

PARSTAT™ MC

multi-channel potentiostat/galvanostat



Designed to protect your experiment from the unexpected, the PARSTAT™ MC is the most modular and robust multi-channel electrochemical testing platform on the market. It builds on our industry-leading 50+ years of experience in potentiostat development and software user-interface design. The PARSTAT™ MC combines function, flexibility and value. Key features include:

- The *ultimate* in modular design
- Widest dynamic current range of 2 Amps to 4 nA (120 fA resolution) as standard - No need for expensive hardware options
- Hot-swappable channels allow potentiostats to be added or removed without interruption of experiments on other channels
- Fast data acquisition at 500 kS/sec allows for a wide range of high speed applications
- Features the most popular electrochemical acquisition and analysis software solution, VersaStudio
- Floating ground allows testing of multiple samples in the same cell

Key Specifications

| | |
|-------------------------------|-----------------|
| Compliance Voltage | ± 12 V |
| Polarization Voltage | ±10 V |
| Standard Maximum Current | 2 A |
| Standard Lowest Current Range | 4 nA |
| Number of Current Ranges | 10 ranges |
| EIS Frequency Range | 1 MHz to 10 µHz |
| Data Acquisition Rate | 500 kS/sec |
| PMC-1000 PSTAT Card | AC/DC |
| PMC-1000/DC PSTAT Card | DC only |
| Connectivity | USB |

- Multi-channel chassis capable of housing up to 8 potentiostat cards
- Up to 4 chassis (32 channels) driven by a single computer
- Each potentiostat card is electrically isolated ensuring floating ground operation
- Each system component is user-replaceable
- Compatible with low current interface providing aA level resolution

Ordering Information

Options:

| | |
|--------------|-------------------------|
| PMC CHS08A | Chassis |
| PMC-1000 | PSTAT Channel AC/DC |
| PMC-1000/DC | PSTAT Channel DC only |
| VersaSTAT-LC | Low Current Interface |
| PMC AUX01 | Digital AUX cable (1 m) |
| PMC ALG01 | Analog AUX cable (1 m) |

User Replaceable Modules:

| | |
|------------|---------------------|
| PMC FAN01 | Fan module |
| PMC BPLN01 | Backplane module |
| PMC PWR01 | Power supply module |
| 223945 | Cell cable (2 m) |

Each PARSTAT MC chassis is configured with up to eight (8) potentiostats. Each potentiostat card provides a wide range of functionality as standard.

Channels can operate simultaneously for high-throughput routine testing, asynchronously for different experiments on distinct cells or in a complex matrix of multiple electrodes in a single test environment. Additional channels can be added on-site by the user, even while other channels are in operation. Every component within the chassis is designed to be user-replaceable minimizing the impact of any interruptions in your experiment.

This design maximizes value by reserving the slots of the chassis for potentiostat channels and not expensive hardware options. The high-functioning core potentiostat is the basis for a system with excellent price-per-channel, especially compared to typical configurations of other option-based offerings.

The PARSTAT MC provides a platform to expand with you as your research needs grow and evolve.

The PARSTAT MC runs on Princeton Applied Research's popular VersaStudio software which now includes new features specifically engineered to tailor the test environment to the multichannel user, including the ability to:

- Overlay data files from multiple channels in a single graph: both during or after acquisition
- Create graphs of data using parameters from different channels or files – e.g., the *voltage* from one channel and the *current* from another channel, as is common in bipotentiostat work
- Access a full suite of electrochemical measurements for energy storage, sensors, corrosion, fundamental research, and nanotechnology

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Please see our website for a complete list of our global offices and authorized agents

