



MPII CONTROLLER

Intelligent Control for Precision Power.

Voltage and Current Control Levels (0-600V L-N, 0-1,000V L-L, or 0-10,000A)

The Staco MPII Series is a microprocessor-based controller engineered for precision voltage and current control across Staco's family of power products—including *StacoVT* variable transformers, *StacoPPS* programmable power supplies, and *StacoAVR* voltage regulators.

Built for industrial and laboratory environments, the MPII combines digital accuracy with analog reliability, ensuring repeatable performance and simplified setup for critical testing, simulation, and manufacturing applications.

APPLICATIONS INCLUDE

- End-of-line functional testing for HVAC, electrical, and industrial equipment.
- Voltage stabilization and testing in R&D and quality environments.
- Controlled power cycling for endurance and reliability verification.

PRODUCT FEATURES

- Seamless integration with StacoVT, StacoPPS, and StacoAVR systems.
- Simple front-panel operation or remote command control.
- Supports manual, semi-automatic, or fully automated test modes.
- Monitors and regulates voltage, current, or power to user-defined limits.
- Compact, durable design with field-proven reliability.

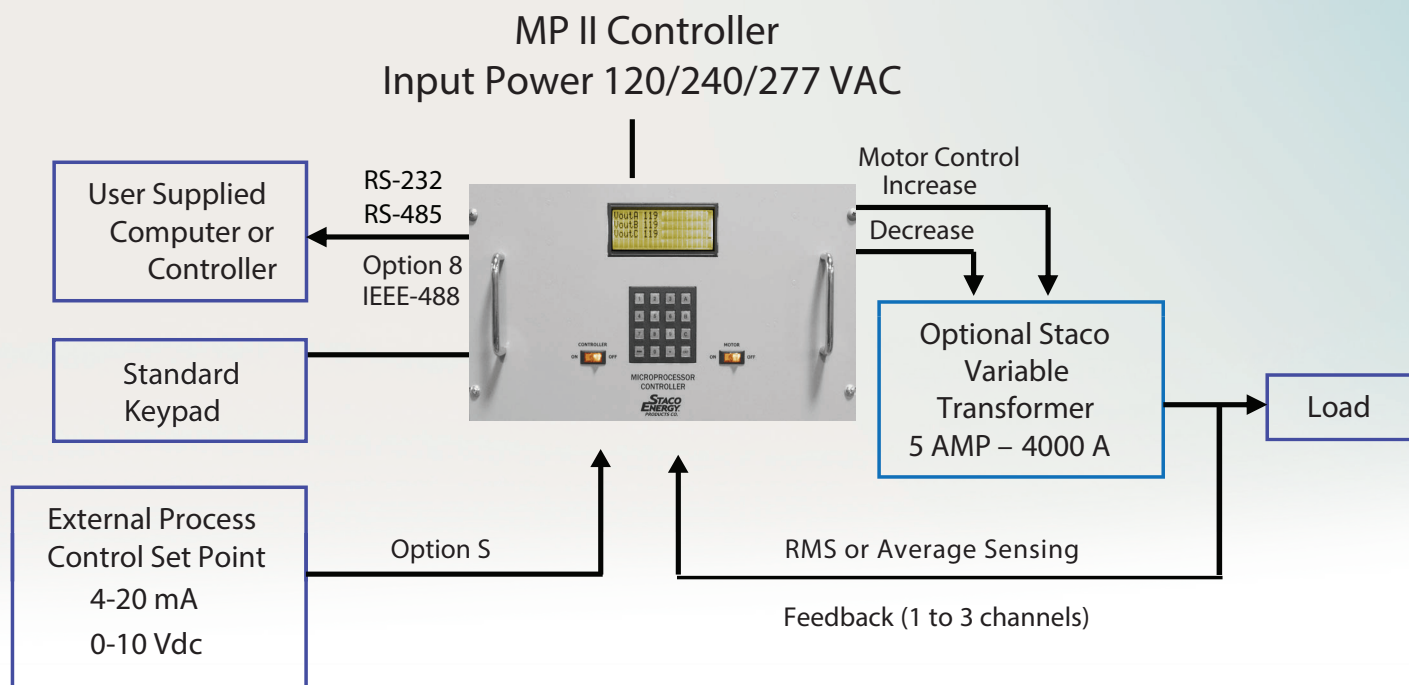




VALUE PROPOSITION

The MP II Series microprocessor controller delivers a seamless connection between your automation system and Staco's motor-driven variable transformers. Designed for flexibility, it offers one to three channels of independent feedback and control—ideal for managing multiple single-phase units or a three-phase system with Individual Phase Control (IPC). The result is precise voltage regulation, simplified integration, and dependable performance in any test or process environment.

With precise digital feedback and modular connectivity, the MP II gives engineers the control and versatility needed to create efficient, accurate, and repeatable test processes. Its intelligent design streamlines setup, enhances measurement consistency, and elevates overall test quality.





HOW IT OPERATES

The MPIO Controller regulates the output of a Staco variable transformer by continuously comparing actual voltage or current to a user-selected setpoint. Adjustments occur automatically through a closed-loop control circuit, maintaining stable output even under varying load conditions.

Operators can define voltage limits or test profiles directly from the front-panel interface or remotely via analog or digital control signals—making the MPIO equally suited for manual bench setups or integrated automated test environments.

Outputs Include:

- 0-10 VDC analog reference for control feedback.
- RS-232 or optional RS-485 digital communication ports.
- Programmable limit and status relays for external signaling.
- Scalable 4-20 mA current loop output for process monitoring.
- Front-panel display with user-selectable voltage and current readout.

Advantages:

- **Precision Control:** Closed-loop feedback delivers accurate, repeatable results. RS-232 or optional RS-485 digital communication ports.
- **Operational Flexibility:** Operates as a stand-alone controller or within an automated system.
- **Connectivity Options:** Analog (4-20 mA, 0-10Vdc) and digital (RS 232/485) interfaces simplify integration with PLCs and DAQ systems.
- **Precise Regulation:** Selectable voltage deadbands (+/- 0.5, 1, 2, or 4 volts)
- **Rugged Reliability:** Proven Staco design ensures long service life in demanding environments.
- **Ease of Use:** Intuitive controls and clear digital display minimize setup time.





How to Specify and Order MPIO Controllers

Basic microprocessor units are full-range controllers in a NEMA-1 style enclosure or rack mount plus a series of programmable DIP switches for motor speed, averaging, and dead-band adjustment to satisfy your install requirements.

Model:

MPIO-NEMA-1 NEMA 1 style enclosed
MPIO-RACK Rack mount

Options

Process Control Set Point
IEEE-488 Communications
Amp readings displayed on Terminal

Suffix

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8
A

Technical Specifications

Operating Voltage: 120/240/277 VAC,
50/60 Hz

Input Signals:

Set Point:

- Remote analog input 4-20mA, 0-10Vdc
- Digital input- local terminal and remote computer interface RS-232, RS-485, and IEEE-488
- Configurable Voltage Feedback: 0-150 VAC, 0-300 VAC, and 0-600 VAC

Output Signals:

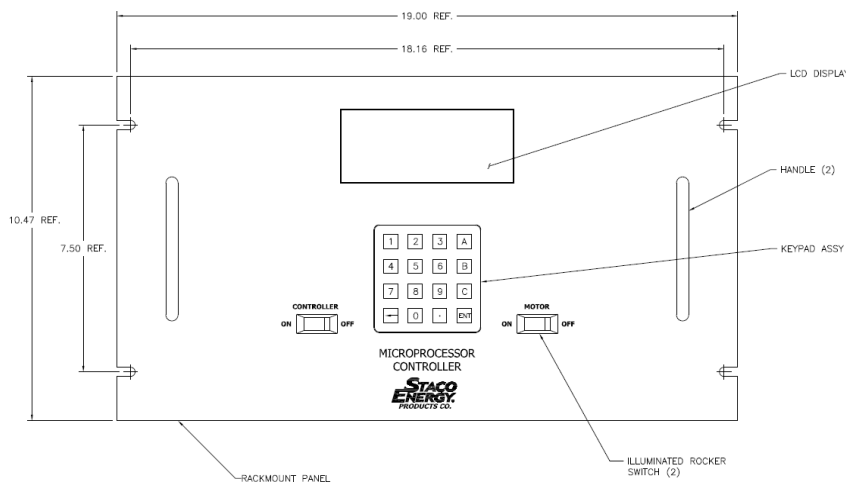
- Predetermined 5Vdc low level logic signals for High/Low Limits, Summary Limit, and Raise/Lower

General:

- 5-year battery backed memory
- Watch dog timer
- Operating temperature: 0-50 C

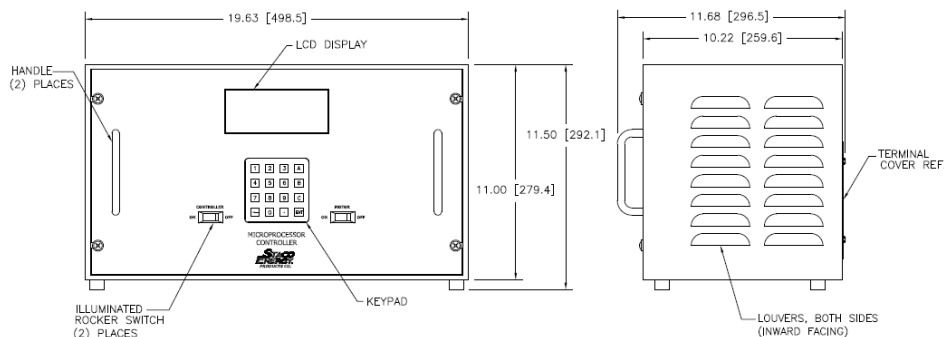
MPIO-Rack

Rack Dimensions: 10.5 x 19 x 3.1 (HxWxD, Inches)
Net Wt: 19 lbs; Shipping Wt: 22 lbs.



MPIO-NEMA-1

Nema-1 Dimensions: 11.5 x 19.6 x 3.1 (HxWxD, Inches)
Net Wt: 19 lbs; Shipping Wt: 22 lbs.



STACO SERVICE

FIELD SERVICE PROGRAM

Staco specializes in providing choice and flexibility by developing tailored solutions for preventive and remedial maintenance services, as well as emergency repairs for all of our products. Staco Service is built upon a nationwide network of highly trained and motivated customer support engineers and technicians who can provide professional services and care throughout the life of your equipment.

- Start-Ups
- Preventive Maintenance
- Spare Parts
- Battery Analysis/Refresh/Replacement
- On-Site Training
- Time & Material Services

WHY STACO ENERGY PRODUCTS?

BECAUSE WE ARE YOUR TAILORED POWER SOLUTIONS PROVIDER!

Unique application design demands, harsh environment concerns, the need to meet non-standard physical space requirements; providing the "not so usual" is what we do best. From leading edge uninterruptible power supplies, power conditioners, power factor and harmonic correction equipment, to the world's most stable voltage control systems, we have the technology you need to protect and manage your business, and the knowledge to make it work for you.

Since 1937, customers worldwide have relied on Staco Energy as their tailored solutions provider, to solve a wide range of electrical power problems. Headquartered in Miamisburg, Ohio, Staco Energy Products is a wholly owned subsidiary of Components Corporation of America, located in Dallas, Texas.

Voltage Control



UPS & Emergency Lighting



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