

**YASKAWA**

# VIPA MICRO

The compact, fast small control system



# Modern, compact and fast

## CPU FACTS

- PROFINET IO-Controller and I-Device
- Integrated web server for device diagnosis and web visualisation
- Ethernet PG/OP channel for active and passive communication
- 16 digital inputs, DC 24V with integrated status display
- 12 digital outputs, DC 24V 0.5A with integrated status display
- 2 analogue inputs 0V ... +10V, 12Bit
- 4 channels for counters, frequency measurement and 2 channels for pulse width modulation
- 64 Kbytes integrated working memory, extended up to 128 Kbytes
- I/O address range, digital/analogue 2048 bytes
- 512 timer/meter, 8192 bit memory bytes
- Low dissipation power, max. 7W
- External memory ability with SD card (up to 2GB)
- Programmable via VIPA SPEED7 Studio, Siemens SIMATIC Manager or Siemens TIA Portal



10-100x faster than traditional controls

Removable plug with push-in technology for installation without tools

Up to 8 modules can be added

Permanent memory and SD card as external storage option

2-way switch for PROFINET and active Ethernet connection

Extremely compact design

Much faster backplane bus



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## MICRO EXPANSIONS

### 2xRS485 expansion module

- 2x serial interfaces (RS485/RS422, MPI, Modbus)
- PROFIBUS-DP-Slave can be activated with VIPA Set Card

### Up to 8 periphery modules

- Digital input module
- Digital output module
- Analogue input module
- Analogue output module

### Power supply

- AC 120 ... 240V / DC 24V, 1.5A



PROFINET IO-Controller



MICRO PROFINET I-Device

Visualisation / WebVisu



MICRO PROFINET IO-Controller

PROFINET Device ... up to 8

## The MICRO system

**A combination of high functionality and excellent performance in a very small size offers new opportunities to optimise processes and increase performance. Even in the smallest equipment and machines.**



The MICRO PLC is the introduction of a new control concept. The MICRO PLC is not only small, compact and high-performance in communication; it also offers additional benefits to users.

Just two examples: a removable plug which simplifies pre-wiring and installation, as well as channel-specific LEDs which are attached directly to each contact. Clear and modern design together in the new MICRO PLC with the latest technology and user-friendly features.

Setting and programming the MICRO small controller system is done as with SLIO using SPEED7 Studio, Siemens SIMATIC Manager or Siemens TIA Portal. This ensures that existing S7 know-how can continue to be used for programming.

The MICRO small controller as a PROFINET controller can be extended by up to eight PROFINET devices. The SLIO I/O system is available, for example, as a PROFINET device. The PROFINET I-Device function makes it possible for you to couple the MICRO to a PROFINET master.

The MICRO PLC provides maximum performance in the smallest space in the control cabinet. Its minimal size allows brand new planning designs for various user applications.

The current versions of MICRO PLC are equipped with an integrated web server, which allows any access to data, diagnoses, and status screens as well as visualisation projects via smart phone, laptop, etc..



In addition to standard Ethernet protocols, such as Modbus TCP or S7 communication, MICRO also speaks PROFINET. Thus you can simply connect up to eight PROFINET devices and/or integrate the MICRO as an I-Device in PROFINET topologies.





## Available components



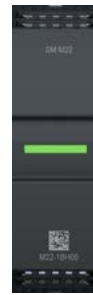
**Mains power supply**  
**M07-2BA00**  
 Input AC 120 ... 240V  
 Output 24V DC, 1.5A



**CPU M13C**  
**M13-CCF0000**  
 PROFINET Controller



**RS485 Extension**  
**M09-0CB00**  
 2x Serial RS485/RS422,  
 MPI, Modbus  
 PROFIBUS-DP-Slave



**Digital Output**  
**M22-1BH00**  
 16x DO  
 DC 24V, 0.5A  
**M22-1HF10**  
 8x DO  
 AC 230V, 2A Relays

**Digital Input**  
**M21-1BH00**

16x DI  
 DC 24V

**Digital Input/Output**

**M23-1BH00**  
 8x DI + 8x DO  
 DC 24V, 0.5A

**Analogue Input**

**M31-1CD50**  
 4x AI, 16Bit  
 0 ... 10V + -10V

**Analogue Output**

**M32-1BD70**  
 4x AO, 12Bit  
 0 ... 10V + -10V

**M32-1BD40**  
 4x AO, 12Bit  
 0/4 ... 20mA

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