



FEATURES

- UPS-Ready, Power Management Software Included
- Built-In 24V Lead-Acid Battery Charger
- 80% Minimum Efficiency
- Meets Medical and ITE Grade Safety Standards
- Intel's Haswell Compatible
- BF Rated



INPUT SPECIFICATIONS

| | |
|-----------------------------|---|
| Input Voltage Range | 90-264 VAC |
| Input Frequency | 47-63Hz |
| Input Current | 8A rms @ 100 VAC, 60Hz 4A rms @ 240 VAC, 50Hz |
| Inrush Current | 30A @ 115 VAC, 60A @ 230 VAC, at 25°C cold start |
| Earth Leakage Current | 300µA max. @ 264 VAC, 63Hz |

OUTPUT SPECIFICATIONS

| | |
|--------------------------------|---|
| Output Power Ratings | See rating chart |
| Load Regulation | See rating chart |
| Line Regulation | ±1% max. @ full load |
| Ripple & Noise* | 50mV peak to peak on 3.3V and 1% peak to peak max. on other voltage outputs |
| Hold Up Time | 17ms min. |
| Over Voltage Protection | Latch off |
| Over Current Protection | +3.3V, +5V, & +12V: Latch off +5Vsb: Auto-recovery |
| Short Circuit Protection | +3.3V, +5V, & +12V: Latch off +5Vsb: Auto-recovery |
| Over Temp. Protection | Latch off |
| Battery | 24V lead-acid type, not included |
| Battery Charge Current | 2.5A max. |
| Battery Backup Power | 400W |

* Measured with 20MHz bandwidth at rated line voltage and output load ranges, with a 47µF tantalum capacitor in parallel with a 0.1µF ceramic capacitor in parallel across the output.

GENERAL SPECIFICATIONS

| | |
|-----------------------------|--|
| Efficiency | 80% min. @ full load |
| Power Factor | 0.9 min. @ full load |
| Switching Frequency | 40-150 KHz |
| Operating Altitude | 5,000 meters max. |
| Operating Temperature | 0°C to +50°C |
| Storage Temperature | -20°C to +80°C |
| Derating | Derate from 100% @ +50°C linearly to 50% @ +70°C, applicable to forced-air cooling conditions |
| Relative Humidity | 5% to 95% non-condensing |
| Withstand Voltage | 4,000 VAC input-output (2MOPP) 1,500 VAC input-ground (1MOPP) 1,500 VAC output-ground |
| MTBF | 100K hours minimum at full load & 25°C ambient, calculated per Telcordia SR-332 |

STANDARDS & COMPLIANCES

| | |
|----------------------------|---|
| IEC/EN 60601-1-2: 2014 ... | EMC & Immunity Performance |
| EN 55011 / EN 55022 | Class B, conducted & radiated |
| FCC / VCCI | Class B, conducted & radiated |
| EN 61000-3-2 | Harmonic distortion, Class A |
| EN 61000-3-3 | Line fluctuations & flicker |
| EN 61000-4-2 | ESD, ±15 KV air and ±8 KV contact |
| EN 61000-4-3 | Radiated immunity, 10 V/m |
| EN 61000-4-4 | Fast transient/burst, ±2 KV |
| EN 61000-4-5 | Surge, ±1 KV diff., ±2 KV com. |
| EN 61000-4-6 | Conducted immunity, 6 Vrms |
| EN 61000-4-8 | Magnetic field immunity, 30 A/m |
| EN 61000-4-11 | Voltage dip immunity, 30% reduction for 500ms, 60% reduction for 100ms and >95% reduction for 10ms |
| Safety Standards* | UL/IEC/ EN 60601-1 (3rd Ed.) ANSI/AAMI ES 60601-1:2005 CSA C22.2 No. 60601-1:2008 UL/IEC/EN 60950-1 (2nd Ed.) CSA C22.2 No. 60950-1 (2nd Ed.) |
| Agency Approvals | UL, cUL, CB (Report), TUV |
| Other Compliance | RoHS |

