

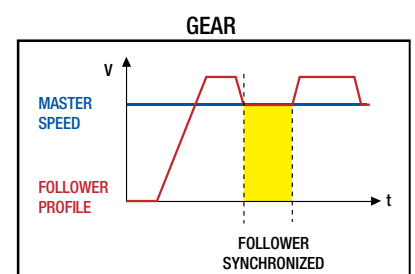
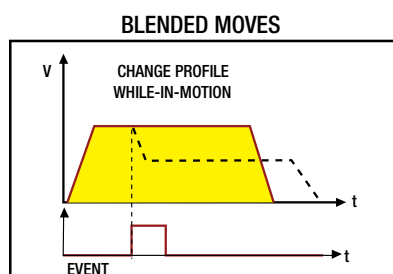
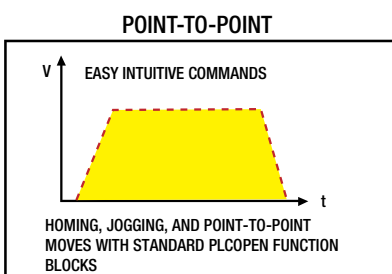
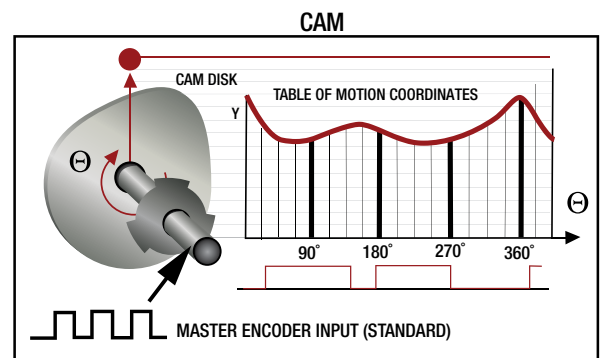
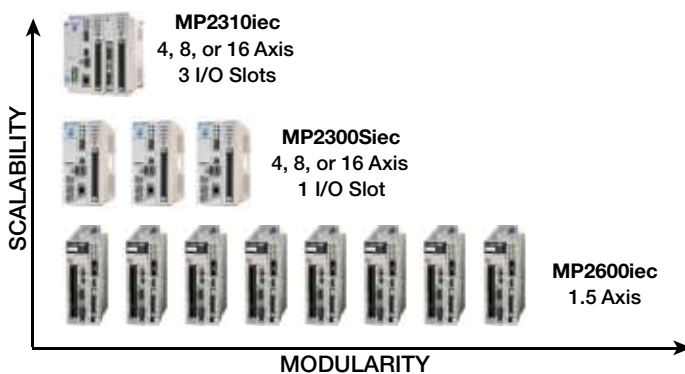


1.5 Axis Machine Controller

IEC on the Drive
 The MP2600iec is a machine controller module fully integrated into Yaskawa's latest Sigma-5 series servo amplifier.

MP2600iec IEC 61131-3 on the Sigma-5 Amplifier

- ▶ One software platform, MotionWorks IEC, allows applications to scale up from single to multi-axis control within a standard IEC 61131-3 environment
- ▶ PLCopen Function Blocks in MotionWorks IEC simplify programming
- ▶ Diagnostic Web server reduces field maintenance time
- ▶ Optional OPC server provides HMI connectivity or Data Acquisition
- ▶ Sigma-5 autotuning and vibration suppression algorithms provide easy setup
- ▶ Wide product range of Sigma-5 (230/480 VAC from 50 W to 15 kW) allows flexible designs





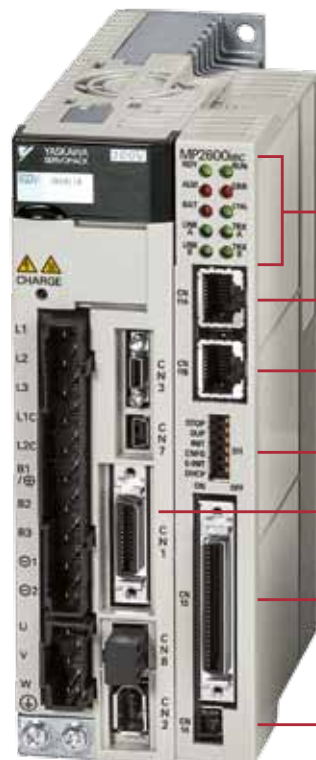
Standard Specifications

Items		Specifications		
CPU		200 MHz, 32 bit, ARM 9		
Memory	SDRAM	32 MB		
	SRAM	512 kB with battery backup		
	Flash	4 MB flash. Code and parameter storage.		
Operator interface		LED	10 LEDs (red and green - operating mode, communication and error status)	
		User Configuration	6x DIP switch (operating mode and communication configuration)	
User I/O	Controller Side (CN13)	Network	2x 100baseTX Ethernet	
		Digital input	8 programmable inputs	
		Digital output	8 programmable outputs	
		Analog input	1 ch., +/- 10 V, 16 bit	
		Analog output	1 ch., +/- 10 V, 16 bit	
		Pulse Counter	RS-422-compatible pulse counter input (quadrature, pulse and direction, and up/down counter modes) with 5, 12, and 24 V position latch inputs	
	Servo Side (CN1)	Sequence Input	Allocated*	Number of Inputs: 7 (1 registration input latches external encoder in 5 μ s) Functions: The signal allocation and positive/negative logic can be modified. Forward run prohibited (P-OT), reverse run prohibited (N-OT), forward torque limit (/P-CL), reverse torque limit (/N-CL), general-purpose input signal (/SI0 to /SI6)
			Fixed	Servo Alarm (ALM)
		Sequence Output	Allocated*	Number of Outputs: 3 Functions: The signal allocation and positive/negative logic can be modified. Positioning completion (/COIN), speed coincidence detection (/V-CMP), servomotor rotation detection (/TGON), servo ready (/S-RDY), torque limit detection (/CLT), speed limit detection (/VLT), brake (/BK), warning (/WARN), near (/NEAR)
Network capability		2 Ethernet Ports (100 Mbps Autocrossover)	OPC (Client and Server required) Ethernet/IP Modbus/TCP	
Programming standards		IEC 61131/PLCopen		
Diagnostic and configuration interface		Web interface		
Motion control performance		1 controlled axis and 1 external encoder input plus virtual axis		
Servo-Side Safety Functions	Input	/HWBB1, /HWBB2: Baseblock signal for power module		
	Output	EDM1: Status monitor (fixed output) of built-in safety circuit		

* Allocated I/O can also be used as programmable I/O.



Modbus TCP



LED (10 points)

Ethernet/IP or Modbus TCP/IP
Communication Port A (CN11A)

Ethernet/IP or Modbus TCP/IP
Communication Port B (CN11B)

Configuration DIP
Switches (6 points)

CN 1 Port
Digital I/O

CN13 Port
Analog I/O, Digital I/O
External Encoder (incremental, with latch)

Battery Port (CN14) for 3.6 V Lithium Battery
(preserves retained variables, absolute
encoder offset, and real-time clock data)