

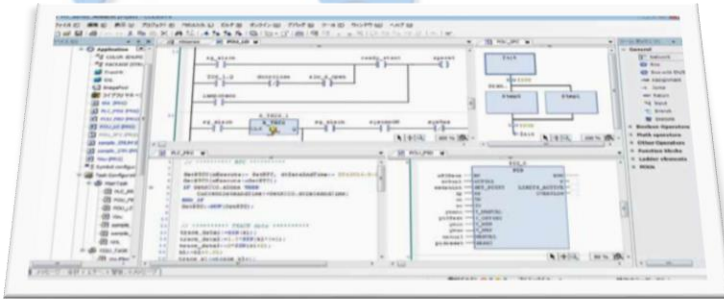
HX Series
Next generation industrial controller



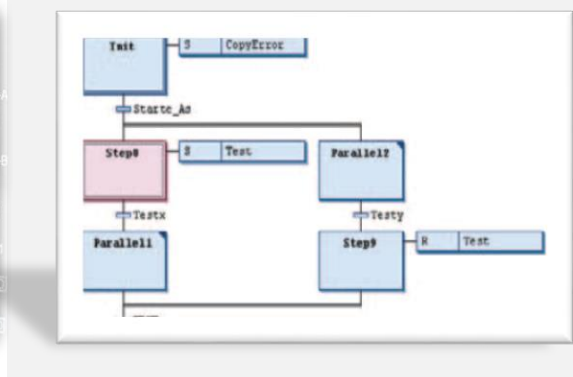
CODESYS

IoT Gateway Controller Stand-alone CPU Unit

IEC 61131-3 Compliant Programmable Logic Controller



Model :HXC-CP1H16-0

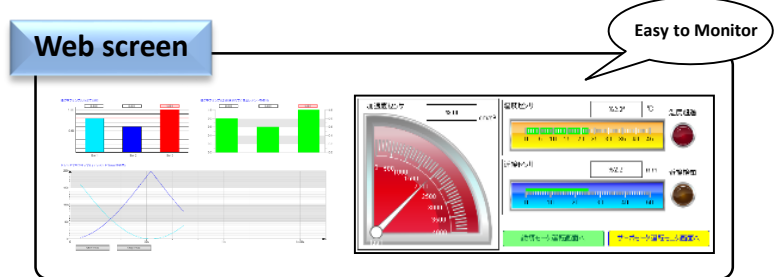
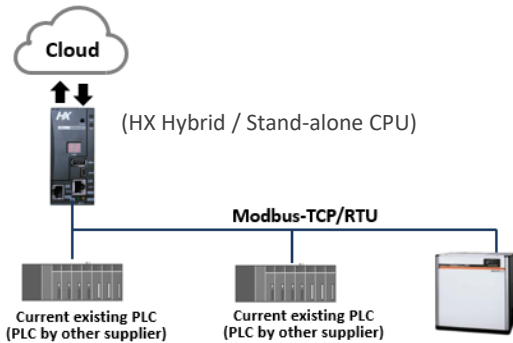


Main Feature

Useable Features – Data collection and gateway

- Application in IoT gateway
- For edge computing
- As communication interface
- As master on field-network
- For Web-server application
- For Motion-controller by EtherCAT

It's possible to collect data from existing facilities using various open networks and each communication protocol in PLC. The collected data can be stored as digital data, making it possible to visualize and having on-site maintenance. It's also possible to upload collected data on the cloud via HX CPU.



Advanced Programming & Visualization (Easy to read & operating)

- Optimal language selection based on process requirements possible by IEC61131-3 languages
- Easy remote access to the controller's web server to monitor the application status.

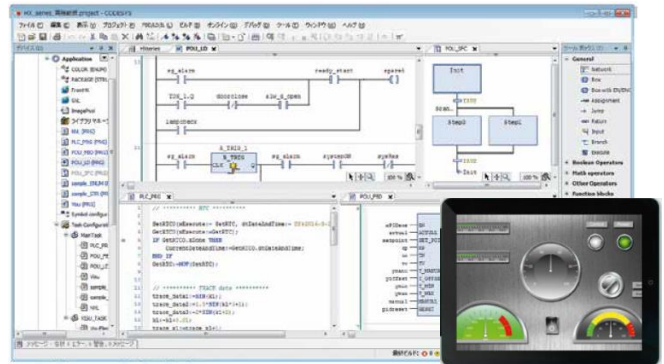


Unique Web Functionality

- Visualization over Internet / Intranet
- Web Server is adopted as standard
- JavaScript Execution

Software Environment : HX-CODESYS

Hitachi version of CODESYS by 3S-Smart Software Solutions GmbH



Products lineup

Item	Specification				
	HX-CP1S08-0	HX-CP1S08M-0	HX-CP1H16-0	HX-CP1H16M-0	HXC-CP1H16-0
Model	Standard	Motion	Full Function	CNC Motion	Hybrid
User program memory *1	8 MB		16 MB		
Source file memory *1	8 MB		16 MB *2		
Data Memory (non-retain) *1	8 MB		16 MB		
Data memory (retain) *1	250 KB				1,024 KB
Data memory (persistent) *1	250 KB				1,024 KB
Field bus / Marker memory	48 KB				
PLC Programming language	IEC61131-3 compliant 5 languages + CFC				
C program	Adaptation of C / C++ program	—			○
	Data sharing	—			○
	Web server for application management	—			○
Execution speed	Boolean instruction	min. 1.0 ns			
	Double-precision floating point	min. 6.6 ns			

*1 Since additional information needs to be saved, available memory size is slightly smaller than nominal value.

*2 Data for Web visualization is stored in the source file memory.

Specifications

Item		Specification				
		HX-CP1S08-0	HX-CP1S08M-0	HX-CP1H16-0	HX-CP1H16M-0	HXC-CP1H16-0
Model		Standard	Motion	Full Function	CNC Motion	Hybrid
Communication interfaces	Ethernet	2 ports (10/100BASE-T/TX)		3 ports (10/100BASE-T/TX)		
	Hardening *8	○	○	○	○	○
	Certification / Cryptograph *8	—	—	—	—	○ (ETH3)
	Serial	—				
	USB device	1 port (RS-485)				
USB host *5		1 port (Mini-B type connector, USB 2.0 High speed) for connecting programming tool				
SD memory card slot *5		—			1 slot (SD / SDHC)	
Display		RUN LED, ERR LED, 7-segment LED (2digits)				
Switch	RUN / STOP switch	STOP / RUN (Remote control of RUN / STOP over communication from HX-CODESYS is enable when switch position is in RUN.)				
	Error clear switch	Clear of error code				
	2-bit switch (SW1)	Reset the factory default settings				
	4-bit switch (SW3)	—		Reserved for future		
Real-time clock		Built-in RTC (deviation ±60 s/month at 25 °C)				
Battery (Option for RTC) *6		HX-BAT (for RTC)				
Startup time *7		About 20 to 30 s				About 70s or more
Maintenance function		microcomputer error, watchdog timer error, memory error, program error, system ROM / RAM error, scan time error, battery under-voltage detection, and others				
Available version of HX-CODESYS		CPU Software version 3.5.8.2x: 3.5 SP8 Patch4 or newer CPU Software version 3.5.13.4x: 3.5 SP13 Patch2 or newer				

*5 File access is possible from user program and FTP client.

*6 The battery is option for realtime clock.

*7 It depends on the size of the user program.

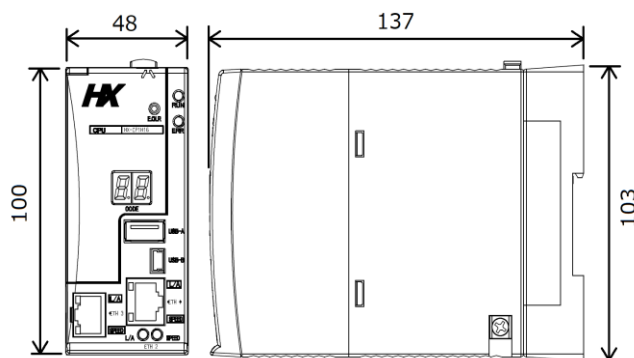
*8 Security protection support functionalities on each device which constructs a system help to secure a required level of security on the system.

