



## 1500W Medical and Industrial Power Supplies



| Features                                | Benefits                   |
|-----------------------------------------|----------------------------|
| • Enclosed Compact Construction         | • Easy Installation        |
| • Class B Conducted & Radiated EMI      | • Simpler System Filtering |
| • Variable Speed Fan                    | • Quieter Operation        |
| • Medical and Industrial Certifications | • Easier System Compliance |
| • 7 Year Warranty                       | • Lower Cost of Ownership  |

| Specification                         |       |                                                                                                                 |  |
|---------------------------------------|-------|-----------------------------------------------------------------------------------------------------------------|--|
| Model                                 |       | CUS1500M                                                                                                        |  |
| AC Input Voltage range <sup>(1)</sup> | VAC   | 85 - 265VAC (47 - 63Hz)                                                                                         |  |
| DC Input Voltage range *              | VDC   | 120 - 340VDC*                                                                                                   |  |
| Inrush Current (100 / 200VAC)         | A     | 60 / 60A                                                                                                        |  |
| Power Factor (100 / 200VAC)           | -     | Meets EN61000-3-2 (0.98 / 0.95)                                                                                 |  |
| Input Current (115/230VAC) (Typ)      | A     | 16 / 8A                                                                                                         |  |
| Temperature Coefficient               | %/°C  | <0.02%/°C                                                                                                       |  |
| Regulation                            | -     | See Model Selector                                                                                              |  |
| Overcurrent Protection                | -     | >105%, Constant Current Style. After 5s unit will shutdown                                                      |  |
| Overvoltage Protection                | V     | 125-150% (115-125% for 48V), Cycle AC line to reset                                                             |  |
| Hold Up Time (Typ at 100% load)       | ms    | 20ms                                                                                                            |  |
| Leakage Current (max)                 | mA    | <0.3mA                                                                                                          |  |
| Standby Voltage                       | A     | 5V 1A (always on)                                                                                               |  |
| Remote Sense                          | -     | Yes                                                                                                             |  |
| Remote On/Off                         | -     | Yes. Apply external or Standby voltage to enable output voltage                                                 |  |
| DC Good, Fan Alarm                    | -     | Open collector signal, high on fail                                                                             |  |
| Parallel Operation                    | -     | Yes, up to 5 units                                                                                              |  |
| Series Operation                      | -     | Yes                                                                                                             |  |
| Operating Temperature                 | °C    | -20°C to +60°C, derate linearly to 60% load from 50°C to 60°C                                                   |  |
| Storage Temperature                   | °C    | -30°C to +75°C                                                                                                  |  |
| Operating Humidity (non condensing)   | %RH   | 20 - 90%RH                                                                                                      |  |
| Storage Humidity (non condensing)     | %RH   | 10 - 90%RH                                                                                                      |  |
| Cooling                               | -     | Internal variable speed fan, air intake from front. <45dBA noise                                                |  |
| Withstand Voltage                     | VAC   | Input to Ground 2kVAC (1xMoPP), Input to Output 4kVAC (2xMoPP),<br>Output to Ground 1.5kVAC (1xMoPP) for 1 min. |  |
| Isolation Resistance                  | MΩ    | >100MΩ at 25°C & 70%RH, Output to Ground 500VDC                                                                 |  |
| Vibration (non operating)             | -     | 10 - 55Hz: 19.6m/s <sup>2</sup> (sweep 1 min) X, Y, Z for 1 hour                                                |  |
| Shock                                 | -     | < 196.1 m/s <sup>2</sup>                                                                                        |  |
| Safety Agency Certifications          | -     | IEC/ES/EN/CSA60601-1, IEC/UL/EN/CSA60950-1, IEC/UL/EN62368-1 (in progress),<br>EN62477-1 (OVC III), CE Mark     |  |
| Line Dips                             | -     | SEMI-F47 (200VAC input)                                                                                         |  |
| Conducted & Radiated EMI              | -     | EN55011 / EN55032-B, FCC Class B, VCCI-B                                                                        |  |
| Immunity                              | -     | IEC61000-4-2, -3, -4, -5, -6, -8, -11, IEC61000-6-2, IEC60601-1-2 Ed.4                                          |  |
| Weight (Typ)                          | g     | 3,000g                                                                                                          |  |
| Size (WxHxD)                          | mm    | 127 x 63 x 261mm                                                                                                |  |
| MTBF - Telcordia SR-332 issue 3 **    | hours | 769,670                                                                                                         |  |
| Warranty                              | yrs   | 7                                                                                                               |  |

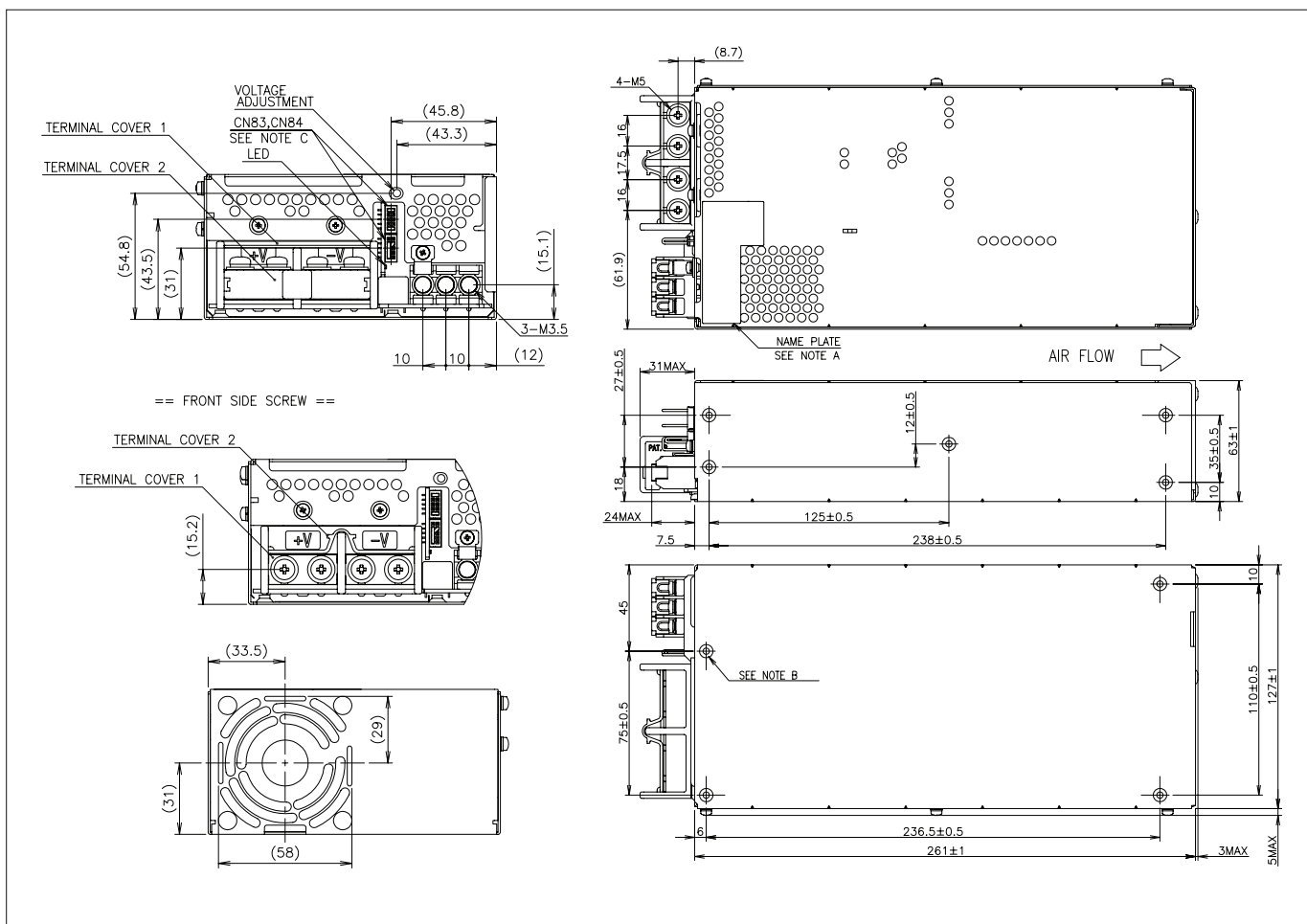
Notes: \* Safety certified for AC input only \*\* 24V output model, 25°C ambient, full load, 230VAC input

(1) Derate linearly to 80% load from 90 to 85VAC input

## Model Selector

| Model       | Voltage (V) | Adjust Range (V) | Max Current (A) | Max Output Power (W) | Load Reg (mV) | Line Reg (mV) | Ripple Noise (mV) | Efficiency (typ) % 115/230VAC |
|-------------|-------------|------------------|-----------------|----------------------|---------------|---------------|-------------------|-------------------------------|
| CUS1500M-12 | 12          | 10.2 -14.4       | 125             | 1500                 | 96            | 48            | 150               | 82 / 85                       |
| CUS1500M-15 | 15          | 12.8 - 18        | 100             | 1500                 | 120           | 60            | 150               | 82 / 85                       |
| CUS1500M-24 | 24          | 20.4 - 28.8      | 63              | 1512                 | 144           | 96            | 180               | 85 / 88                       |
| CUS1500M-36 | 36          | 30.6 - 43.2      | 42              | 1512                 | 216           | 144           | 250               | 85 / 88                       |
| CUS1500M-48 | 48          | 40.8 - 52.8      | 32              | 1536                 | 288           | 192           | 300               | 85 / 88                       |

Outline Drawing CUS1500M



## Options

| Suffix                | Description                                         |
|-----------------------|-----------------------------------------------------|
| /SF                   | Single fuse (live line)                             |
| /RF (contact factory) | Reverse Fan (Air exits over input/output terminals) |
| /CO2                  | PCB coating                                         |



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