

GlacialTech®

Enlighten Your Humanity

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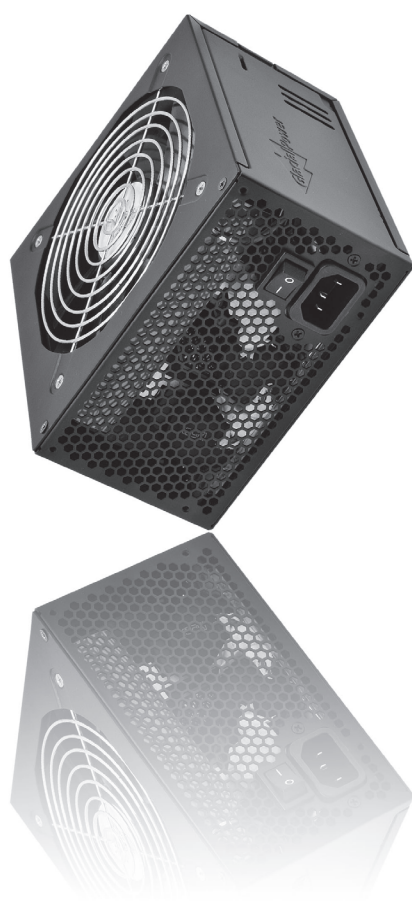


17-AP500CA0001



User's Manual

- GP-AP500CA
- GP-AP600CA
- GP-AP700CA



English

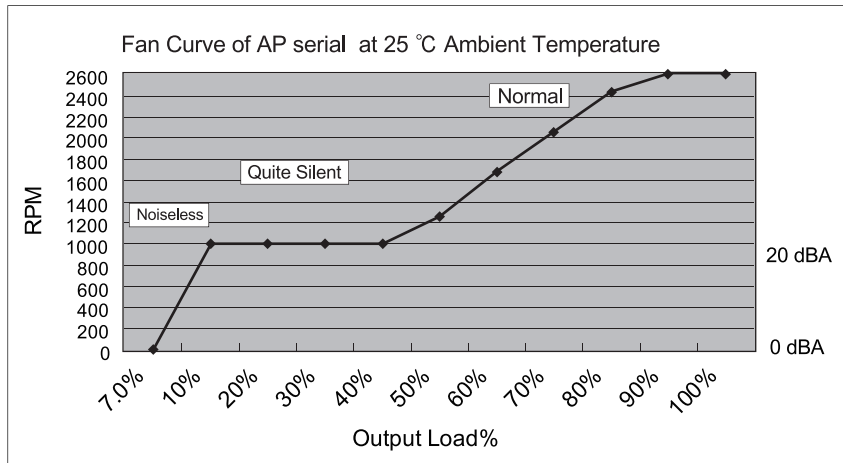
Introductions

GlacialPower AP series products are designed to be in compliance with ATX12V V2.2 to support the latest Intel Core™2 Duo and AMD Athlon™ 64 X2 CPU systems. You have made a wise choice in selecting GlacialPower products. Our products will be your pleasure.

Features

- ATX12V Version 2.2
- Designed with active PFC function
- Dual +12V rails and +5Vsb capability at 15W
- Full output power from 0°C to 35°C
- Full protection features of SCP, OVP, OCP, OPP, OTP
- Power efficiency >80% (230Vac input)
- Fan speed control and delay shut down to extend components lifetime
- Fan switches off (0 dBA) at low load and Fan size is 12cm
- 100% full load burn-in test and RoHS compliance

The AP series products are designed with reliable forward topology which presents the highest reliability, highest stability and highest efficiency. The series of products provide real full specification performance in all kinds of environments. The intelligent and unique fan control circuit is designed to acquire a fan speed (RPM) in relation to the inside temperature of the power supply. After initially starting up, the fan turns off when the first mains power is on. The fan will then be turned on again at a minimum low speed until the PSU temperature inside rises to around 45°C. The PSU fan will be fully turned-off when the system reaches certain low loads (the same as in Standby or Sleep Mode) to achieve real noiseless conditions. This feature also prolongs the fan lifetime. In cases of heavy loading the system turns off softly (PS_OFF) and the PSU fan delays to turn off until inside temperatures are below 35°C. The graph shows the intelligent and silent fan curve for a typical AP series power supply.



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English

Specifications

AC Input

Parameter	Min.	Nom.	Max.
Vin	103 Vrms	110 ~ 240 Vrms	264 Vrms
Iin			7A(GP-AP500CA)
Iin			10A(GP-AP600CA)
Iin			10A(GP-AP700CA)
Vin Frequency	47 Hz	50 / 60 Hz	63 Hz

Model: GP-AP500CA

DC Output Load

DC Output	+5V	+3.3V	+12V1	+12V2	-12V	+5Vsb
Nominal Output Voltage (V)	5	3.3	12	12	-12	5
Min. Current (A)	1	0.5	1	1	0	0
Max. Current (A)	18	22	17	17	0.6	3
Peak Current (A)						3.5
Max. Power (W)	90	72.6	204	204	7.2	15
Combined Max. Power (W)	130		408		7.2	15
Total Max. Power Output (W)	500					

Model: GP-AP600CA

DC Output Load

DC Output	+5V	+3.3V	+12V1	+12V2	-12V	+5Vsb
Nominal Output Voltage (V)	5	3.3	12	12	-12	5
Min. Current (A)	1	0.5	1	1	0	0
Max. Current (A)	22	25	25	20	0.6	3
Peak Current (A)						3.5
Max. Power (W)	110	82.5	300	240	7.2	15
Combined Max. Power (W)	150		504		7.2	15
Total Max. Power Output (W)	600					

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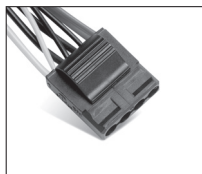
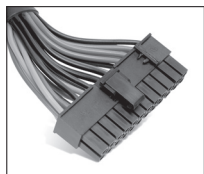
English

Model: GP-AP700CA

DC Output Load

DC Output	+5V	+3.3V	+12V1	+12V2	-12V	+5Vsb
Nominal Output Voltage (V)	5	3.3	12	12	-12	5
Min. Current (A)	1	0.5	1	1	0	0
Max. Current (A)	30	30	30	20	0.6	3
Peak Current (A)						3.5
Max. Power (W)	150	100	360	240	7.2	15
Combined Max. Power (W)	200		588		7.2	15
Total Max. Power Output (W)	700					

Output Connector Quantities



Model	Main Power (20+4)P	CPU Connector (4P)	5.25" HDD (4P)
GP-AL500CA	1	1	4
GP-AL600CA	1	1 (4P+4P)	6
GP-AL700CA	1	1 (4P+4P)	6



Model	Serial ATA	3.5" FDD (4P)	PCI-E (6+2P)
GP-AL500	4	1	1
GP-AL600	6	1	2
GP-AL700	6	1	2

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English

Power Supply Installation Instructions

For New System

1. Consult your system or chassis manual to open your computer chassis properly.
2. Position the power supply into your computer chassis and secure with screws.
3. Connect DC output connectors to mother board and peripheral devices.
 - a. Attach the (20+4) pin main power connector to mother board 24 pins connector, or use the 20 pins main power connector to connect to mother board 20 pins connector.
 - b. Attach the 4+4 pins +12V power connector to mother board 4 pins connector.
 - c. Attach the peripheral 4 pins connector to the peripheral devices (HDD, ODD). The Serial ATA connectors are for your hard disk drivers with Serial ATA interface.
 - d. Attach 4 pins floppy disk driver power connector to the floppy driver.
 - e. If you have the graphic card, please attach the 6+2 pins +12V power connector(s) to PCI-E graphic card(s).
4. Arrange the wires carefully to avoid any wires blocking the CPU and/or system fan.
5. Follow the system or chassis manual to close your computer system chassis properly.
6. Connect the power cord to the power supply, then insert the power cord plug into your city power socket.
7. Switch the "I/O" AC power switch to "I" status then turn on your computer.



For Replacement

1. Make sure the system power is turned off and power cord is disconnected.
2. Consult your system manual to open the system chassis properly.
3. Disconnect all old power supply DC output connectors from mother board and other peripheral devices.
4. Remove old power supply screws from the system chassis then remove old power supply from the system.
5. Follow Step 2 to 5 mentioned above to complete the new power supply replacement and run your system with the new power supply.

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English

Warnings

1. Do not open the power supply chassis. Under no circumstances should the power supply cover be opened. The Warranty becomes invalid if the power supply chassis cover is removed. There are dangerous high voltages inside the power supply.
2. Make sure the input voltage range switch is on the right position before plugging the AC power cord in, and turn on the power supply. The wrong input voltage switch setting will cause the system not to operate properly or may damage the power supply permanently.
3. Please keep the power supply away from humidity and do not block the exit or entrance of the air flow in operation.

Trouble Shooting

If the power supply fails to operate properly, please follow the steps given below to check, before you return it for repair.

1. Is the input voltage range switch in the right position?
2. Is the AC power cord plug properly connected from the wall outlet to the AC inlet of the power supply?
3. Ensure the power supply "I/O" switch is switched to "I" status.
4. Check all DC output connectors are properly connected to all locations and devices.
5. Recycle the turn-off and turn-on switch for the power supply through the "I/O" switch with intervals of at least 20 seconds.

Safety Approval



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