IEC 61131-3 Compliant Programmable Logic Controller

# EHV+ Series

Powered by CoDeSys

HITACHI
Inspire the Next

# *Powerful general purpose PLC*


CoDeSys

# Powerful and flexible

## Hitachi EHV+ Series

Core of the new powerful general purpose EHV+ CPU series is the CoDeSys V3 runtime system. The result is an open and flexible system which is completed through utilising existing EH-150 modules.

EH-150 system incl. EHV+ CPU and various I/O modules


### Memory capacity

- User program (RAM) up to 1024 kByte
- Boot project (FLASH) up to 1024 kByte
- Source file (FLASH) up to 6 MByte
- Data memory 256 kByte

### Communication interfaces

- Ethernet (10BASE-T/100BASE-TX)
- USB interface (Ver.2.0 Full speed 12Mbps)
- Serial interface (RS-232C/RS-422/RS-485)

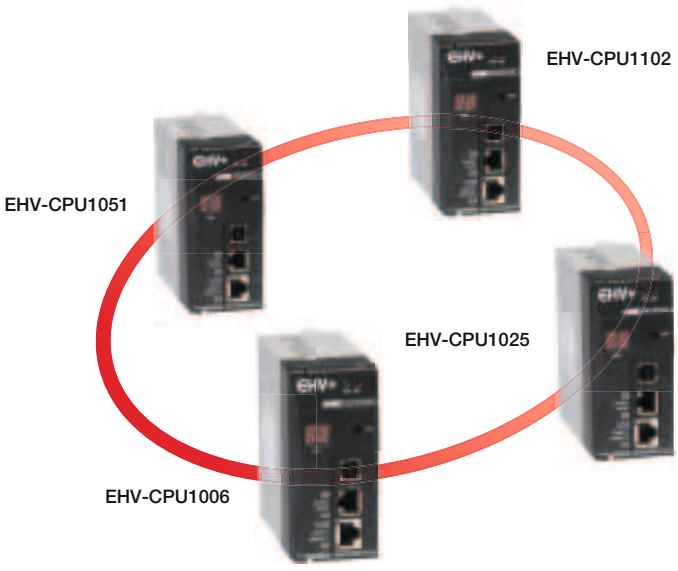
### Programming

- Communication protocol CoDeSys V3
- Programming languages according to IEC 61131-3: LD, IL, FBD, ST, SFC, CFC