However, those are not things to protect the system completely from any kinds of security risk which is increased day by day. Continuous security measure is needed to realize and maintain the required security level. We suggest you clarify the target of the security protection on the system and take proper security measures, maintain the system.

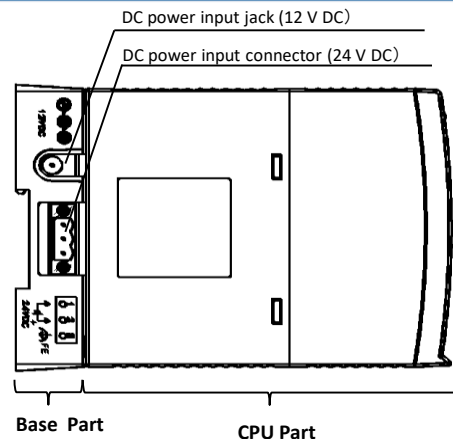
Power supply Specifications

Item	Specification	
	AC-DC power supply	AC adapter
Rated input voltage	24 V DC	12 V DC
Input voltage range	21.6 to 26.4 V DC	10.8 to 13.2 V DC
Input current	0.4 A or less	0.7 A or less
Instantaneous power failure guarantee	1 ms or less	No guarantee
Input rush current (At 24 V DC)	25 A or less (Ta=25 °C)	
Noise resistance	<ul style="list-style-type: none"> Noise voltage 1,500 Vpp, Noise pulse width 100 ns, 1 μs (Noise input by a noise simulator across input terminals of a power module according to measuring method of Hitachi-IES. Static noise 3,000 V at electrode part 	
Grounding	Ground with 100 Ω or less	
Output overcurrent protection	Output short-circuit protection	
Isolation	Non isolated	
Efficiency	85 % or more	

Dimensions



[Unit : mm]



Product Overview in Industrial IoT Solution

IoT Controller



PAC System / HX-Series

Programmable Logic Controller (PLC)



Module Type - EH-150 EHV / EHV+



Compact Type - MICRO-EHV / EHV+

HMI

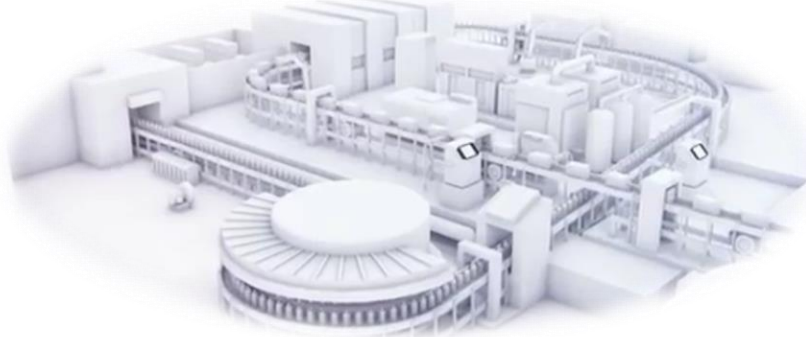


Text Display : EH-TD10A

Operator Panel : EH-OP05

Touch-panel Monochrome : EH-TP05

Color touch-panel : EH-TP504 / 507 / 510 / 513 / 515



Remote I/O Module (Slice I/O Module)



- Fieldbus Modules
- I/O Modules
- Analog Modules
- Special function Modules

Variable Frequency Drive (Inverter)



WJ200



WL200



SJ-P1

AC Servo Motor



HTW-Series

 Hitachi Industrial Equipment Systems Co., Ltd.

International Sales Dept / Component Sales Div
Global Sales Operation Group

For further information, please contact your nearest sales representative.

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