

GPS-1000EB A

1000 Watt



NEW

AC input



- ✓ +12V output / 83.33 A max.
- ✓ High efficiency up to 90%
- ✓ Designed for continuous operation 24/7
- ✓ No minimum load required!
- ✓ High reliability due to premium quality components!
- ✓ Active PFC
- ✓ Current Harmonic class D
- ✓ OVP, OCP, OTP, SCP
- ✓ Quiet fan
- ✓ International certifications
- ✓ Modular DC cable harness
- ✓ AC cable (EU) included
- ✓ 3 years warranty

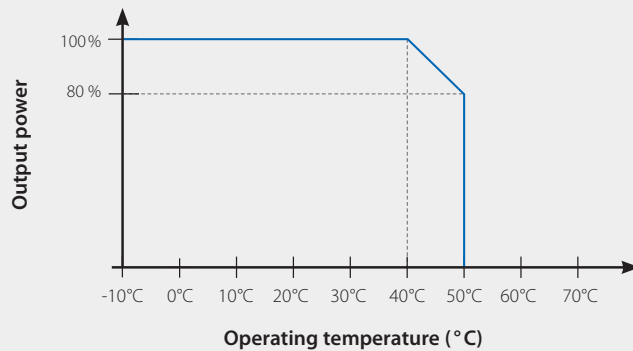
Technical data

Input voltage	90...264 VAC, active PFC
Input frequency	47...63 Hz
Input current max.	15 A (115 VAC) / 7.5 A (230 VAC)
Inrush current	<132 A @ 264 VAC
Efficiency	Up to 90%
Standby consumption	<0.5 W
Hold up time	>15 ms at 115 VAC/60Hz 80% load
Power-Good-Signal	Switch on delay 100...500 ms Switch off delay 1 ms
Overshoot	At turn on or turn off shall be less than 10% of the normal value
Protection	<u>Short circuit protection:</u> 3.3 V/5V/+12V/-12V: shut down and latch off, +5V _{sb} latch off <u>Overcurrent protection:</u> +5V (30...55 A), +12V (85...110 A), +3.3V (30...55 A), +5V _{sb} (3.5...10 A) <u>Overvoltage protection:</u> +5V (+5.5...7.5V), +5V _{sb} (+5.5...7.5V), +12V (13.2...16.5V), +3.3V (3.63...5V)
Earth leakage current	≤2.5 mA
Safety / EMC	CB, BSMI, TÜV, CCC, CE, UL + cUL, FCC, KC, KCC
Temperature	Operating: 0...+50 °C / Storage: -40...+70 °C
Derating	From +40...+50 °C, 2% / °C
MTBF	>100k hours at max. load 115 VAC and +25 °C ambient temperature
Max. operating altitude	5000 m
Humidity	Operating: 5...85% RH, non-condensing / Storage: 5...95% RH, non-condensing
Dimensions (WxDxH)	150 x 190 x 86 mm ±0.5 mm
Weight (net)	1.9 kg

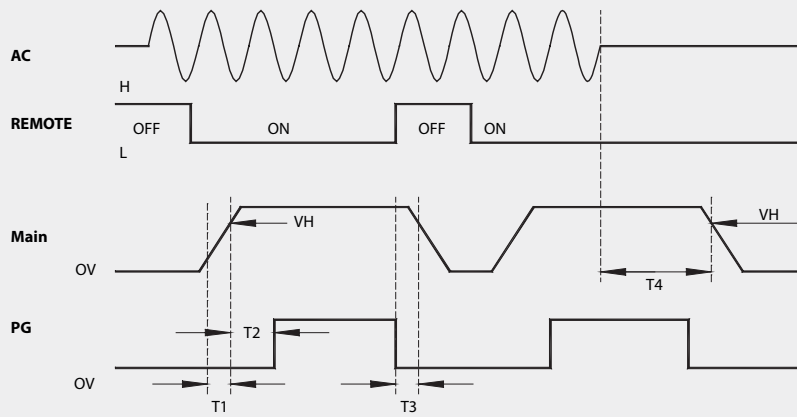
Article No.	Output voltage	Output current		Load regulation	Ripple & Noise
		min	max		
GPS-1000EB A	+3.3V	0 A	25 A	±5%	50 mV
	+5V	0 A	25 A	±5%	50 mV
	+12V	0 A	83.33 A	±5%	120 mV
	-12V	0 A	0.3 A	±10%	120 mV
	+5V _{sb}	0 A	3.0 A	±5%	50 mV

Max. output power is 1000W, combined output power at +3.3V and +5V must not exceed 125W. Add a 0.1 µF ceramic disk capacitor and 10µF tantalum capacitor at output connector terminals for Ripple & Noise measurements. This power supply is for assembly purposes only and it must not be operated in unassembled condition. The final assembly has to comply with the valid EMC standards.

