

IEC 61131-3 Compliant Programmable Logic Controller
EHV+ Series

Powered by CODESYS

HITACHI
Inspire the Next

Powerful general purpose PLC



CODESYS

Automation Solutions **by Hitachi**

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.



Memory capacity

- User program (RAM) up to 2048 kByte
- Boot project (FLASH) up to 2048 kByte
- Source file (FLASH) up to 5 MByte
- Data memory 512 kByte

Communication interfaces

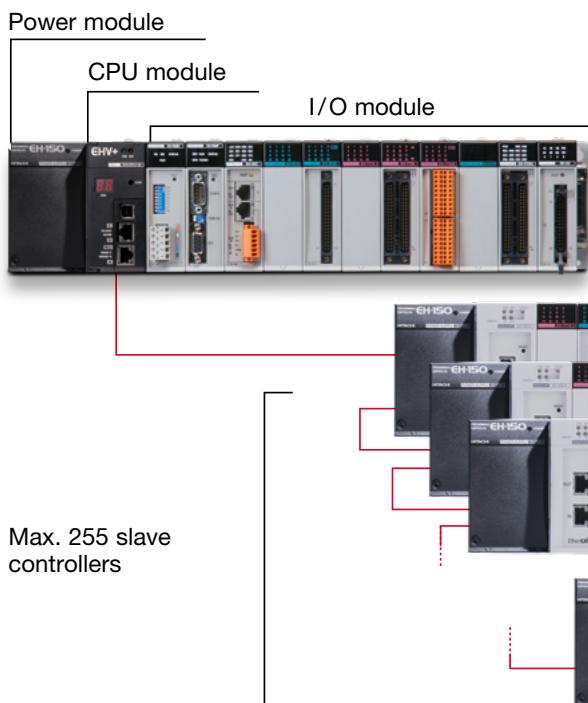
- Ethernet (10BASE-T/100BASE-TX)
- USB interface (Ver. 2.0 Full speed 12 Mbps)
- Serial interface (RS-232C/RS-422/RS-485)

Programming

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

Communication protocols

- Modbus TCP Client/Server
- Modbus RTU Master
- EtherCAT Master



EHV+ CPU module is supporting the EtherCAT master function. It is possible to control up to 11472 bytes I/O (Input 5736 bytes, Output 5736 bytes).

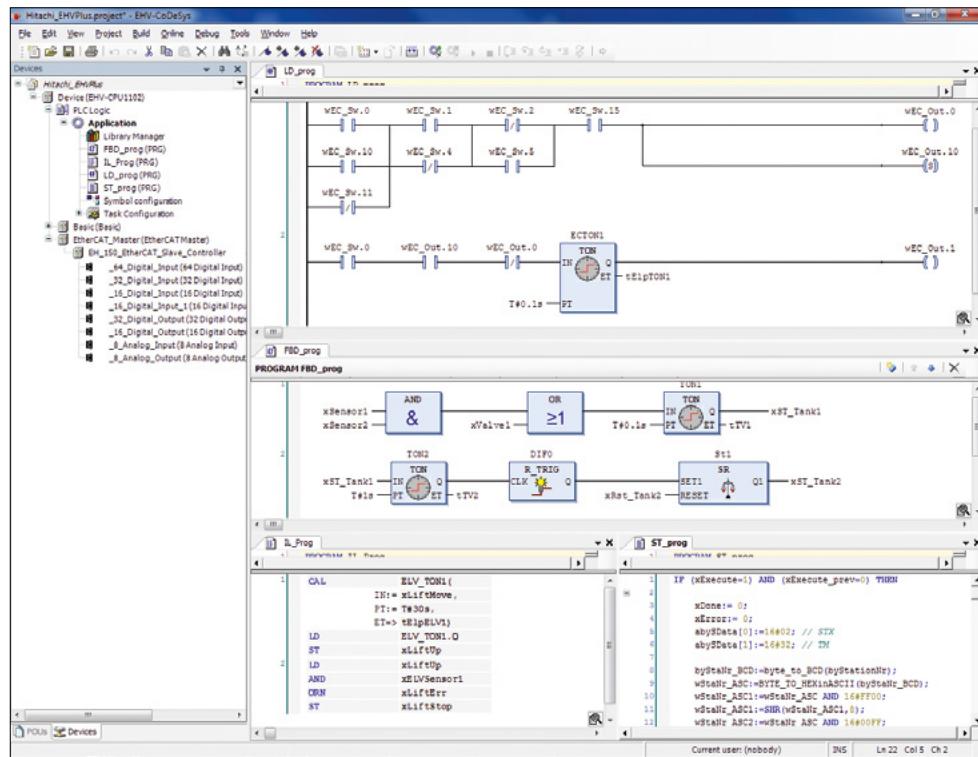
EHV+ CPU module

The new EHV+ series consists of 2 powerful CPUs. The models differ through memory capacities (512, 2048 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.

Easy and efficient

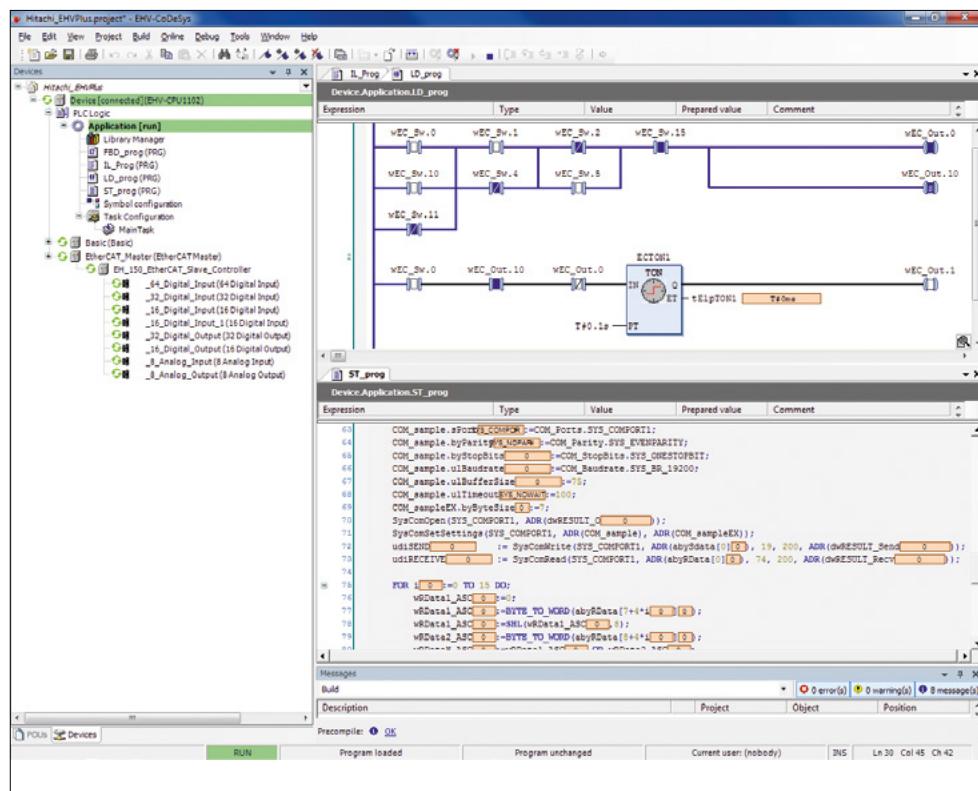
Flexible choice

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



Fast and convenient

Fast and convenient debugging/testing during commissioning



Standard Specifications

| Type | | EHV-CPU1025 | EHV-CPU1102 |
|---------------------------|----------------------|---------------------------------------------------------------------------------------------------------------------------|-------------------|
| Processing speed | | 80 ns/instruction | 80 ns/instruction |
| Memory | User program (RAM) | 512 kByte | 2048 kByte |
| | Boot project (FLASH) | 512 kByte | 2048 kByte |
| | Source file (FLASH) | 5 MByte | 5 MByte |
| | Data memory | 384 kByte | 384 kByte |
| | Retain data memory | 128 kByte | 128 kByte |
| Supported expansion bases | | 5 | 5 |
| Fieldbus memory | | 16 kByte (2 kByte × 8 units) | |
| Processing method | | Refresh | |
| Programming software | | HX-CODESYS (Version 3.5) | |
| Programming languages | | LD, IL, FBD, ST, SFC, CFC (Continuous Function Chart) | |
| Communication port | | CODESYS V3 protocol | |
| USB | 2.0, Full speed | Programming | |
| Ethernet | UDP/IP, TCP/IP | Programming / General purpose / Modbus TCP Client / Modbus TCP server / EtherCAT Master / EtherNet/IP (under development) | |
| Serial | RS232C/422/485 | 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 | |

HX-CODESYS

| Item | | Descriptions |
|----------------------|-------------------|----------------------------------------------------|
| System requirements | RAM | 1 GB |
| | Operating System | Windows XP/Windows Vista/Windows 7 (32-bit/64-bit) |
| | CPU | 1 GHz Pentium |
| | Hard disk | 1 GB |
| | Screen resolution | 1024 × 768 |
| Communication cables | USB | Standard USB cable (Type B connector) |
| | Ethernet | UTP or STP cable (cat5E) |

Programming software HX-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 HX-CODESYS.

In addition to the PLC programming functionality, HX-CODESYS offers powerful visualisation functions such as an integrated graphical editor, which is useful for testing, commissioning or diagnostic purposes.