







965 W

DC INPUT,

PARALLELABLE, HOT-SWAPPABLE,

**FIVE-OUTPUT** 

**POWER SUPPLY** 

## MARTEK

## **PS2246 POWER SUPPLY FEATURES**

**INPUT POWER:** 40-60VDC, 35A Max

**INPUT CONNECTOR:** 3 position, 50A, single row terminal block with 10-32 studs and 11/32" extended hex nuts.

Lexan protective cover included

**INPUT PROTECTION:** 40A, single pole, single throw magnetic circuit breaker

**INRUSH CURRENT:** < 400A peak @ 60 VDC

**OUTPUT CONNECTOR:** DIN M-type connector with 40 A rated high power inserts and 24 signal pins

**OUTPUT POWER:** 965W Max (+5V @ 160A, +3.3V @ 8A, +12V @ 3A, -12V @ 6A, & -5V @ 6A)

with current sharing on +5V

**NOMINAL SIZE:** 10.800"L x 5.580"H x 5.980"W

**WEIGHT:** 10.5 Lb

**OPERATING AMBIENT:** 0-50 degrees Celsius

**COOLING:** System provided

**SIGNALS:** Power supply present signal, power supply fail signal

**CONSTRUCTION:** Fully enclosed steel chassis

**CONTROLS:** Factory preset +5V adjustment pot, remote ON/OFF switch

**PROTECTIONS:** Input reverse polarity protection. Primary power limiting. Overtemperature protection, resetting

with hysteresis. Self-restarting type overcurrent and over-voltage protection on all outputs. Output

oring diodes on all outputs.

**POWER CIRCUITS:** 125 kHz single-switch forward isolating down converters with magnetic amplifiers.





| ОИТРИТ                        | +5 V    | +3.3V   | +12V                       | -12V     | -5V     |
|-------------------------------|---------|---------|----------------------------|----------|---------|
| LINE/LOAD/CROSS<br>REGULATION | 4.5%    | 5.0%    | 1.9%                       | 8.0%     | 6.3%    |
| DIFF. MODE NOISE              | 55mVp-p | 39mVp-p | 33mVp-p                    | 56mVp-p  | 35mVp-p |
| OVP                           | 6.6V    | 4.3V    | 15.3V                      | -15.1V   | -6.7V   |
| ОСР                           | 203A    | 9.9A    | 3.6A                       | 7.4A     | 7.4A    |
| TRANSIENT<br>RESPONSE         | 240mVp  | 475mVp  | 80mVp                      | 1000m Vp | 300mVp  |
| (50 % LOAD STEP)              | 480µs   | 560μs   | 0μs                        | 5.6ms    | 580μs   |
| GAIN MARGIN                   | 13 dB   | > 20 dB | > 14 dB                    | -        | > 20 dB |
| PHASE MARGIN                  | 88°     | 57°     | 103°                       | -        | 73°     |
| CROSSOVER<br>FREQUENCY        | 6.4 kHz | 3.2 kHz | 3.8 kHz                    | -        | 5.0 kHz |
| LINE CONDUCTED EMI            |         |         | GR1089 with > 30 dB margin |          |         |
| INRUSH CURRENT @ 60 Vdc       |         |         | 364 Apk                    |          |         |
| START UP TIME @ 40 Vdc        |         |         | 684 Apk                    |          |         |
| HOLD UP TIME @ 48Vdc          |         |         | 520µs                      |          |         |
| EFFICIENCY @ 48Vdc, 965W      |         |         | 74%                        |          |         |



## **Mechanical Outline**

