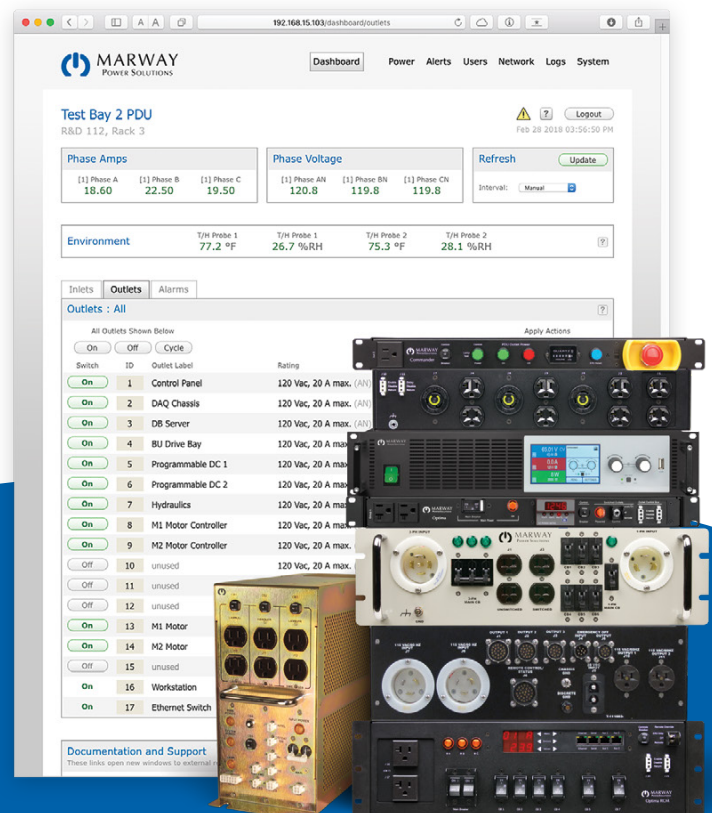




# Power Distribution Solutions

Power Distribution Units  
Programmable DC Power Supplies  
Control/EPO Panels  
Auto-Transfer Switches  
Rack Power Integration





## Optima™ Power Distribution Units

Defense and Industrial, Custom and Standard

### Custom PDUs for Any Application

A custom PDU offers the opportunity to consolidate power management capabilities such as electrical noise filtering, power monitoring, outlet control, safety interlocks, and more into a convenient, single-enclosure solution tailored to the application. Marway specializes in working closely with customers to configure custom PDUs to meet all aspects of power distribution, power conversion, conditioning, control, safety, installation, environment, and even regulatory requirements.

- From rackmount and custom enclosures to full rack-sized systems.
- Ac and dc, in 50, 60, and 400 Hz, up to 400 Amps.
- Consolidate requirements to reduce parts, cabling, space, and weight.
- Mix power forms, and convert power forms in a single unit.
- Mitigate voltage spikes/transients using surge suppression.
- Meet EMI standards using filters and shielded enclosures.
- Monitor power quality, available capacity, and discrete status.
- Onboard digital or analog meters for amps, volts, power, and others.
- Onboard indicators for phases, circuits, outlets, and interlocks.
- Remote outlet control via Ethernet, dry-contacts, EPO, and interlocks.
- Integrate external signals to automate control and safety dependencies.
- Multiple MIL-SPEC conformances, UL, CE through NRTLs.

### Optima 8, 5, 3 Series Standard PDUs

- Integral EMI filtering, surge suppression, and remote on/off/EPO.
- Over 280 models offer numerous inlet, outlet, circuit configurations.
- Optima 8 includes Ethernet switching, inlet power monitoring, event logging, power setpoints, automated alerts, remote control scripting.
- 120 Vac, 200–240 Vac, 100–240 Vac, or 120/208 Vac 3 $\phi$  inlets.
- 15 A, 20 A, 30 A maximum ratings.
- 1U, 2U, 3U, 0U enclosures.



## Commander™

Remote Control and EPO Panels

Marway's universal control panels consolidate the on, off, and EPO control features used to manage one or more power distribution units. PDUs with remotely switchable outlets can then provide power on/off control in unison to downstream equipment. Additionally, the EPO circuit of the Commander control panels improves safety of the combined power system.



Above and cover photo: Marway specializes in custom PDUs from 1U to rack sized. From commercial to MIL-STD, we integrate power conditioning, conversion, control, and conformance requirements into a single solution package.



Available in 1U, 2U, 3U, and 0U chassis, there are over 280 standard models to choose from with a selection of inlet connectors, outlets, circuit configurations, and power management options including networking.



The Commander 5000 (shown) provides On/Off control, EPO, status indicators, and utility outlets. The Commander 4900 (not shown) offers basic on/off/EPO functions in a more economical package.

Providing power distribution for multiple industries and applications.



## mPower™ DC

### Autoranging and Bidirectional Power Supplies

mPower features an autoranging power envelope enabling a wider range of voltage and current settings at peak power. All systems offer constant voltage, current, or power modes. The 311 and 411 Series include a sophisticated function generator. The 411 Series includes source and regenerative sink power modes. Remote control is possible with ModBus or SCPI over a number of hardware options, as well as LabView VIs and Windows® control software. Profiles are used to quickly switch between five stored test settings.

### 300 Series (1U)

- 80 to 750 Vdc, 6 to 100 amps, and 1.5 or 3 kW.
- USB, Ethernet, analog remote control. Up to 10 units in parallel.

### 311 and 411 Series (2U, 3U, and 4U)

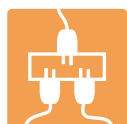
- 10 to 2,000 Vdc, 6 to 1,000 amps
- 2U models in 1, 1.5, 3 kW, 3U models in 5, 10, and 15 kW, and 4U models in 30 kW (all models up to 64 units in parallel).
- USB, Ethernet, CAN, Profi, EtherCAT, RS232, analog, and others.



mPower's autoranging enables operation for a wider range of test conditions per kW than traditional power supplies. Configurable function generators in 311/411 Series further broadens the test abilities of a single unit. (Shown: 300 1U, 311 2U, 411 3U.)



Standard TwinPower ATS models are available for 120 Vac or 208 Vac 30 amps. Custom designs to meet application-specific needs are also available.



## TwinPower™

### Auto Transfer Switches

An automatic transfer switch (ATS) enables critical equipment to have both a primary and a secondary power feed. If primary power fails, the ATS switches to the secondary power feed. Marway's "break before make" switching mechanism ensures isolation of the two power feeds, and eliminates a requirement for the two power feeds to be phase synchronized.



## PowerPlus™

### Turn-key rack-level power integration

PowerPlus services integrate the engineering and packaging of customized, turn-key, rack-based control centers where the optimization of power distribution is a key objective of the design need.

Where critical equipment comes together in a rack, power distribution often plays an important role. Some equipment will need specific power conditioning requirements, and/or multiple power forms. For others, space constraints will dominate the need for creative solutions. Marway can address these design needs and more.

More Details At: [www.marway.com](http://www.marway.com)





Committed to the success of  
your project for over 40 years.



## What We Do

Marway designs and manufactures power distribution products for electronic equipment in either standard rack-mount form, or in custom enclosures.

We specialize in creating optimized solutions for unique applications. Whether for one-time, custom, multi-rack platforms, or for high-volume OEM power boxes, we're able to meet the needs of a variety of engineering and manufacturing needs.

We also design and manufacture auto transfer switches to handle dual power sources, and custom control and EPO panels to help manage multiple or remotely located PDUs.



## Who We Do It For

Over the years, much of Marway's focus has been on meeting the demanding needs of industrial, military, and OEM applications. We've delivered thousands of custom designs for test applications used in development, DVT, and maintenance environments. In the defense realm, we have hundreds of products deployed in ships, submarines, aviation, and mobile command centers.

We have also delivered a great number of rackmount PDUs and custom-enclosure power modules for industrial, commercial, and OEM applications.



## How We Do It

With Marway's ability to create PDUs for unique applications, the PDU becomes an ideal place to consolidate many power management needs. This includes conditioning incoming power to minimize noise, converting available power to other forms, adding controls for safety and operator convenience, and integrating monitoring to display power conditions and status.

We call these capabilities the pillars of power management. Marway has specialized in the integration of these capabilities to reduce space, weight, and costs, and to improve performance compared to separate third-party components.

