

IEC 61131-3 Compliant Programmable Logic Controller

MICRO-EHV+

Powered by CODESYS

HITACHI
Inspire the Next

Compact Type General Purpose PLC



EtherCAT

Modbus

Automation Solutions by Hitachi

All-In-One Compact Type PLC

Hitachi MICRO-EHV+ series

Memory Capacity

- User program (RAM) up to 1024 kB
- Boot project (FLASH) up to 1024 kB
- Source file (FLASH) up to 1024 kB
- Data memory 640 kB

Communication Interfaces

- Ethernet (10BASE-T/100BASE-TX)
- USB interface (ver. 2.0, full speed 12 Mbps)
- Serial interface (RS-232C)

Programming

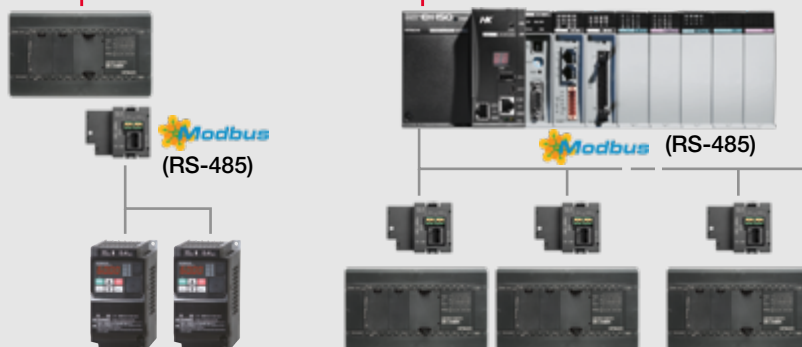
- Communication protocol CODESYS V3.5
- Programming languages according to IEC 61131-3: LD, IL, FBD, ST, SFC, CFC

Communication Protocols

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



CODESYS V3.5 (Ethernet)



Advantages for Your Application

Simple Motion Control

- High-speed counter
- Pulse train output
- Interrupt input
- PWM output



USB Memory Storage

- Program download/upload without programming software by using a USB Stick
- Long time PLC data logging on USB Stick (32 GB/CSV, separated values)



Web Visualization

- Visualization via Internet/Intranet
- Remote maintenance
- Diagnostics
- Remote control



RS485 2-wire interface option



NE-S1



Hitachi inverter

Options



- OBV-NES:** RS485, 1 port
- OBV-485A:** RS485, 1 port, Analog Input 2ch.
- OBV-485TAI:** RS-485, 1 port, Analog Input 2ch.
- OBV-485TAO:** RS-485, 1 port, Analog Output 2ch.
- OBV-AIO:** Analog Input 2ch, Analog Output 2ch.

Battery



MV-BAT

For data memory retention. 1750mAh.

Specifications

Item	MV-A20DR	MV-D20DR	MV-D20DTPS	MV-A40DR	MV-D40DR	MV-D40DTPS	MV-A64DR	MV-D64DR	MV-D64DTPS
Power supply	100 / 240 V AC	24 V DC		100 / 240 V AC	24 V DC		100 / 240 V AC	24 V DC	
Number of inputs (DI)	12			24			40		
Input specification	DC input (24 V DC)								
Number of output (DO)	8			16			24		
Output specification	Relay		Transistor	Relay		Transistor	Relay		Transistor
No. of expansion units	4								
No. of I / O (using 64 pts exp. units)	276 (input 172 / output 104)			296 (input 184 / output 112)			320 (input 200 / output 120)		
Size (W x H x D) [Unit: mm]	150 x 90 x 76						195 x 90 x 76		
Boolean executive speed	0.54 μ s / instruction								
User program memory	1 MB								
Source file memory	1 MB								
Data memory (non-retain)	640 kB								
Data memory (retain)	256 kB								
Programming languages	IEC 61131-3 compliant, 5 languages (LD, FBD, SFC, IL, ST) + CFC								
Special I / O	Single phase counter	Max. 5 ch, 100 kHz							
	2-phase counter	Max. 2 ch, 60 kHz							
	Pulse train output	Max. 3 ch, 65 kHz							
	PWM output	Max. 3 ch, 65 kHz							
	Interrupt input	Max. 5 ch							
I / O updating cycle	Refresh processing (depends on each task cycle)								
USB	Device function	Programming (built-in USB 2.0, full speed)							
	Host function	USB stick (up to 32 GB) can be used for project copies and data logging							
Ethernet	UDP/ IP, TCP/ IP	Programming, general purpose, Modbus / TCP Client and Server, EtherCAT master							
Serial	RS-232C (built-in)	General purpose, Modbus / RTU master and slave							
	RS-485 (option)	General purpose, Modbus / RTU master and slave							
Web visualization function	Supported as standard								
RTC	Built-in								
Battery	Optional (MV-BAT: 3.0 V / 1.750 mAh)								
Certifications	CE								
Programming software	HX-CODESYS								

HX-CODESYS Programming Software

Thanks to full compliance with the IEC 61131-3 standard, the user can select from 6 programming languages (LD, IL, FBD, ST, SFC, CFC) in HX-CODESYS.

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