



±12V DC Input Industrial PC ATX 2.01 & 2.03 Switching Mode Power Supply

Series	Model No.	Output Watts	Input Voltage	Input Voltage range	Polarity reverse protection
12	STC-12650	650 W	±12V DC	±9V ~ ±18V DC	Not Protected

ENVIRONMENTAL CONDITIONS:

- ▶ Cooling: Forced Air-cooling, **80x80x25 mm Fan x 2PCs (With Two Ball Bearing)**
- ▶ Operating Temperature: **0°C~+50°C (-20°C~+60°C Optional) Full Load**
- ▶ Output Power: **100%@50°C, 70%@60°C, 50%@70°C**
- ▶ Operating Humidity: **20%~85% RH. (Non condensing)**
- ▶ Storage Temperature: **-20°C~+80°C**
- ▶ Storage Humidity: **10%~90% RH. (Non condensing)**
- ▶ Operating Altitude: **10M Below Sea level to 3000M Above Sea level**

DC INPUT CHARACTERISTICS:

- ▶ Input connector type **200A/300V UL Approved Gold Plated Brass 2 Pin 12.5mm Screw Terminal**
- ▶ Input Current **54A/110A(650W) @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	650W		
+5V	±5%	±1%	±5%	Min.	Max.	50mV
+12V				0A	30A	120mV
+3.3V				0A	30A	50mV
-5V				Optional	Optional	50mV
-12V	±8%			0A	1A	120mV
+5VSB	±5%			0A	3,5A	50mV
Maximum continuous combined load on +3.3 V & +5V DC output shall not exceed				250		Wattage
Maximum continuous combined load on +3.3 V & +5V & 12V DC output shall not exceed				570		
Maximum continuous total DC output power shall not exceed				650		

OVERALL PERFORMANCE:

- ▶ Efficiency: **65% typical @12V 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: >90,000 hours @max. Load, 12V 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: 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 2	Molex 8981-04P or equivalent
FDD 4 Pins x 2	AMP 171822-4 or equivalent
Serial ATA x 8	Molex 675820000 or equivalent
Process EPS 8 Pins x 1	Molex 39-01-2080 or equivalent
PCIe x 2	

Standard Output Cable Length:

530 mm / 20.87 Inches

Power Chassis Dimension:

184(L) x 150(W) x 86(H) mm / 7.24(L) x 5.9(W) x 3.39(H) Inches

Net Weight:

3.5 kg / 7.716 lbs

Gross Weight:

4 kg / 8.818 lbs

Packing Detail:

4 PCs

Measurement of Carton:

0.042 m³ / 1.49 Cuft