

## MOTECH PPS Series Specifications

### PPS-1000 Series

(70W single output with external programming capability)



MODEL PPS-	Output Ratings Voltage / Current	Programming Resolution(LSB) Voltage / Current
1001	0 to 8V / 0 to 10A	2mV / 4mA
1002	0 to 18V / 0 to 4A	5mV / 2mA
1003	0 to 30V / 0 to 2.5A	10mV / 1mA
1004	0 to 35V / 0 to 2A	10mV / 0.6mA
1005	0 to 60V / 0 to 1A	20mV / 0.4mA
1006	0 to 128V / 0 to 0.5A	40mV / 0.25mA
1007	0 to 250V / 0 to 0.2A	80mV / 0.1mA
1008	0 to 35V / 0 to 0.35A	10mV / 0.1mA

### PPS-1020 Series

(100W single output with dual range operation)



MODEL PPS-	Output Ratings Voltage / Current	Programming Resolution(LSB) Voltage / Current
1021	0 to 17.5V or 0 to 35V / 0 to 6A or 0 to 3A	10mV / 2mA(high) / 1mA(low)
1022	0 to 30V or 0 to 60V / 0 to 3A or 0 to 1.5A	20mV / 1mA(high) / 0.5mA(low)

### PPS-1200 Series

(70W per channel/dual outputs)



MODEL PPS-	Output Ratings Voltage / Current	Programming Resolution(LSB) Voltage / Current
1201	dual 0 to 8V / 0 to 6A	2mV / 2mA
1202	dual 0 to 18V / 0 to 4A	5mV / 1.5mA
1203	dual 0 to 35V / 0 to 2A	10mV / 0.6mA
1204	dual 0 to 30V / 0 to 3A	10mV / 1mA
1205	dual 0 to 60V / 0 to 1A	20mV / 0.4mA
1206	dual 0 to 128V / 0 to 0.5A	40mV / 0.25mA

### PPS-2000 Series

(250W single output with external programming capability)



MODEL PPS-	Output Ratings Voltage / Current	Programming Resolution(LSB) Voltage / Current
2013	0 to 30V / 0 to 6A	10mV / 2mA
2014	0 to 35V / 0 to 5A	10mV / 2mA
2015	0 to 8V / 0 to 20A	2mV / 7mA
2016	0 to 18V / 0 to 10A	5mV / 3mA
2017	0 to 60V / 0 to 3A	20mV / 1mA
2018(A)	0 to 128V / 0 to 1.5A(2A)	40mV / 0.5mA
2019(A)	0 to 250V / 0 to 0.8A(1A)	80mV / 0.25mA

#### Programming Accuracy

Voltage	0.05%+2LSB
Current	0.15%+5LSB

#### Ripple and Noise

RMS	1mVrms
(PPS 1006, 1007, 1206, 2018(A), 2019(A), 3mVrms)	
Peak-to-peak	10mVp-p

#### Readback Accuracy

Voltage	0.1%+2LSB
Current	0.2%+5LSB

#### Load Regulation

Voltage	0.001%+1mV
Current	1mA

#### Line Regulation

Voltage	1mV
Current	1mA

#### Transient Recovery

	50 μs typical
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#### Programming Up/Down Speed

	15ms/20ms typical
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#### Operating Temperature

	0 to 40°C
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#### Dimensions

	8.4"x5.2"x15.7"
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#### Weight

	16 to 20lbs
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#### External Programming: (PPS-1000 and PPS-2000 Series)

Both the voltage and current can be programmed by an external analog voltage. The outputs are linearly proportional to an external input voltage from 0 to 10 volts with correspondence to the voltage and current full-scale outputs. To program both voltage and current output simultaneously in the external programming mode, two isolated voltage sources are required.

#### Tracking Function: (PPS-1200 Series)

When the tracking mode is enabled, the voltage and current output of channel two is identical to channel one, and also controlled by channel one.

#### Dual Range operation: (PPS-1020 Series)

The PPS-1020 series have two (high /low) operating ranges: high range stands for high current / low voltage output, and low range stands for low current / high voltage output.

#### Remote Sensing:

Up to 0.5 volts can be dropped in each load wire; add 0.5 to 1mV to the voltage load regulation specifications for 0.5 volts drop in the positive load wire.

#### GPIO Interface Capability: SH1, AH1, T6, TE0, L4, LE0, RL1, SR0, PP0, DC1, DT0, C0, E1

Warranty period: 2 years

Optional Accessory: GPIO Interface Card

Contact:

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## THE NO COMPROMISE SOLUTION ...

MOTECH Now Offers 24 Programmable DC Power Supplies  
With The Quality & Features Priced  
To Beat All Competition!



- Standard GPIB Interface
- One-Box Solution Architecture
- Electronic Calibration via Front Panel or GPIB
- Programmable Overvoltage and Overcurrent Protection
- Low Ripple and Noise Output
- Voltage Controlled External Programming Capabilities
- Output Enable/Disable
- Remote Sensing Function
- Programmable Up/Down Fine Tuning
- Power-Off Memory
- Two Year Warranty





### One-Box Solution Architecture

To optimize bench space and interconnections between all components that make up a programmable power supply, MOTECH offers One Box Solution. One Box Solution combines the current shunt, DVM, voltage and current programmers all in one simple unit. This makes the power supply programming and monitoring system reliable and easy to use.

### Remote Sensing

The remote sense function automatically compensates unavoidable voltage drops caused by the load leads. The voltage is sensed at load rather than at the output terminals of the supply. Thus, proper voltage is provided to the load at all times.

### Programmable Protection Settings

Protecting your power supply and your load is a great concern to MOTECH. The PPS series provide two programmable protection settings, overvoltage (OV) and overcurrent (OCP). Whenever either of the two settings are tripped, the outputs are instantaneously disabled. Therefore, protecting your supply and load from the possibility of extensive damage.

### Electronic Calibration

In order to provide years of reliable and troublefree service, each power supply is able to be software calibrated. This method allows the unit to be calibrated without having to remove it from a system or even the cover for that matter. This method is a simple operation that can be done in either local or remote mode (GPIB). The equipment necessary for the calibration is a 5 1/2 digit DMM and a high precision shunt resistor.

### Standard GPIB Interface



Each power supply offers a GPIB interface as a standard accessory, unlike other manufacturers who charge hundreds of dollars more. The GPIB (General Purpose Interface Bus) function enables linking a computer, peripherals and instruments into a single automated system. The user writes software programs which allow the system to talk, listen and control operations. Thus, providing a very effective and powerful ATE system. All GPIB interface functions for the power supplies are compatible with IEEE-488 standard.

### Reliability and Performance



These industry grade linear power supplies have been proven to provide superior operational characteristics.

- Load/line regulation of 1mV/1mA rms
  - Low PARD
  - Short transient recovery time
  - Forced air ventilation system to decrease component temperature susceptibility
  - Optocouplers to isolate digital control circuits
  - Extensive burn-in testing to detect infant mortality in units
- All these points are furthermore backed by a two-year warranty on parts and labor to ensure your confidence, and satisfaction with our power supplies.



### Outline Drawing

