



±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-242400	2400 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). Specifications are equivalent
► Operating Temp.:	0°C~+50°C Full Load
► Operating Temp.: / H version	-20°C~+60°C Full Load
► Output Power:	100% @ 50°C, 70% @ 60°C, 50% @ 70°C
► Output Power: / H version	100% @ 60°C, 70% @ 65°C, 50% @ 70°C
► Operating Humidity:	20%~85% RH Non condensing
► Operating Humidity: / H version	95% 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 (*)	350A thickness 1.0mm/ 1port for Positive Terminal/ 1port for Negative Terminal
► Input Current	80A/160A(2400W) @Full Load High Line & Low Line
► Inrush Current	Less than 250A 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	2400W				
				Min	Max			
+5V	±3%	±1%	±5%	1A	35A	50mV		
+12V				0.5A	181A	120mV		
+3.3V				0A	22A	50mV		
-12V	±8%			0A	0.3A	120mV		
+5VSB	±5%			0A	4A	50mV		
Maximum continuous combined load on +3.3 V & +5V DC output shall not exceed				230		Wattage		
Maximum continuous total DC output power shall not exceed				2400				

OVERALL PERFORMANCE:

- ▶ Efficiency: 80% typical @24V 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@4.4V, +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: <0.005µA @ 24V DC

Output Device Connector Specific:

- ▶ ATX 24 Pins x 1 Molex 29-01-2240 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 2 Molex 39-01-2080 or equivalent
- ▶ PCIe x 10

Standard Output Cable Length:

610 mm / 24 Inches

PCB specific:

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

Power Chassis Dimension:

470(L) x 150(W) x 86(H) mm / 18.5(L) x 5.9(W) x 3.39(H) Inches

Packing Detail

1 pc / Carton
N.W. 10.5 kg / 23.15 lbs
G.W. 11.5 kg / 25.35 lbs

Measurement of Carton

70 x 33 x 20 cm / 1.63 Cuft / 1pc

Input Connector Terminal Pictures:

