



±12V DC Input Industrial PC ATX 12V 2.03 1U Switching Mode Power Supply

| Series | Model No. | Output Watts | Input Voltage | Input Voltage range | Polarity reverse protection |
|-----------|------------|-----------------|---------------|---------------------|-----------------------------|
| 12 | STC-12600I | 600W continuous | ±12V DC | ±9V ~ ±18V DC | Protected (Max.50V DC) |
| | STC-12400I | 400W continuous | | | |
| | STC-12200I | 200W continuous | | | |

ENVIRONMENTAL CONDITIONS:

- ▶ Cooling: Forced Air-cooling, **40x40x28mm Fan x 2 (With Two Ball Bearing)**
- ▶ Fan Noise Level: 65dBA @ Full Load (for STC-12200I, STC-12300I)
- ▶ Fan brand: SUNON, DELTA, ADDA, NMB with the same specification
- ▶ Operating Temperature: 0°C~+50°C Full Load
-20°C~+60°C Full Load * optional **H version (Black color chassis)**
- ▶ Operating Humidity: 20%~85% RH Non condensing
90% RH Non condensing * optional **H version (Black color chassis)**
- ▶ Storage Temperature: -20°C~+80°C
- ▶ Storage Humidity: 10%~90% RH. (Non condensing)
- ▶ Operating Altitude: 10M Below Sea level to Above Sea level 3000M

DC INPUT CHARACTERISTICS:

- ▶ Input connector type 40A/ 300V Single table type Terminal x 2
- ▶ Input Current 45A/90A(600W) 30A/60A(400W) 15A/30A(200W)
@Full Load High Line & Low Line
- ▶ Inrush Current Less than 90A Cold start @25°C ambient

DC OUTPUT CHARACTERISTICS:

| Output Voltage | Regulation | | | Output Current | | | | | | Ripple & Noise |
|---|------------|------|-------|----------------|-------|------------|-------|------------|-----|----------------|
| | Load | Line | Cross | 600W | | 400W | | 200W | | |
| | | | | Min | Max | Min | Max | Min | Max | |
| +5V | ±3% | ±1% | ±5% | 0.5A | 25A | 0.5A | 25A | 0A | 30A | 50mV |
| +12V | | | | 1A | 48A | 1A | 31A | 0A | 15A | 120mV |
| +3.3V | | | | 0.5A | 25A | 0.5A | 25A | 0A | 15A | 50mV |
| -12V | ±8% | | | 0A | 0.83A | 0A | 0.83A | 0A | 1A | 120mV |
| +5VSB | ±5% | | | 0.1A | 3.5A | 0.1A | 3.5A | 0A | 3A | 50mV |
| Maximum continuous combined load on +3.3 V & +5V DC output shall not exceed | | | | 166 | | 166 | | | | |
| Maximum continuous combined load on +3.3 V & +5V & 12V DC output shall not exceed | | | | 570 | | 370 | | 170 | | Wattage |
| Maximum continuous total DC output power shall not exceed | | | | 600 | | 400 | | 200 | | |

| | | | | | |
|-----------------|--|--|--|--|--------------|
| MOQ requirement | | | | | 30pcs |
|-----------------|--|--|--|--|--------------|

OVERALL PERFORMANCE:

- ▶ Efficiency 65% typical @12V DC Input Full Load
- ▶ Hold up time
- ▶ Rise time
- ▶ Power Good Signal TTL Compatible signal, on delay 100~500ms, off delay 1ms min
- ▶ Short Circuit Protection (SCP) All output equipped with SCP (shutdown and latch off)
- ▶ Over Power Protection (OPP) Peak power protected to 130%±10% of continuous rated power (shutdown and latch off)
- ▶ Over Voltage Protection (OVP) +3,3V@4.5V, +5V@6V, +12V@15.6V

RELIABILITY:

- ▶ MTBF: >75,000 hours @max. Load, 12V DC & 25°C ambient
- ▶ Safety Standards: Meet IEC60950-1 and EN60950-1
- ▶ Safety Approved:
- ▶ EMI Compatibility (EMC): EN55032:2015/AC:2016, CISPR32:2015, EN61000-3-2:2014, EN61000-3-3:2013, EN55024:2010 +A1:2015

ISOLATION:

- ▶ INPUT and OUTPUT are isolated by transformers and optical couplers
- ▶ Dielectric Withstand INPUT to OUTPUT: 500V DC for 60 seconds
- ▶ Dielectric Withstand INPUT to FRAME GROUND: 500V DC for 60 seconds
- ▶ Leakage Current <0.005µA @12V DC

Output Device Connector Specific:

| | |
|------------------------|--------------------------------|
| ATX 24 Pins x 1 | Molex 29-01-2240 or equivalent |
| +12V(P4) 4 Pins x 1 | Molex 39-01-2040 or equivalent |
| HDD, DVD 4 Pins x 7 | Molex 8981-04P or equivalent |
| FDD 4 Pins x 1 | AMP 171822-4 or equivalent |
| Serial ATA x 2 | Molex 675820000 or equivalent |
| Process EPS 8 Pins x 1 | Molex 39-01-2080 or equivalent |
| PCIe 12V 6+2 pin x 2 | |

Standard Output Cable Length From Chassis:

550 mm ±50mm / 21.6 inches

PCB specific:

- ▶ Layers: 2 (200W, 400W)
4 (600W)
- ▶ Copper: 3 Oz
- ▶ Thickness: 1.6mm
- ▶ Material: FR4
- ▶ PCB material origin: Taiwan

Power Chassis Dimension:

| | |
|--------------|---|
| 200W: | 220(L) x 100(W) x40.5(H) mm / 8.07(L) x 3.94(W) x 1.59(H) inches |
| 400W: | 240(L) x 100(W) x40.5(H) mm / 9.45(L) x 3.94(W) x 1.59(H) inches |
| 600W: | 340(L) x 100(W) x40.5(H) mm / 13.38(L) x 3.94(W) x 1.59(H) inches |

Net Weight:

| | |
|--------------|-------------------|
| 600W: | 2.7 kg / 5.95 Lbs |
| 400W: | 1.9 kg / 4.19 Lbs |

Gross Weight:

| | |
|--------------|-----------------|
| 400W: | 2 kg / 4.41 Lbs |
|--------------|-----------------|

Packing Detail:

400W:

8PCs N.W.: 15.2 kg / 33.5 Lbs G.W.: 17 kg / 37.47 Lbs

Measurement of Carton:

0.049 m³ / 1.73 Cuft