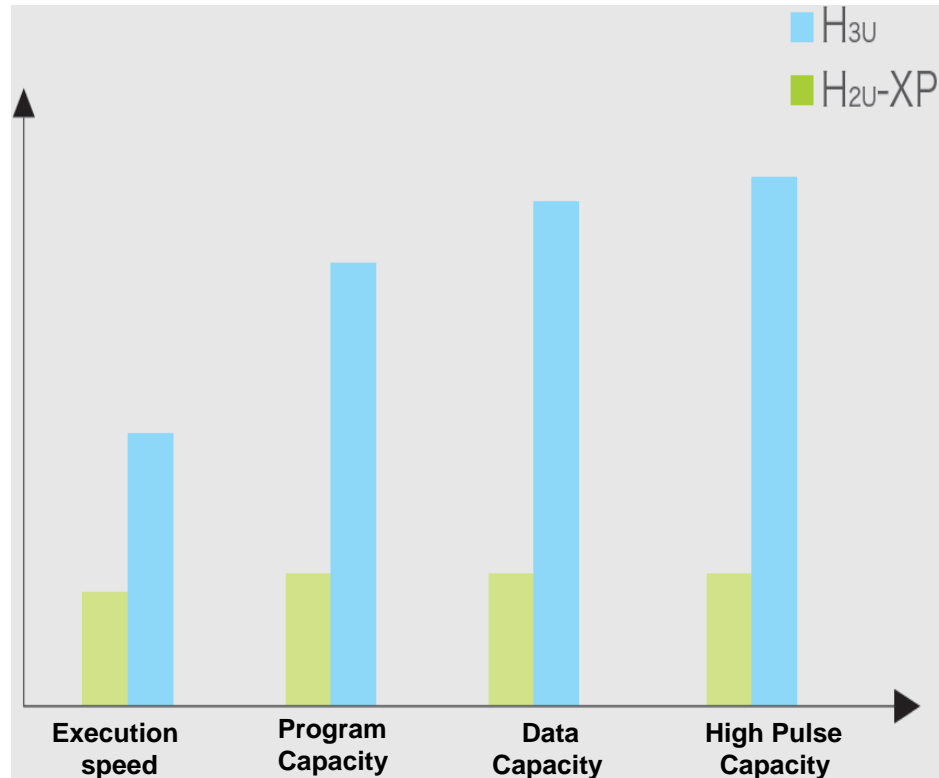
System Application

High Performance and large Capacity

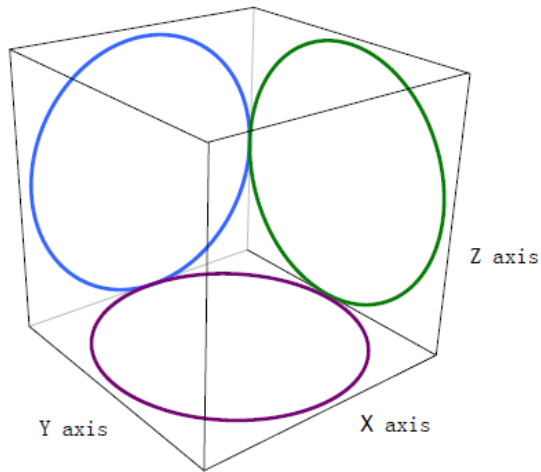
- ❑ All-in-one CPU, power supply and I/O
- ❑ Basic instruction: 100ns/instruction
- ❑ Program capacity: 64K steps
- ❑ Device memory

Auxiliary Relays	9216 points
Timers	512 points
Counters	256 points
Data Registers	9552 points
File Registers	32768 points
- ❑ High-speed inputs: 200kHz
- ❑ High-speed outputs:

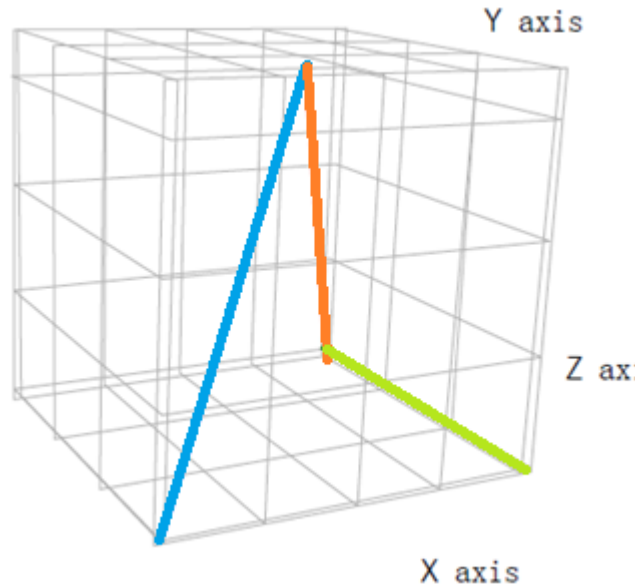
200kHz(Standard Model)
500kHz(Motion Control Model)



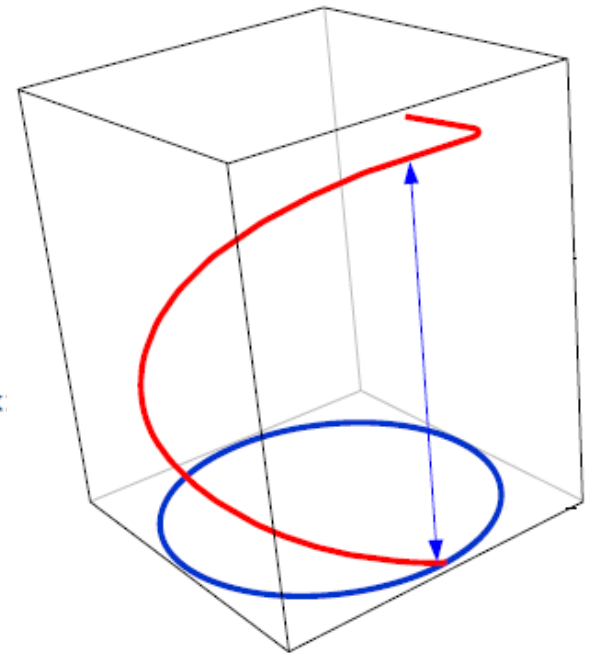
Powerful Motion Control



Two-axis arc interpolation



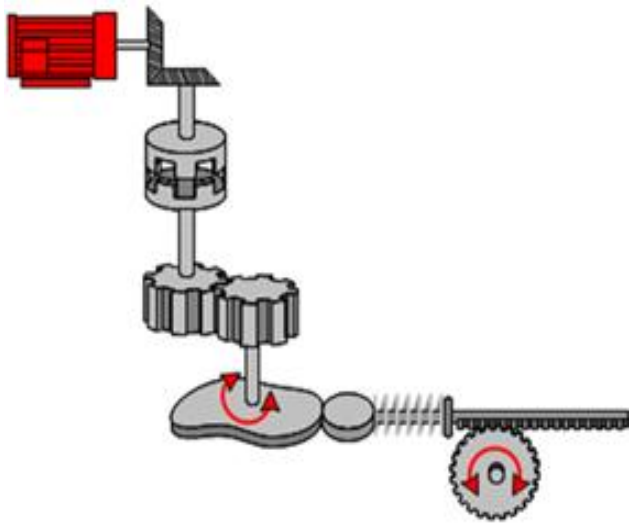
Three-axis straight line interpolation



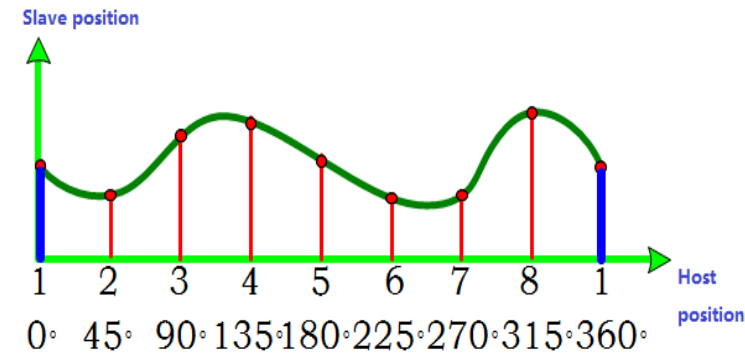
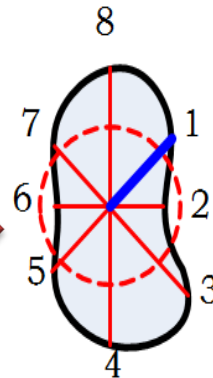
Three-axis spiral interpolation

Powerful Motion Control

- ❑ Three-axis electronic cam replaces the mechanical cam, more flexible and low cost

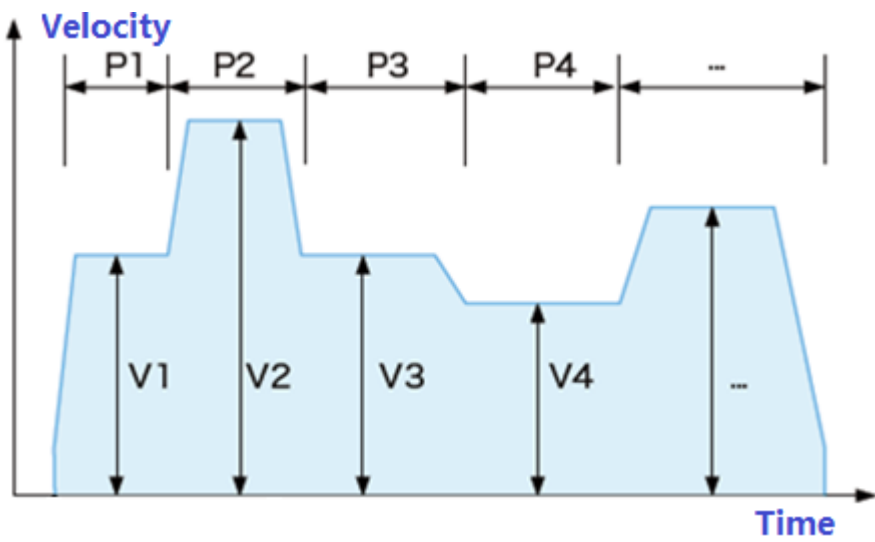


Mechanical Cam

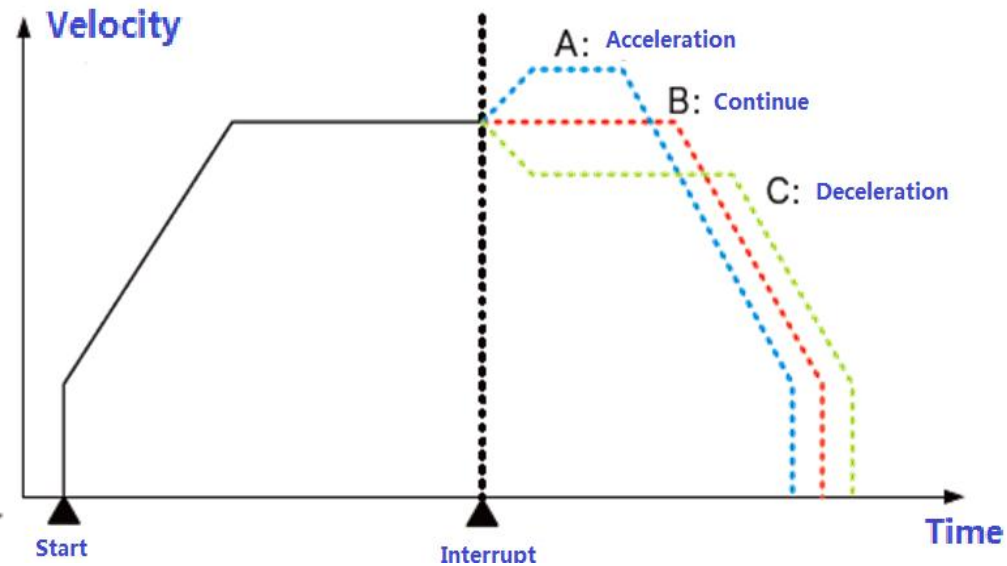


E- Cam

Powerful Motion Control

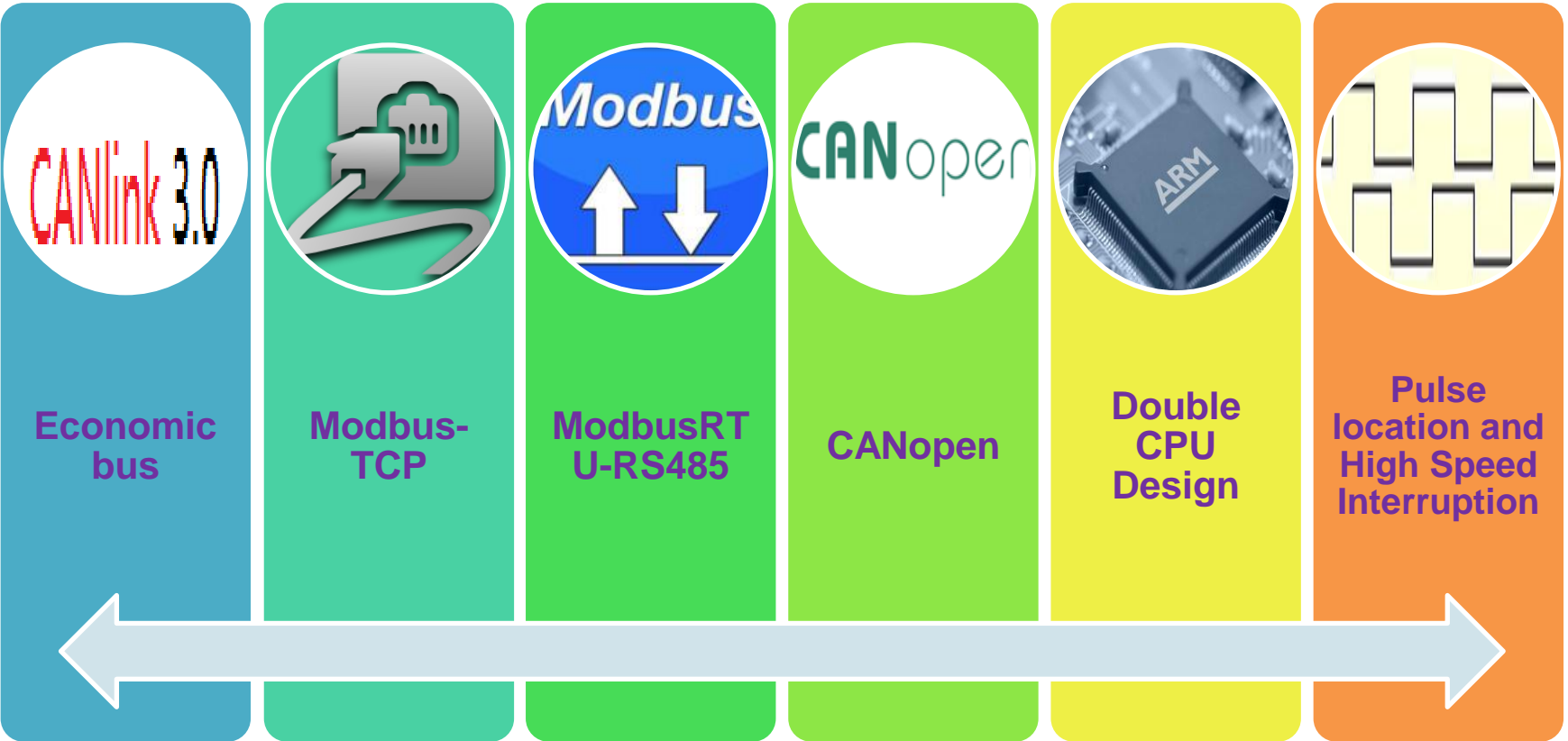


□ Multi-Position Location



□ Interruption Control

Rich Network Solution



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System Application

Application Industry

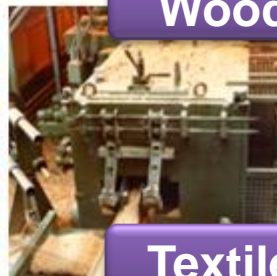
Crane



Glass



Wood



Conveyor Belt



Textile



Package



Print



Machine Tool



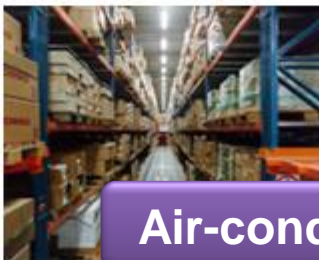
Cable



Package



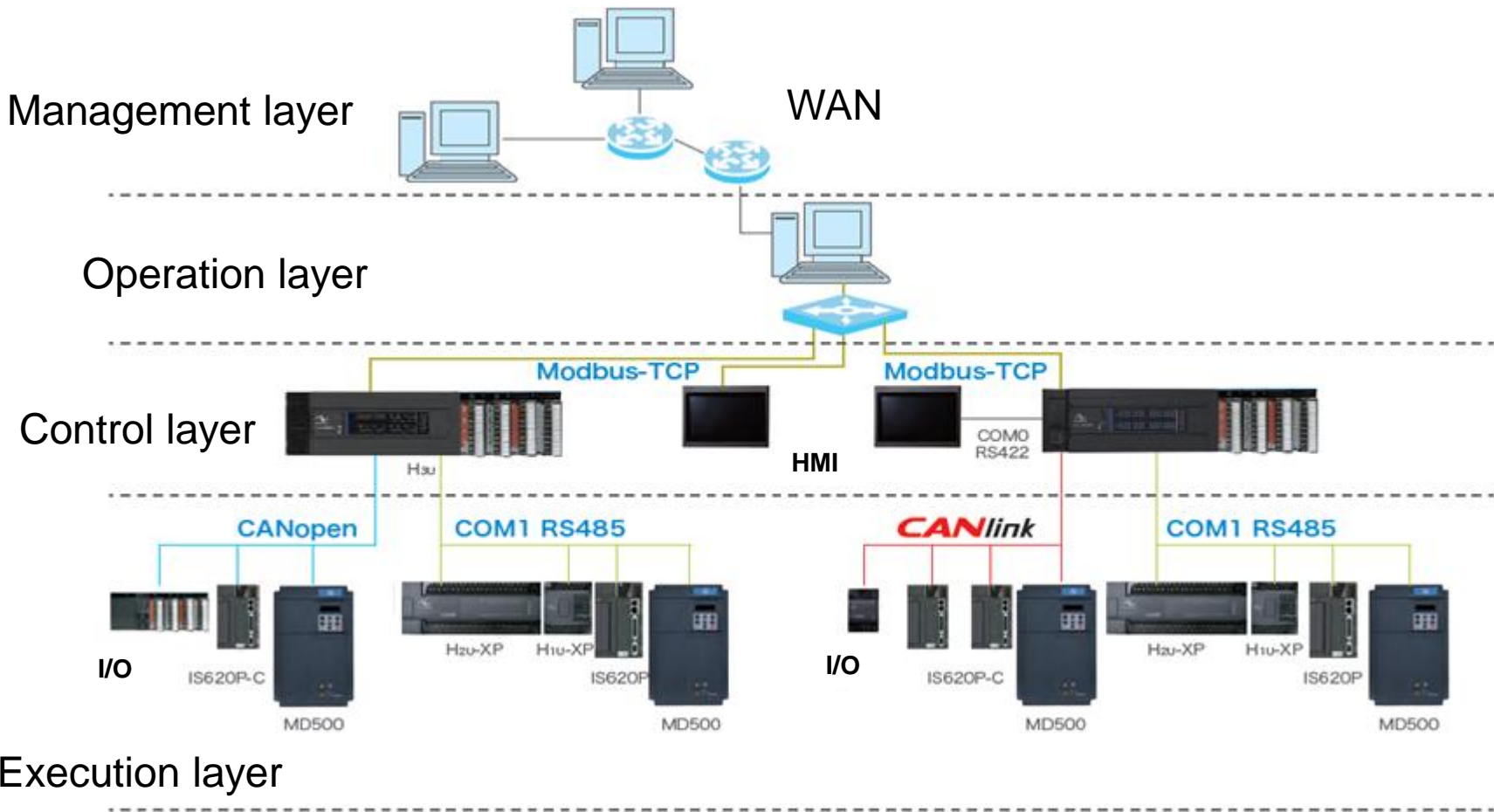
