

MVH600



About us

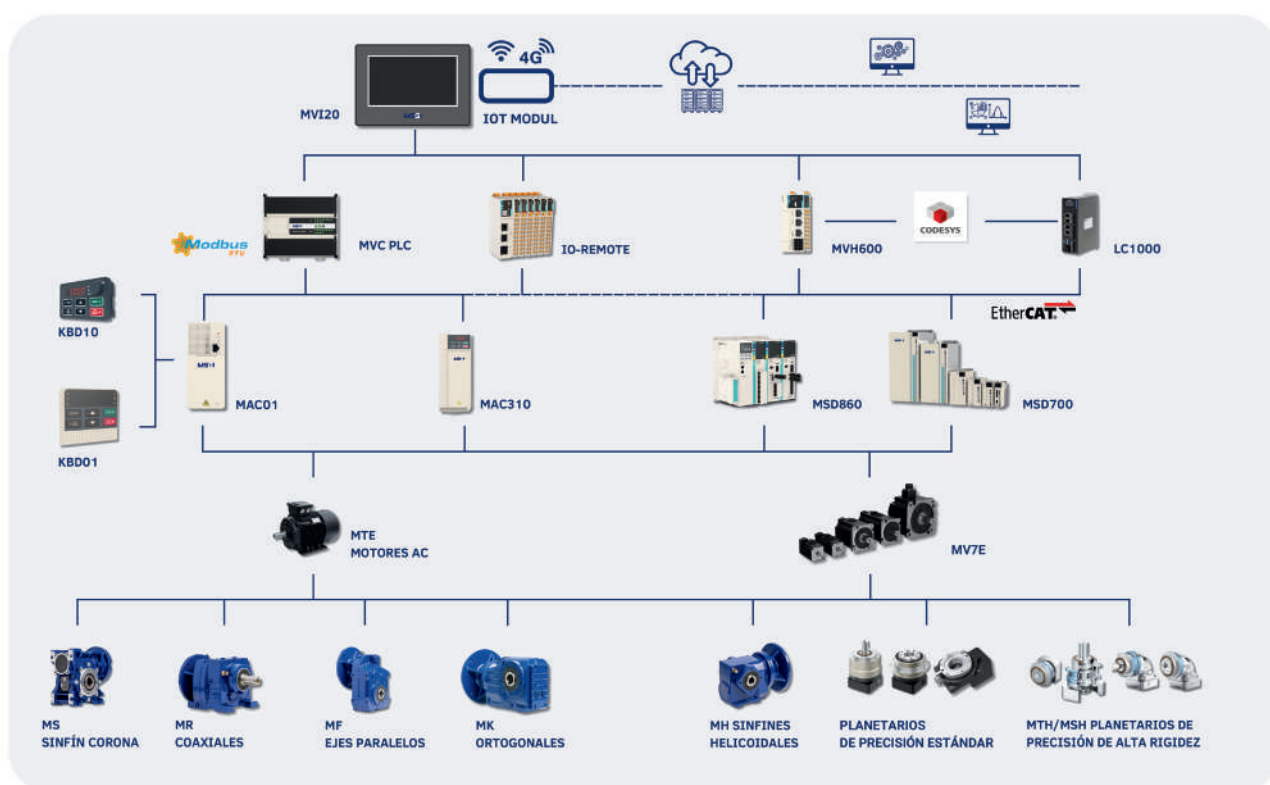
Welcome to Mechatronic System Group (MSG), a young team with solid experience in the industrial mechatronics sector.

We stand out by offering innovative products and a complete portfolio that covers the needs of machine manufacturers and engineering companies. At MSG, we not only provide advanced technical solutions, but we also accompany our customers throughout the machine definition process. With a national and international presence, we are committed to driving the cutting edge of mechatronics in industry.

At MSG, we pride ourselves on being at the forefront of technology by constantly innovating our products. In our electronics division, we excel with precision planetary gearboxes and helical gearboxes. Designed to be interchangeable with the vast majority of manufacturers, this gives us a unique competitive advantage over other brands. MSG are committed to offering advanced and flexible mechanical solutions to meet the demands of our customers.

MSG provides various products including inverters from 0.4kW to 630kW, servo systems from 50W to 15kW, motion controllers, PLC and HMI, which are applied in all sorts of fields occasions like lifting, mining, rail traffic, machine tools, compressors, plastic equipment, photo-voltaic pumping, construction, robots/mechanical arms, printing and packaging, chemical fibers for textile use, metallurgy, municipal works, petrol work and chemical engineering.

MSG has committed to electric drive and industrial control since it's foundation. As an all-round company engaged in R & D, manufacturing and sales on high-tech industrial automation products.



Production Introduction



MVH600 is the first medium-sized PLC. Having accumulated years of experience with industrial control equipment and analyzed the actual situation of a number of sites, MSG has been launched reliable industrial controllers specifically for mid- and high-end equipment and factory automation design.

MVH600 is integrated with a range of functions and can be used to control multiple devices with ultra-high-speed computing and processing speed to deliver excellent system performance.

Simple Codesys integrated development environment:

For multiple programming languages(LD, FBD, ST, SFC and CFC) in conformity to IEC 61131-3.

Precise motion control:

By EtherCAT bus and pulses
For up to 128 axes (32 recommended)
And 16-axis electronic cam with synchronization cycle of 2ms.



Strong bus network:

For up to 128 EtherCAT slaves (including servo axes)

Supports PLCopen mainstream functions

Product Features

Part 1 Efficiency

Faster command processing:
 Quad-core processor for nanosecond speed.
 Nearly 3X improvement in overall performance over the previous generation with greater capacity

Part 2 Convenience

Integrated development environment (IDE) for Codesys supports multiple programming languages(LD, FBD, ST, SFC and CFC) in conformity to IEC 61131-3.

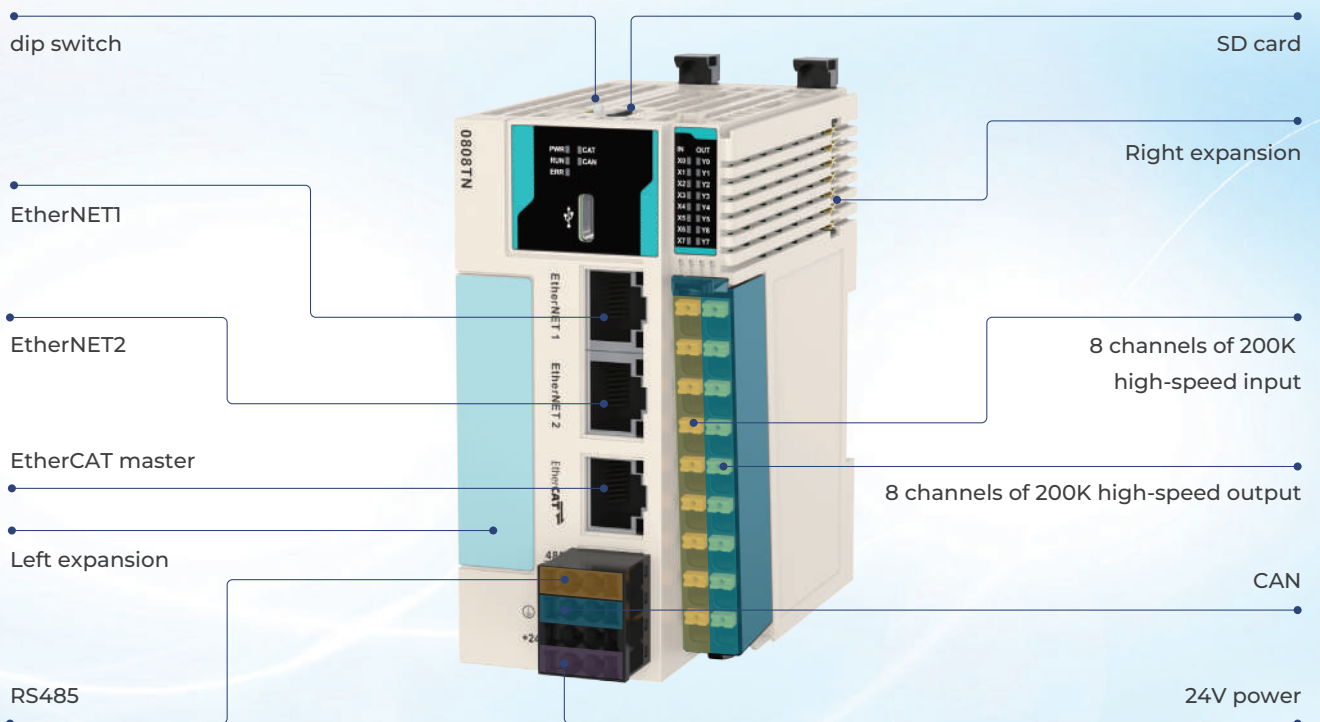
Part 3 Communication

Strong bus network:
 EtherCAT, EtherNet/IP, OPC UA, Modbus TCP, RS485, CAN bus and other global standard industrial networks.
 Two channels of EtherNet built-in switches.

Part 4 Control

Bus + Pulse for more flexibility and versatility:
 EtherCAT includes both real and virtual axes and supports a maximum of 128 axes (32 axes recommended) and 16-axis electronic cam with synchronization cycle of 2ms.

One-Stop Control

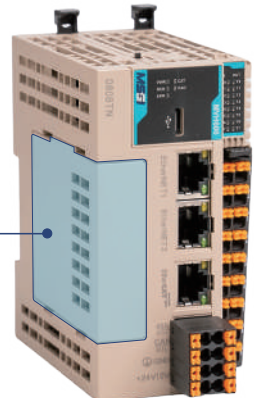


MVH600-0808TN Specification

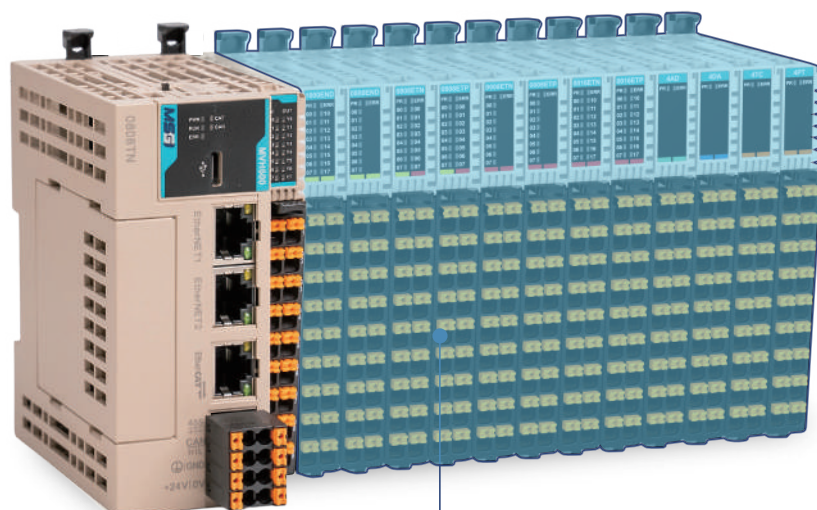
Item	Specification			
Model	MVH600-0808TN/P	MVH601-0808TN/P	MVH602-0808TN/P	MVH603-0808TN/P
Axis no.	Up to 128 axes	8 axes	16 axes	32 axes
Rated voltage	24VDC			
RS485	1 channel of RS485 serial communication			
CAN	CANopen master			
EtherNet	2 channel of EtherNet (built-in switch), supports ModbusTCP and program upload/download			
EtherCAT	Connect up to 128 EtherCAT slaves (servo axes included)			
High-speed input	8 channels at 200kHz			
High-speed output	8 channels (pulse axis) at 200kHz, source/drain output selectable			
Left expansion	One 485 function can be extended			
Right expansion	Up to 16 modules can be extended			
SD card	Support up to 32G for 1 channel			
Program data capacity	Program memory 10MB, power-down memory 512kb (Flash power-off save), data capacity 20MB			
Program language	IEC 61131-3 programming language (LD, FBD, ST, SFC, CFC)			
Motion control	Support linear arc interpolation, electronic gear, electronic cam functions			

