



**±120V DC Input Industrial PC PS2 4U ATX
Switching Mode Hot Swap
Mini Redundant Power Supply**

Series	Model No.	Output Watts	Input Voltage	Input Voltage range	Polarity reverse protection
120	STC-120750RD	750 W continuous	±120V DC (Optional 110V AC)	±85V ~ ±144V DC (Optional 90V ~ 130V AC)	By fuse
120	STC-120600RD	600 W continuous	±120V DC (Optional 110V AC)	±85V ~ ±144V DC (Optional 90V ~ 130V AC)	By fuse

ENVIRONMENTAL CONDITIONS:

- ▶ Cooling: Forced Air-cooling, **40x40x28 mm Fan x 2 (With Two Ball Bearing)**
- ▶ Fan brand: DELTA, NMB, SUNON, SUNON IP68 (for H version). Specifications are equivalent
- ▶ Operating Temperature: **0°C~+50°C (Full Load)**
- ▶ Output Power:: **100% @ 50°C, 70% @ 60°C**
- ▶ Operating Humidity: **20%~85% RH. (No condensing) (95% Optional)**
- ▶ Storage Temperature: **-20°C~+80°C**
- ▶ Storage Humidity: **10%~90% RH. (No 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 1.2f/2 Terminal**
- ▶ Input Current **5.2A/8.8A(600W) 6.14A/10.4A(750W) @ Full Load High Line & Low Line**
- ▶ Inrush Current **Less than 50A Cold start @ 25°C ambient**

DC OUTPUT CHARACTERISTICS:

Output Voltage	Regulation			Output Current				Ripple & Noise
	Load	Line	Cross	750W		600W		
				Min.	Max.	Min.	Max.	
+5V	±5%	±1%	±5%	1A	35A	35A	35A	50mV
+12V				1A	50A	1A	40A	120mV
+3.3V				0.5A	25A	0.5A	25A	50mV
-12V	±8%			0A	1A	0A	1A	120mV
-5V (Optional)	±5%			0A	0.5A	0A	0.5A	50mV
+5VSB	±5%			0A	3.5A	0A	3.5A	50mV
Maximum continuous combined load on +3.3 V & +5V DC output shall not exceed				175		175		Wattage
Maximum continuous combined load on +3.3 V & +5V and 12V DC output shall not exceed				720		570		
Maximum continuous total DC output power shall not exceed				750		600		

OVERALL PERFORMANCE:

- ▶ Efficiency: 82% typical @ 120V DC Full Load
- ▶ Hold up time: When power shut down DC output 5V must be maintain 1ms @120V DC
- ▶ 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 3@.6V~4.3V DC, +5V @5.5V~6.5V DC, +12V @13.2~15.6V DC

RELIABILITY:

- ▶ MTBF: 100,000 hours @ Max. Load, 120V DC & 25°C ambient
- ▶ Safety Standards: Follow 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 @ 120V DC

LED indicator:

Power module 1 Green LED when power on
Power module 2 Green LED when power on

Alarm function:

In the rear panel with power failure alarm signal to indicate when power failure wire.

Alarm reset switch

To rest by a switch

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 4	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 x 2 (600W)	
PCIE x 3 (750W)	

Standard Output Cable Length:

500 mm / 19.68 Inches

PCB specific:

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

Power Chassis Dimension:

225(L) x 150(W) x 86(H) mm / 8.86(L) x 5.9(W) x 3.39(H) Inches

Rackmount Chassis solution:

4U IPC Chassis 510mm Model No. GHI419ATX

Screw hole:

Front panel with 4 screw holes

Rear panel bracket with 2 screw holes

Net Weight:

4.8 kg / 10.85 lbs

Gross Weight:

6 kg / 13.22 lbs

Packing Detail:

2 pcs

12 kg / 26.45 lbs

Measurement of Carton:

0.045 m³ / 1.59 Cuft

Note:

Power Supply is not able to be used in stand alone application

Use Power Supply in Power Chassis Assembly only