Air-condition



Elevator

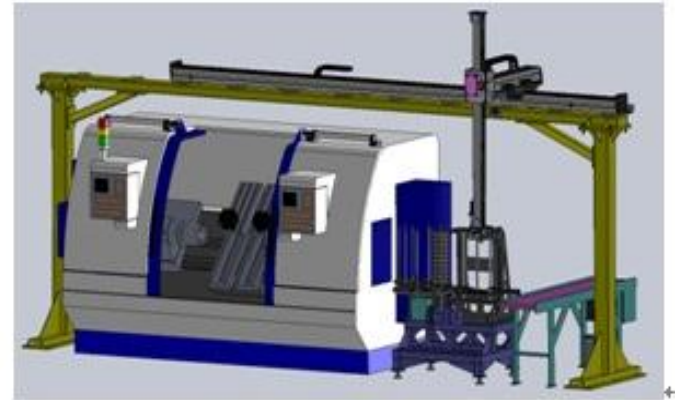


Typical Application Network



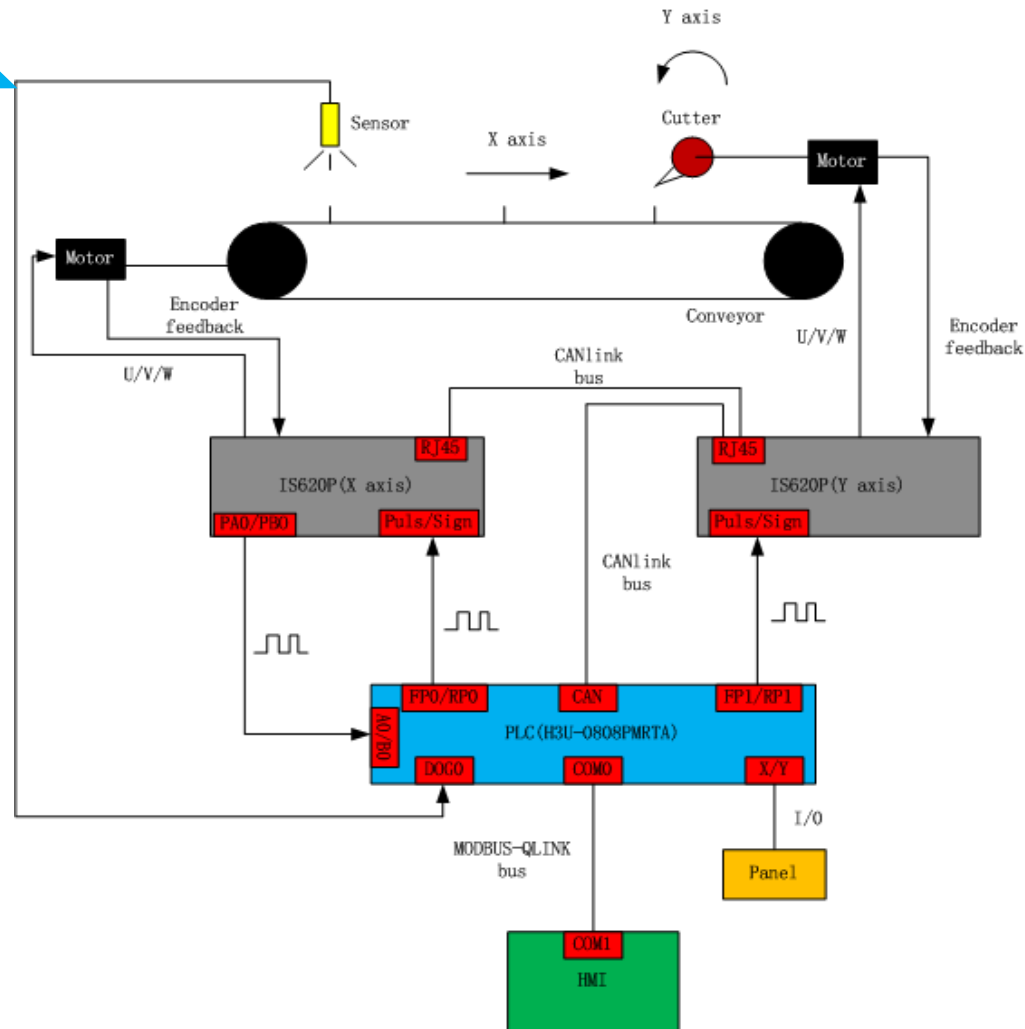
Application In Machine Feeding

- The scheme realizes machine feeding system, using path planning function of H3u to achieve trajectory planning, logical planning



Application In Rotary Cutting

- H3u controls the X axis to drive the conveyor to feed the material, controls the Y axis to drive the cutter to circle, counts the pulses output by X axis to calculate the on-going convey distance. E-CAM function of H3u describes the running distance relationship between the X and Y axis.





Inovance

inova
automation

Monarch

Forward, Always Progressing !