Derating

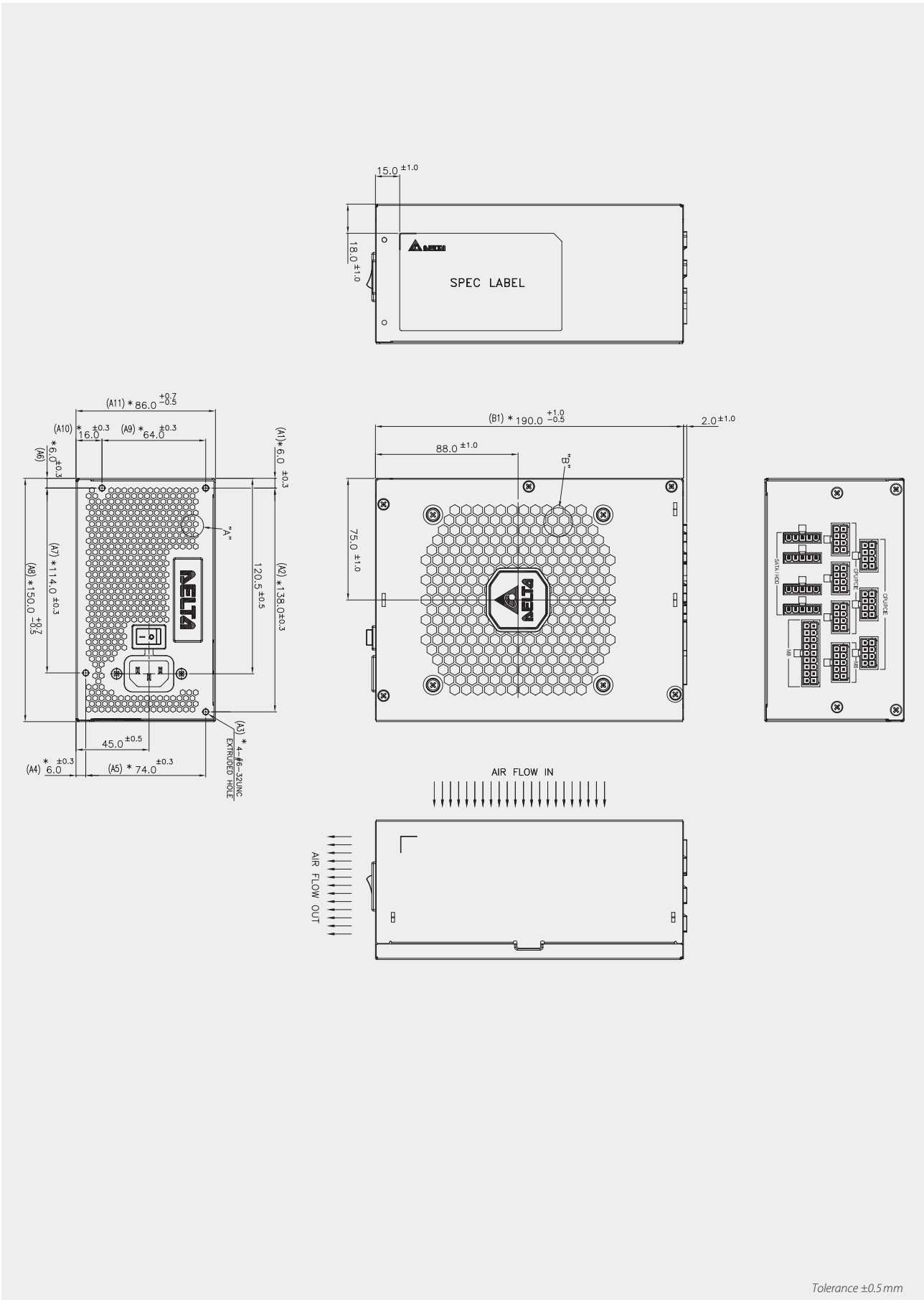


Timing Diagram



- Note: (1) T1: Rise time ($0.2ms < T1 < 20ms$), any outputs rise time from 10% to 90% of normal voltage should be $< 20ms$.
 (2) T2: Power good signal turn on delay time ($100ms < T2 < 500ms$, 5V vs PG).
 (3) T3: Power good signal turn off delay time ($T3 \geq 1ms$; DC on/off, PG to 12V).
 (4) T4: Power hold-up time ($T4 \geq 15ms$, 115Vac/60Hz input, at 80% full load).
 (5) PS-ON Delay Time: 500mS max. at nominal line. PS-ON with respect to +5V.

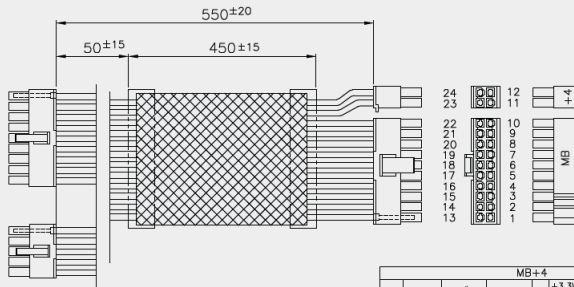
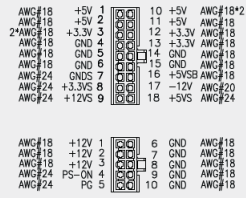
Drawing GPS-1000EB A



AC input

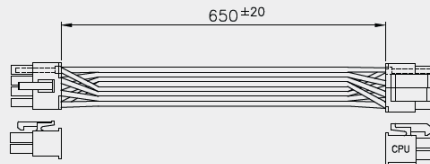
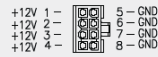
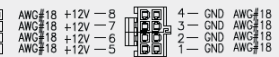
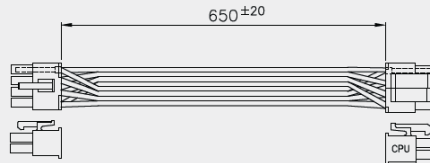
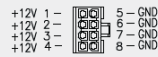
Cable harness GPS-1000EB A – part 1

24Pin, 550 mm

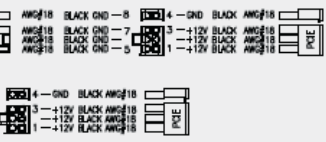
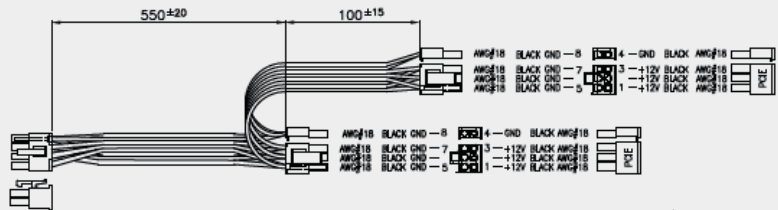
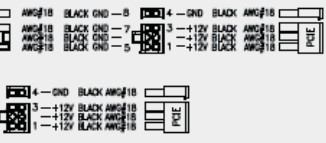
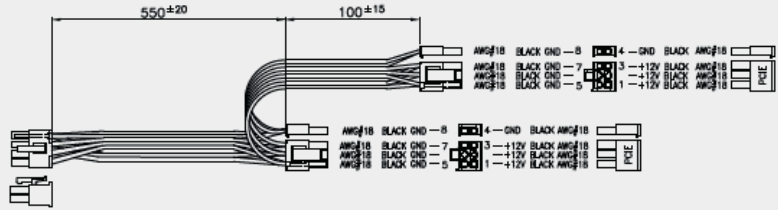
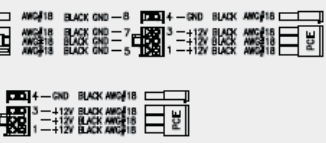
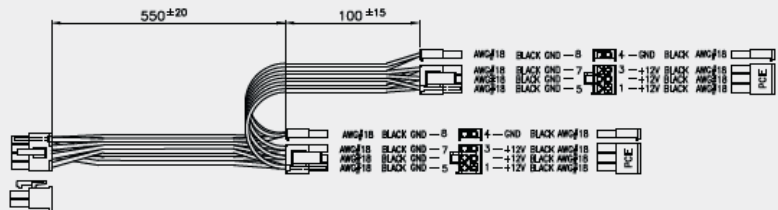


MB+4							
1	+3.3V	AWG#18	BLACK	13	+3.3V	AWG#18	BLACK
2	+3.3V	AWG#18	BLACK	14	-12V	AWG#20	BLACK
3	GND	AWG#18	BLACK	15	GND	AWG#18	BLACK
4	+5V	AWG#18	BLACK	16	PS-ON	AWG#24	BLACK
5	GND	AWG#18	BLACK	17	GND	AWG#18	BLACK
6	+5V	AWG#18	BLACK	18	GND	AWG#18*2	BLACK
7	GND	AWG#18	BLACK	19	GND	AWG#18*2	BLACK
8	PC	AWG#24	BLACK	20			
9	+5VSB	AWG#18	BLACK	21	+5V	AWG#18	BLACK
10	+12V	AWG#18*2	BLACK	22	+5V	AWG#18	BLACK
	+12V	AWG#18	BLACK	23	+5V	AWG#18	BLACK
11	+12VS	AWG#24	BLACK	24	GND	AWG#18	BLACK
12	+3.3V	AWG#18	BLACK		GND	AWG#24	BLACK

