High speed CPU with enormous memory resources

EHV Series

Ethernet Interface Onboard

Hitachi EHV Series

The EHV CPU is compatible with a variety of open networks and through use of the onboard Ethernet interface may be linked to higher-level information processing systems as well as other PLC systems.

In the area of automation, the necessity of networking and communication is becoming ever more significant alongside the increasing demand for smaller and faster systems. The newly developed EHV Series meets these requirements through its small footprint, the communication interfaces which are provided as standard and its enormous memory capacity. Thus the EHV CPU can be deployed in large-scale high-speed applications and corresponding network links also without the need for further communications modules. In this way tasks such as process control and data transfer can be implemented in a highly cost-effective manner.

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EHV Series
Ethernet Interface Onboard

Integrated seven segment display
- Displaying of error codes without programmer
- Customised display of user data

A processing speed of 20 ns/binary instructions sets a new standard in this class
- Basic instructions 20 ns/binary instructions
- Processing of 20,000 program steps in 1 ms

Enormous memory capacity
Independent memory areas are available for program, data and comments.
Program memory: up to 768 Kbyte
Data memory: up to 456 Kbyte
Comments memory: up to 1 MB

Extended and improved command structure
Much simplified as well as extended commands structure

Communication interfaces
· Ethernet
  (10BASE-T/100BASE-TX)
· USB interface
  (ver2.0 Full speed 12 Mbps)
· Serial interface
  (RS-232C/RS-422/RS-485)

4 powerful CPUs are the backbone of the new EHV Series

The models differ through memory capacities (768/384/192/96 Kbyte) whilst maintaining a consistently high processing performance.

· Basic instructions 20 ns/binary instructions
· Ethernet/USB/serial interface as standard
· 7 segment LED display

EHV-CPU128

EHV-CPU64

EHV-CPU32

EHV-CPU16

Principal characteristics of the EHV Series

Processing speed sets a new standard

Through the use of high-speed processors, 20 ns per basic instruction have become possible. As a result, a program of 80 Kbyte in size can be processed within 1 ms. In this way even large programs can be processed very quickly.

100 ns

80 %

20 ns

EH-CPU548   EHV-CPU128
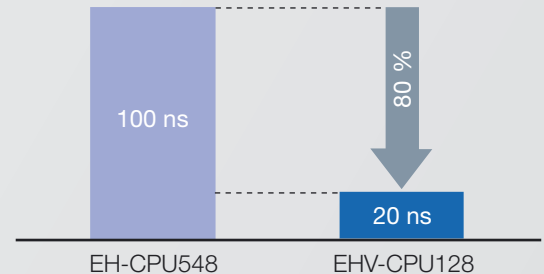
Program memory capacities up to 768 Kbyte

The CPUs of the EHV Series offer program memory capacities ranging from 96 Kbyte to 768 Kbyte. An individual adaptation of the program memory to the specific requirements is thus possible.

Independent comments memory

A separate comments memory of up to 1 MB is available independently of the program memory.

Online functions

A redundant memory permits immediate and quick online changes. The point of time for the online change can optionally be defined by the user.

Complete system through utilising existing EH-150 modules

All I/O modules and communication modules from the EH-150 Series with up to 5 expansion racks (EHV-CPU128: 5 max., EHV-CPU64: 4 max., EHV-CPU32/16: 2 max.), which is equivalent to a maximum of 66 modules, can be used. From this there results a maximum I/O capacity of 4,224 points (when using 64 I/O modules).

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HITACHI
Inspire the Next

Powerful interfaces

Ethernet interface

The Ethernet interface (10BASE-T/100BASE-TX) provides up to four logic ports for programming as well as linking to higher-level systems. Further six ports can be utilised for time-dependent or cyclic transfers of data.
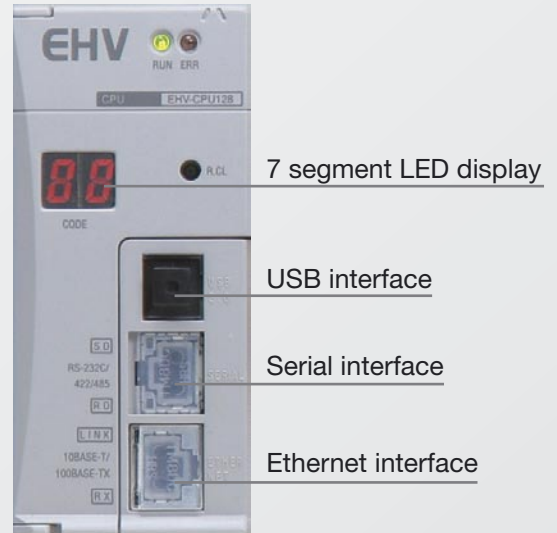
USB interface