Left Expansion

Model	Specification
MVH600-RS485	2-channel RS485
MVH600-RS485-RTC	2-channel RS485 + real-time clock (RTC)
MVH600-4DI	4-channel DI
MVH600-4DI-RTC	4-channel DI + RTC
MVH600-4DO-TN	4-channel drain DO
MVH600-DO-TN-RTC	4-channel drain DO + RTC
MVH600-2AD1DA-I	2-channel AI, 1-channel AO (current type)
MVH600-2AD1DA-I-RTC	2-channel AI, 1-channel AO (current type) + RTC
MVH600-2AD1DA-V	2-channel AI, 1-channel AO (voltage type)
MVH600-2AD1DA-V-RTC	2-channel AI, 1-channel AO (voltage type) + RTC
MVH600-RTC	Real-time clock expansion card

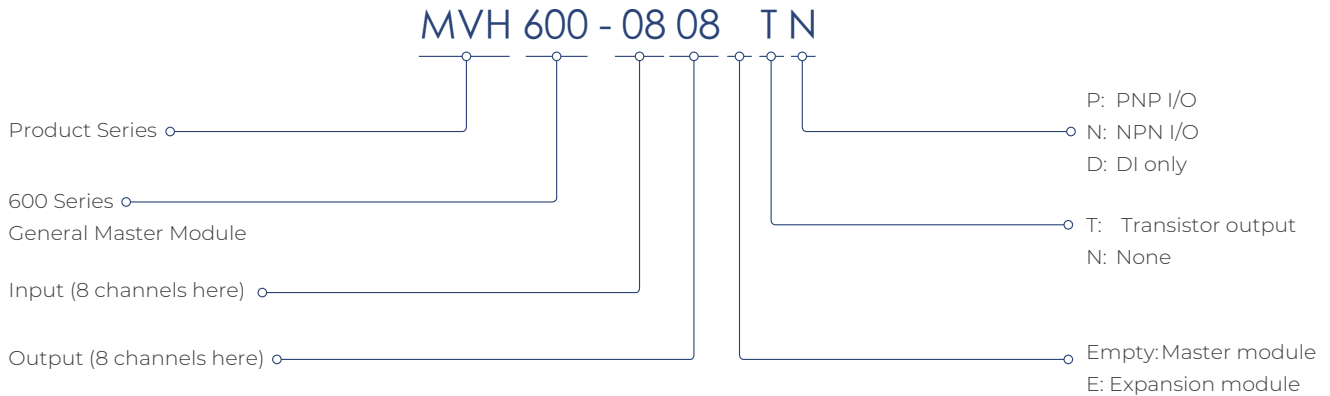


Right Expansion



Model	Specification
MVH-1600END	16 channels of DI
MVH-0800END	8 channels of DI
MVH-0016ETN	16 channels of NPN DO
MVH-0016ETP	16 channels of PNP DO
MVH-0808ETN	8 channels of DI, 8 channels of NPN DO
MVH-0808ETP	8 channels of DI, 8 channels of PNP DO
MVH-0008ETN	8 channels of NPN DO
MVH-0008ETP	8 channels of PNP DO
MVH-4AD	4 channels of AI
MVH-4DA	4 channels of AO
MVH-4PT	4 channels of RTD temperature detection module
MVH-4TC	4 channels of thermocouple temperature detection module

Model Description



Manufacturing and Quality Control

Smart manufacturing with whole-process automation

- > On intelligent manufacturing ,the smart factory yields an annual capacity of 914,600 sets;
- > Fully automatic SMT production line, automatic coating line, assembly line, testing line, packaging line, high temperature aging room and advanced production equipment are established;
- > Enterprise production is implemented with target management and is operated in strict accordance with the production process and management methods, which greatly improves the production efficiency.
- > Complete supply chain system meets the large volume of one-time delivery.

Inheriting the spirit of craftsmanship, detail-oriented and striving for better

- > Insist on the quality policy and concept of quality first.
- > Procurement, design, manufacturing and other aspects all implemented in strict accordance with the requirements of the ISO9001 quality management system.
- > Talents create high quality, the production line core positions are occupied by 100% college degrees and above.
- > Each product has a unique product code, which can be used in the product traceability system to ensure quality can be controlled and traced.



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Official Website

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