CPU, 650 mm

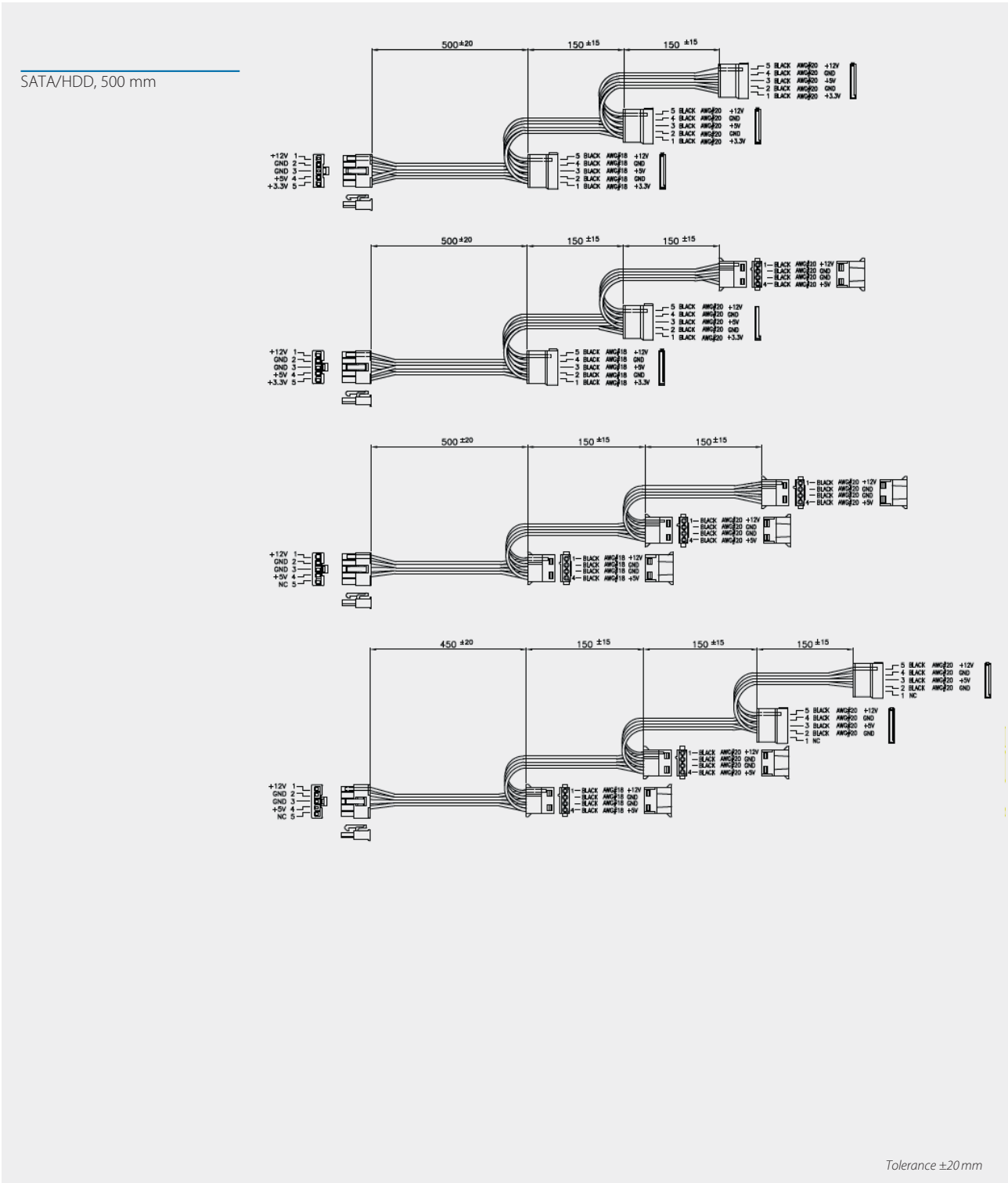


PCIe, 550 mm



Tolerance ±20 mm

Cable harness GPS-1000EB A – part 2



Scope of delivery

- 1x Power Supply GPS-1000EB A
- 1x Modular DC cable harness
- 1x AC cable (EU) / 1800 mm