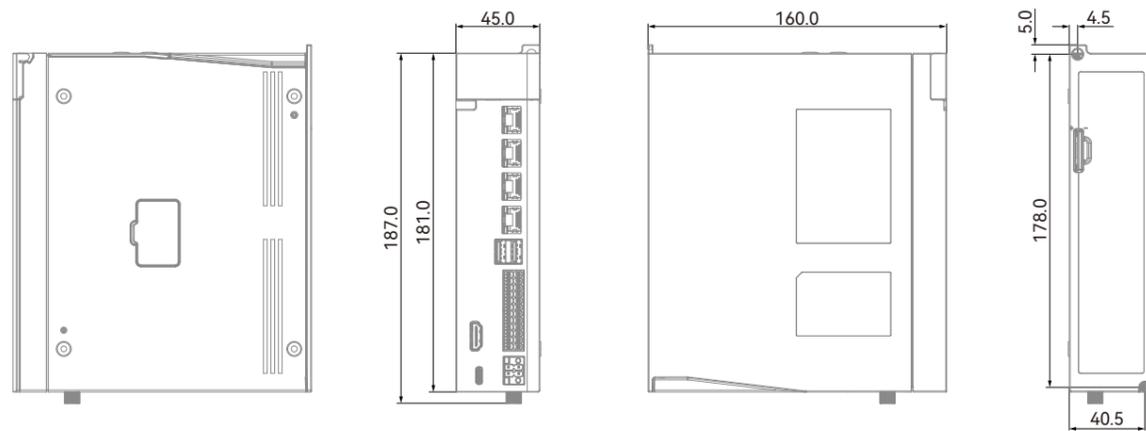


Dimension (mm)



Host Selection Table

Ordering model	Specification overview
HC-IQ815-5037-D	Intel i5 11th Gen processor, 16GB RAM, 256GB SSD, 128MB user program space, 1MB retentive memory area, 8 high-speed inputs and 8 high-speed outputs, 4 Gigabit Ethernet ports + 2 Fast Ethernet ports, 32-axis EtherCAT bus, 4-axis pulse, 2 special inputs (SW and P.OK), 1 HDMI port, USB-A ×2, USB-C ×1, RS485 ×2, pre-installed Windows & Linux dual OS Supported protocols: EtherNet/IP, OPC UA, Modbus TCP, Modbus RTU, EtherCAT, Socket, etc

IQ800 Series Flagship IPC

Industrial PC Controller



HCP Works3

Open IPC Automation Platform



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Due to delays in updating printed versions, please refer to the official website for the latest product information. The information provided in this manual is subject to change without prior notice.

Product Specifications

Model	HC-IQ815-5037-D	
Appearance		
Processor	Intel i5	
Operating system	Windows & Linux dual OS	
Memory	16G	
Hard disk	256G	
Display interface	Supports HDMI display interface	
Special input	2 inputs (SW power-on/off signal, P.OK power-down retention and shutdown)	
RTC	Built-in battery, supports real-time clock	
Programming	User program space	128MB
	User data space	128MB (folder name FlashFiles)
	Retentive memory area	1M
Axis capacity	EtherCAT	32-axis
	Pulse axis	4-axis
USB	Quantity	2 USB-A ports and 1 USB-C port
	Quantity	Main unit with 4 Gigabit Ethernet ports
Gigabit Ethernet port	Identifier	LAN1/LAN2/LAN3/LAN4
	Data transmission rate	1000/100/10Mbps
	Communication mode	Full-duplex
	Interface	RJ45 connector
	Maximum segment length	100m
	IP address	Default DHCP auto-obtain
	Cable used	Supports Ethernet-compliant product cables Category 5 and above
EtherNet	Identifier	LAN5
	Function	Linux-specific system, program download monitoring, firmware upgrade
	Data transmission rate	100Mbps
	Communication mode	Full-duplex
	Interface	RJ45 connector
	Maximum segment length	100m
	Supported protocols	Modbus TCP, OPC UA, EtherNet/IP, PLCHandler, Socket, protocol-free, etc
EtherCAT	Identifier	LAN6/Ecat
	Function	EtherCAT-specific
	Data transmission rate	100Mbps
	Communication mode	Full-duplex
	Interface	RJ45 connector
	Maximum segment length	100m
	Supported protocols	EtherCAT master
Serial port	Physical layer	2-channel RS485, A1,B1 (COM1);A2,B2 (COM2)
	Baud rate	9600bps~115200bps
	Number of slave stations	31
	Maximum transmission distance	500 meters (at 9600 bps)
	Supported protocols	Modbus RTU, protocol-free

Environmental Specifications

Item	Specifications
Operating temperature	0°C to 55°C
Storage temperature	-25°C to 70°C (non-condensing)
Relative humidity	10% RH to 95% RH (non-condensing)
Altitude	2000m Max.
Pollution degree	Pollution degree II
IP rating	IP20
Cooling method	Active cooling (long-life fan)