### Communication protocols

- Modbus TCP Client
- Modbus RTU Master

CoDeSys




### EHV+ CPU module

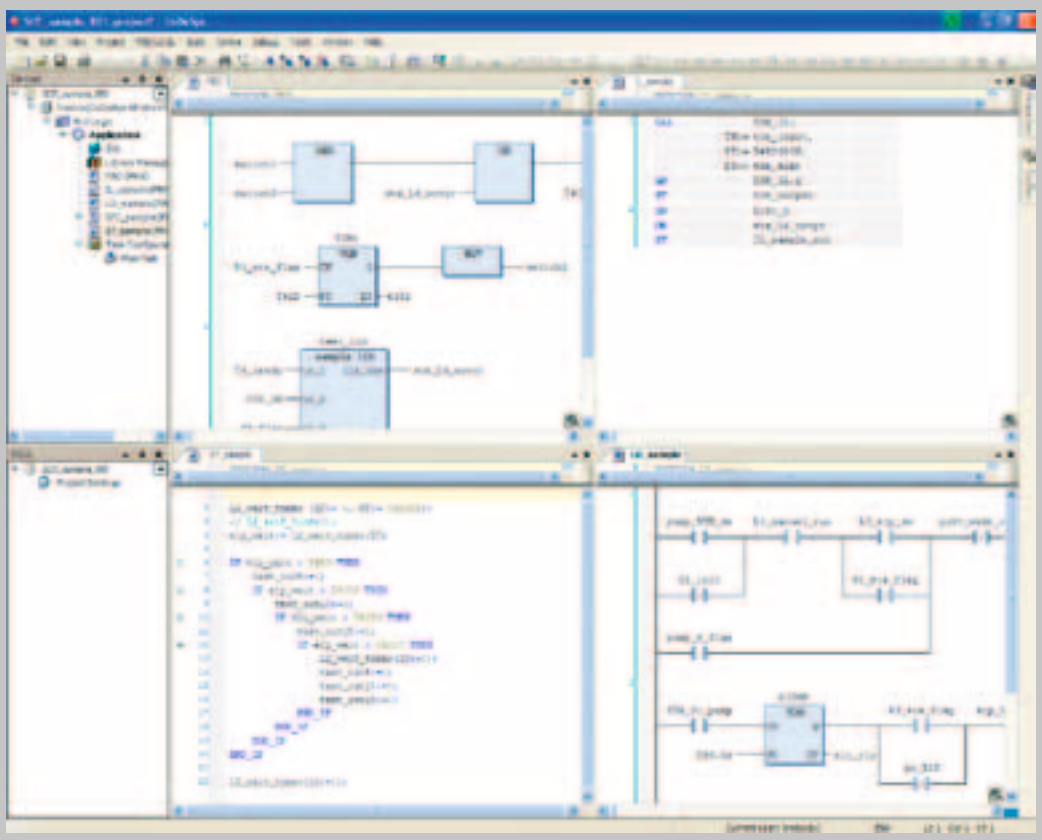
The new EHV+ series consists of 4 powerful CPUs. The models differ through memory capacities (64, 256, 512, 1024 kByte) whilst maintaining a consistently high performance. The EHV+ CPU is compatible with a variety of open networks through use of the onboard Ethernet interface.

### Programming software EHV-CoDeSys

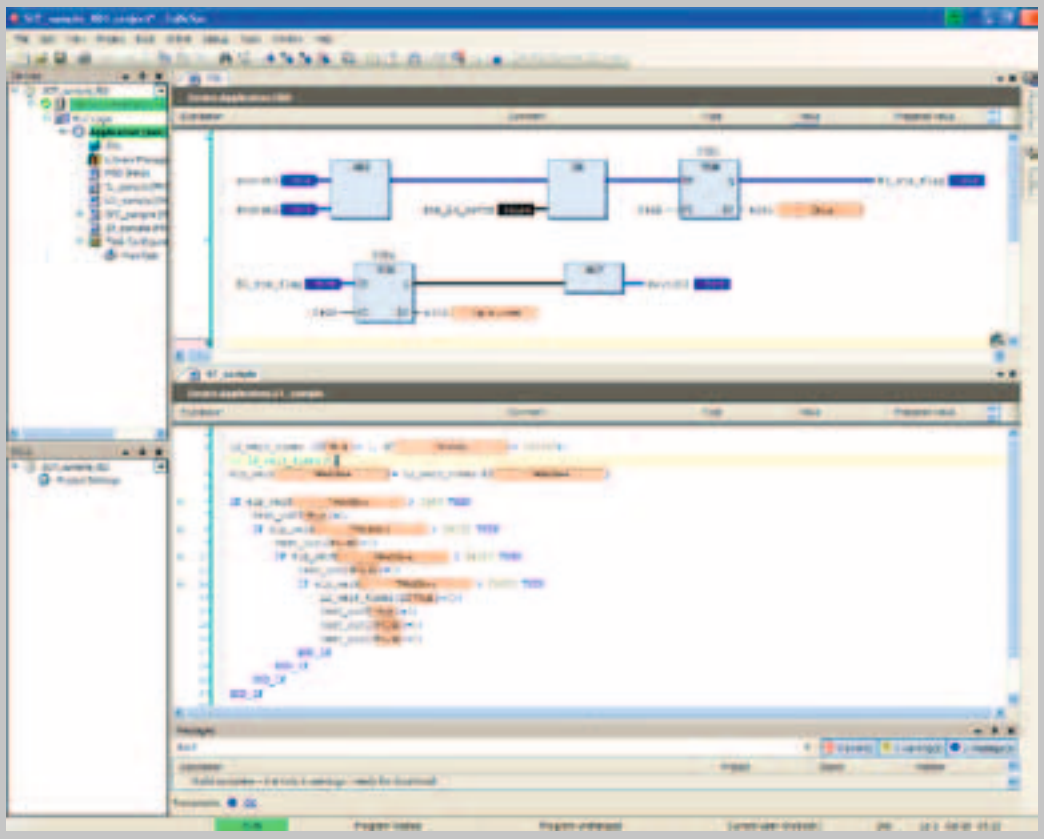
Thanks to full compliance to the IEC 61131-3 standard, the user can select among 6 programming languages (LD, IL, FBD, ST, SFC, CFC) in EHV-CoDeSys. In addition to the PLC programming functionality, EHV-CoDeSys offers powerful visualization functions such as an integrated graphical editor, which is useful for test, commissioning or diagnostic purpose.

# Easy and Efficient

**Flexible choice of editors and usage of library functions considerably decreases programming time**



**Fast and convenient debugging/testing during commissioning**



## Specifications

| Type | | EHV-CPU1006 | EHV-CPU1025 | EHV-CPU1051 | EHV-CPU1102 |
|---|---|---|---|---|---|
| Processing speed | | 145 ns / instruction | 145 ns / instruction | 145 ns / instruction | 145 ns / instruction |
| Memory | User program (RAM) | 64 kByte | 256 kByte | 512 kByte | 1024 kByte |
| | Boot Project (FLASH) | 64 kByte | 256 kByte | 512 kByte | 1024 kByte |
| | Source file (FLASH) | 2 MByte | 6 MByte | 6 MByte | 6 MByte |
| | Data memory | 256 kByte | 256 kByte | 256 kByte | 256 kByte |
| | Retain data memory | 16 kByte | 16 kByte | 16 kByte | 16 kByte |
| Supported expansion bases | | 0 | 5 | 5 | 5 |
| Fieldbus memory | | 16 kByte (2 kByte x 8 units) | | | |
| Processing method | | Refresh | | | |
| Programming software | | EHV-CoDeSys (Version 3.4) | | | |
| Programming languages | | LD, IL, FBD, ST, SFC, CFC (Continious Function Chart) | | | |
| Communication port | | CoDeSys V3 protocol | | | |
| USB | 2.0, Full speed | Programming | | | |
| Ethernet | UDP / IP, TCP / IP | Programming / General purpose / Modbus TCP Client / Ethernet IP (under development) | | | |
| Serial | RS232C / 422 / 485 | Programming / General purpose / Modbus RTU Master | | | |
| User Interface | Display | RUN LED, ERR LED, 7-segment LED | | | |
| | Run switch | Remote RUN / STOP (RUN position) | | | |
| | E.CLR switch | Clear error indication in 7-segment LED | | | |
| RTC | | Supported (access by RTC FB) | | | |
| Battery | | Built-in (LIBAT-H) | | | |
| Approval | | CE, UL, cUL, C-Tick | | | |

## EHV-CoDeSys

| Item | | Descriptions |
|---|---|---|
| System requirements | RAM | 1 GB |
| | Operating System | Windows 2000 or higher (not yet released for the 64-bit platforms of Windows Vista and Windows 7) |
| | CPU | 1 GHz Pentium |
| | Hard disk | 1 GB |
| | Screen resolution | 1024 x 768 |
| Communication cables | USB | Standard USB cable (Type-B connector) |
| | Ethernet | UTP or STP cable (cat5E) |
| | Serial | EH-PROG40 |

Hitachi Europe GmbH, Am Seestern 18, D-40547 Düsseldorf
Tel.: +49 (0) 211-5283-0, Fax: +49 (0) 211-5283-649
www.hitachi-ds.com, info@hitachi-ds.com
**Hitachi Industrial Equipment Systems Co., Ltd., Tokyo**