*Pending

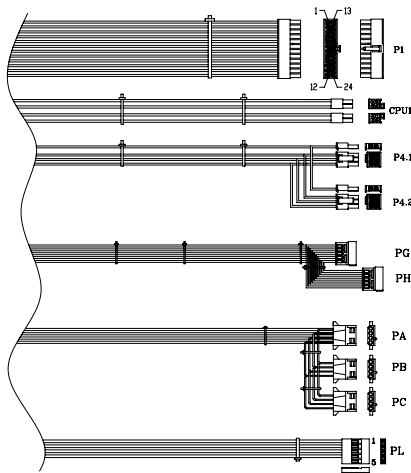
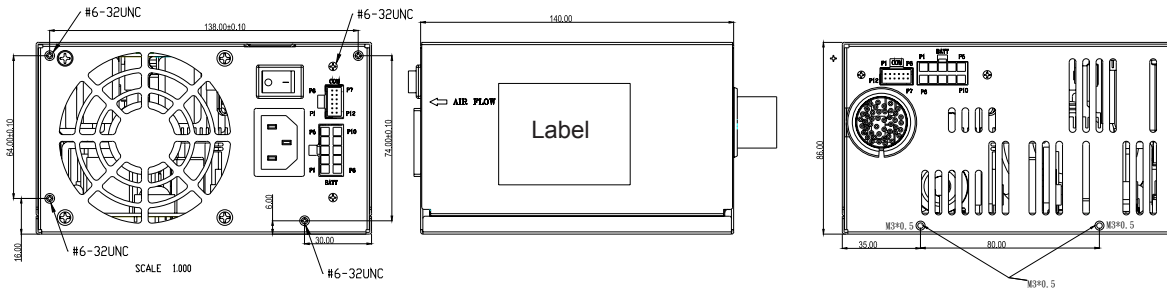
| OUTPUT VOLTAGE & CURRENT RATING CHART | | | | |
|---------------------------------------|--------------|---------------|-----------------|---------------------------|
| Ouput Voltage | Minimum Load | *Maximum Load | Load Regulation | Ripple & Noise* VP-P Max. |
| +3.3V | 0A | 20A | ±5% | 50mV |
| +5V | 0A | 20A | ±5% | 50mV |
| +12V1 | 0A | 16A | ±5% | 120mV |
| +12V2 | 0A | 16A | ±5% | 120mV |
| +12V3 | 0A | 16A | ±5% | 120mV |
| -12V | 0A | 0.5A | ±5% | 120mV |
| +5Vsb | 0A | 3A | ±5% | 50mV |

*The overall output power with battery charger is 550W maximum.
 *The total output power for +3.3V & +5V is 120W maximum.
 *The total output power for +12V1, +12V2, & +12V3 is 432W maximum.
 *The total output power for +3.3V, +5V, +12V1, +12V2, +12V3, -12V, & +5Vsb is 500W maximum.

TMPC-550U

UPS-Ready Medical Grade 550W ATX Power Supply

MECHANICAL SPECIFICATIONS



| STANDARD CABLE SET | | |
|--------------------|---------------|-----------|
| Ouplut Connectors | Cable Length | Connector |
| Motherboard 24 Pin | 400mm | 1 |
| CPU 4+4 Pin | 400mm | 1+1 |
| PCIe 6+2 Pin | 500+150mm | 1+1 |
| SATA | 400+150mm | 1+1 |
| PATA | 400+150+150mm | 1+1+1 |
| USB Interface | 600mm | 1 |

| COMMUNICATION PORT | | |
|--------------------|---------------|----------|
| PIN | NAME | FUNCTION |
| 1 | AC_FAIL_T | OUTPUT |
| 2 | SHUTDOWN_T | OUTPUT |
| 3 | BATTERYLOW_T | OUTPUT |
| 4 | USB_VCC | INPUT |
| 5 | USB- | I/O |
| 6 | USB+ | I/O |
| 7 | USB_GND | GND |
| 8 | GND | GND |
| 9 | PSON_N | INPUT |
| 10 | POWERBUTTON_N | INPUT |
| 11 | BEEP | OUTPUT |
| 12 | PWRBTN_N | OUTPUT |

| BATTERY PORT | | |
|--------------|----------------|----------|
| PIN | NAME | FUNCTION |
| 1 | VBATT+ | POWER |
| 2 | VBATT+ | POWER |
| 3 | VBATT+ | POWER |
| 4 | SMBDAT | I/O |
| 5 | SMBCLK | CLK |
| 6 | VBATT- | POWER |
| 7 | VBATT- | POWER |
| 8 | VBATT- | POWER |
| 9 | BATTERY_INSERT | INPUT |
| 10 | BI | OUT |

Notes:

- Units: mm
- Tolerance: 0.5 mm, unless otherwise noted.
- Battery Port Connector: JWT P/N C4201WR0-10NPNL or equivalent, mating with JWT P/N C4202H00-2X5P or equivalent.
- Communication Port Connector: CVILUX P/N CI5012SL000 or equivalent, mating with CVILUX P/N CI5012P1HD0-LF or equivalent.
- Weight: 1.8 kgs (3.97 lbs) approx.