Convenient interface for programming the respective CPU.
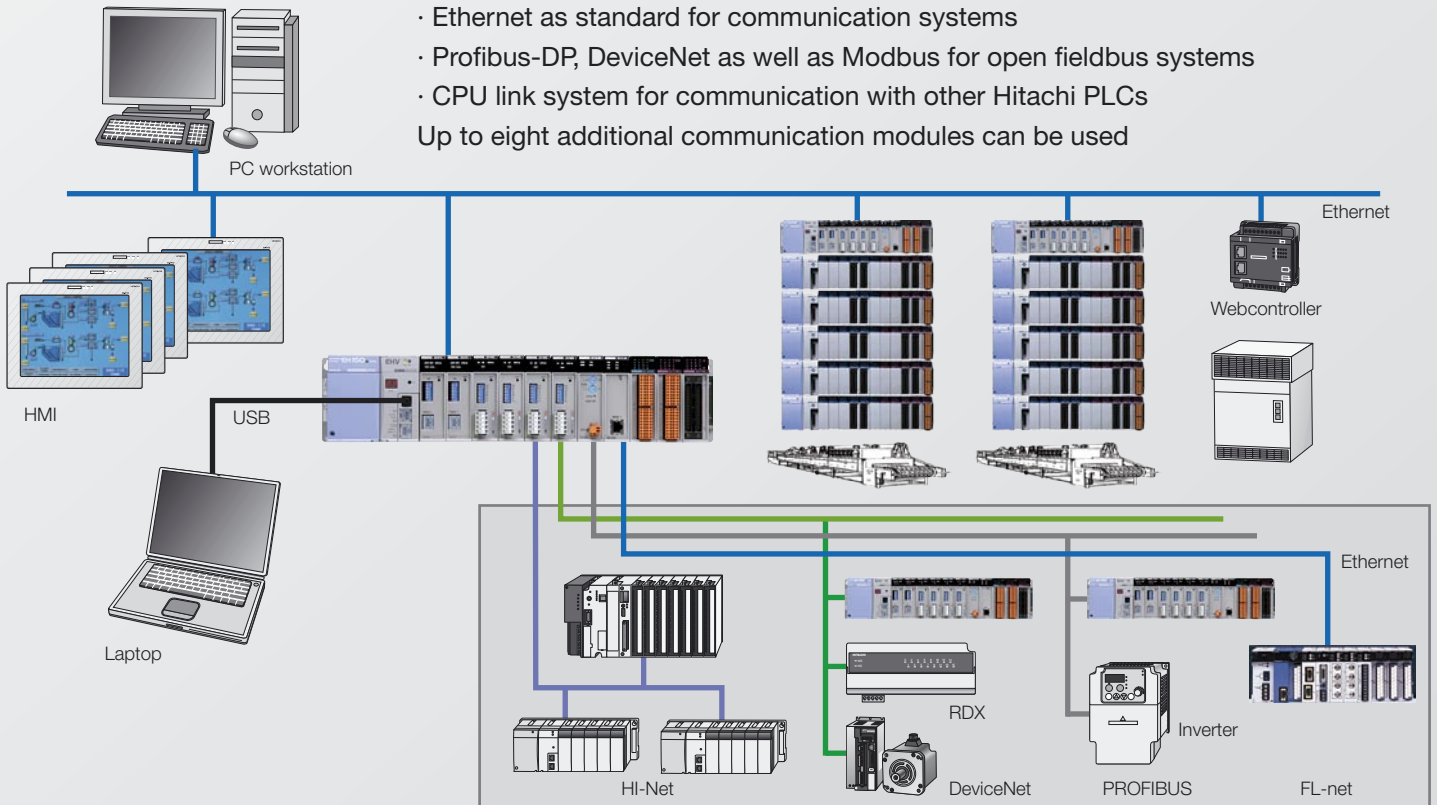
Serial interface

Flexible serial interface (RS-232C/422/485 selectable) which besides the Hitachi protocol also permits free ASCII communication.

LED display

Individually configurable display for displaying error codes or also user data.

- 7 segment LED display
- USB interface
- Serial interface
- Ethernet interface

Communicative

· Ethernet as standard for communication systems

· Profibus-DP, DeviceNet as well as Modbus for open fieldbus systems

· CPU link system for communication with other Hitachi PLCs

Up to eight additional communication modules can be used

PC workstation

HMI

USB

Laptop

Ethernet

Webcontroller

Ethernet

HI-Net
DeviceNet
RDX
Inverter
PROFIBUS
FL-net

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