Power Specifications

Item	Specifications
Input voltage	DC24V (-15%~+20%)
Maximum power	72W
Allowable momentary power interruption time	Remains operational during momentary power interruptions of 5 ms or less
Power fuse rating	Input fuse, supports overcurrent protection, rated 10A/33VDC

High-speed Input Specifications

Item	Specifications
Signal name	8-channel input (X0-X7)
Function	Supports 4 encoders, A/B phase 1/2/4/frequency multiplication, pulse + direction, CW/CCW, single-phase pulse input
Rated input voltage	DC 24V (-15% to +20%, pulsation within ±10%)
Input type	Supports source-type and sink-type inputs
Rated input current	6mA (typical value at DC24V)
ON current	>3.5mA
OFF current	<1.5mA
Input resistance	3.9kΩ
Maximum input frequency	200KHz
Common mode	8 channels share one common port (SS)
Isolation method	Digital isolation

High-speed Output Specifications

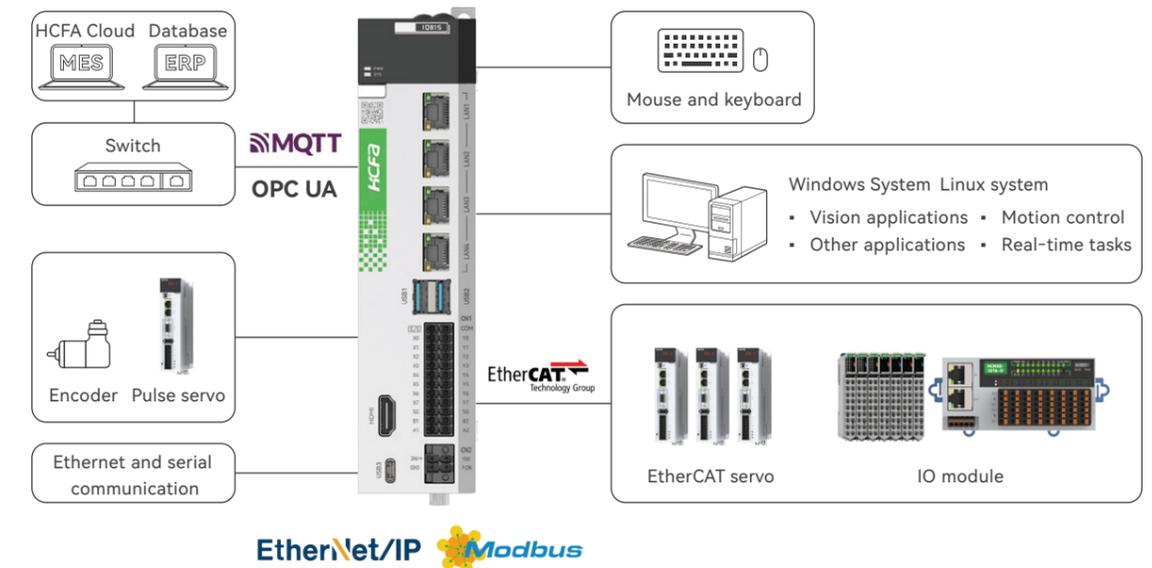
Item	Specifications
Signal name	8-channel output (X0-X7)
Function	Supports 4-channel pulse output, A/B quadrature, pulse + direction, CW/CCW, single-phase pulse output
Control circuit voltage	DC5V~24V
Output polarity	Sink-type output (NPN)
Rated load current	500mA
Maximum voltage drop when ON	Below 1.5V
Leakage current when OFF	Below 0.1mA
Maximum input frequency	200KHz
Common mode	8 channels share one common port (COM)
Isolation method	Digital isolation

Open ecosystem, superior computing

Powerful and efficient

Integrated software, flexible integration

A book-style controller integrating motion controller PAC+ and visual HMI into a single unit
Equipped with an Intel i5 11th Gen processor, 16GB RAM, and 256GB SSD, pre-installed with Windows & Linux dual OS
Features 1 EtherCAT port supporting up to 32 bus-based axes, utilizing HCFA's deeply customized programming platform HCP Works3
The main unit includes 8 high-speed inputs and 8 high-speed outputs with a maximum frequency of 200kHz



Windows and Linux collaboration for building an efficient and intelligent control platform

Powerful performance

Intel i5 11th Gen processor, supports 4 Gigabit Ethernet connections, 1 EtherCAT port capable of driving 32 axes, and 1 Ethernet port for program monitoring and downloading, supporting EtherNet/IP, OPC UA, Modbus TCP, Socket, etc.

Rich interface selection

6-port network design, main unit with 8 high-speed inputs and 8 high-speed outputs, 2 RS485 ports, HDMI display interface, 2 USB-A ports, and 1 USB-C port.

Data rapid transfer

Equipped with Windows & Linux dual OS; Inter-system communication via PLCHandler enables millisecond-level interaction; Capable of deploying customer-specific applications.

Software integration

Integrates control, vision computing, display, and other functions onto a single hardware platform for centralized management, addressing large-scale and complex field applications.