STC Powertech

Cutting edge Power Supplies



±80V DC Input Industrial PC PS2
ATX Form Factor FANLESS
Switching Mode Power Supply

Series	Model No.	Output Watts	Input Voltage	Input Voltage range
80	STC-80300M	300W continuous	±80V DC	±48V ~ ±127V DC

ENVIRONMENTAL CONDITIONS:

- Cooling: Convection cooling
- Operating Temperature: -10°C~+55°C (Full Load)
- Operating Humidity: 20%~90% RH. (Non condensing)
- Storage Temperature: -20°C~+95°C
- Storage Humidity: 10%~95% RH. (Non condensing)
- Operating Altitude: 10M Below Sea level to 3000M Above Sea level

DC INPUT CHARACTERISTICS:

- Input connector type: 30A/300V UL Approved Gold Plated Brass 1.2t/3-pin Terminal
- Input Current: 2.8A/10A(300W) @ Full Load High Line & Low Line
- Inrush Current: Less than 40A Cold start @25°C ambient

DC OUTPUT CHARACTERISTICS:

Output Voltage	Regulation			Output Current 300W		Ripple & Noise
	Load	Line	Cross	Min	Max	
+5V	±5%	±1%	±5%	1.5A	21A	50mV
+12V				0.2A	20A	120mV
+3.3V				0A	15A	50mV
-5V						50mV
-12V	±8%			0A	0.8A	120mV
+5VSB	±5%			0A	3A	50mV
Maximum continuous combined load on +3.3 V & +5V DC output shall not exceed				**150**		**Wattage**
Maximum continuous combined load on +3.3 V & +5V & 12V DC output shall not exceed				**270**		
Maximum continuous total DC output power shall not exceed				**300**		

OVERALL PERFORMANCE:

- Efficiency: 85% typical @ 80V DC 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: 100 000 hours @max. Load, 80V DC & 25°C ambient
- Safety Standards: Meet IEC60950-1, 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: 2000V DC for 60 seconds
- Dielectric Withstand: INPUT to FRAME GROUND: 2000V DC for 60 seconds
- Leakage Current: <0.005μA @ 80V 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 4Pin x 4	Molex 8981-04P or equivalent
FDD 4 Pin 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 8(6+2) Pin x 1	

Standard Output Cable Length:

520 mm / 20.47 inches

PCB specific:

- Layers: 4
- Copper: 3 Oz
- Thickness: 1.6mm
- Material: FR4
- PCB material origin: Taiwan

Power Chassis Dimension:

170(L) x 150(W) x 86(H) mm / 6.69(L) x 5.9(W) x 3.38(H) inches

Net Weight:

3 kg / 6.61 lbs

Gross Weight:

3.5 kg / 7.72 lbs

Packing Detail:

4 PCs

Measurement of Carton:

36 x 35 x 51 cm / 2.33 Cu.Ft
N.W. 13 kg
G.W. 14 kg