



±24V 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
24	STC-241100	1100 W continuous	±24V DC	±18V ~ ±36V DC	Not Protected

* H version (Black color chassis)

ENVIRONMENTAL CONDITIONS:

► Cooling:	Forced Air-cooling, 80x80x25 mm Fan x 2 pcs
► Fan type:	DC type, 2 x Ball Bearing, 6200 rpm, Optional Fan Control Card
► Fan Noise Level:	40 dBA (DELTA fan brand Official Data at 4000 rpm, 46.62 CFM) @ Full Load
► Fan Noise Level tested:	58 dBA @ Distance 1m (DELTA fan brand 4000 rpm, 46.62 CFM) @ Full Load
► Fan brand:	DELTA, NMB, SUNON, SUNON IP68 (for H version) with the same specification
► Operating Temp.:	0°C~+50°C Full Load
► Operating Temp.:	-30°C~+60°C Full Load / H version
► Output Power:	100% @ 50°C, 70% @ 60°C, 50% @ 70°C
► Output Power:	100% @ 60°C, 70% @ 65°C, 50% @ 70°C: / H version
► Operating Humidity:	20%~85% RH (Non condensing)
► Operating Humidity:	% RH Non condensing / H version 95
► 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 (*)	220A thickness 1.0mm/ 1port Positive Terminal/ 1port Negative Terminal
► Input Current	40A/79A(1100W) @Full Load High Line & Low Line
► Inrush Current	Less than 90A Cold start @25°C ambient

(*) Note: See pictures of Input Terminal Connector at the Bottom of this document

DC OUTPUT CHARACTERISTICS:

Output Voltage	Regulation			Output Current		Ripple & Noise
	Load	Line	Cross	1100W		
Min				Max		
+5V	±3%	±1%	±5%	0A	35A	50mV
+12V				0A	92A	120mV
+3.3V				0A	22A	50mV
-5V				Optional	Optional	50mV
-12V	±8%			0A	0.3A	120mV
+5VSB	±5%			0A	4A	50mV
+3.3 V & +5V & 12VDC all individual transformer. Max. output current as specification				175		Wattage
Maximum continuous total DC output power shall not exceed				1100		

OVERALL PERFORMANCE:

- ▶ Efficiency: 80% typical @24V DC Full Load
- ▶ Hold up time: Output voltage stays regulated for at least 16ms with 100% load after loss of DC input
- ▶ Rise time: Output voltage rise from 10% to 90% with full load shall be in 20ms maximum
- ▶ 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@4.4V, +5V@6V, +12V@15.6V

RELIABILITY:

- ▶ MTBF: >90,000 hours @max. Load, 24V 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: <0.0005µA @ 24V 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
- ▶ CPU EPS 8 Pins x 1 Molex 39-01-2080 or equivalent
- ▶ PCIe x 4

Standard Output Cable Length:

610 mm / 24 Inches

PCB specific:

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

Power Chassis Dimension:

270(W) x 150(L) x 86(H) mm / 10.63(W) x 5.9(L) x 3.39(H) Inches

Net Weight:

4.7 kg / 10.36 lbs

Gross Weight:

5.3 kg / 11.68 lbs

Packing Detail

2 PCs / Carton
N.W. 10.8 kg / 23.8 lbs
G.W. 11.8 kg / 26.0 lbs

Measurement of Carton

0.045 m³ / 1.58 Cu. Ft

Input Connector Terminal Pictures:

