ARGUS NT®

GPS - Series EN



V1.2

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1. Introduction

Thank you for buying an Argus*NT*® power supply. You chose a high-quality and high-efficient power supply which is made from selected components and subjected to a strict quality management system. This ensures best performance and reliability.

The power supply has a high efficiency which respects the environmental and lowers the cost of power. This is documented by the 80+ Gold EU certification of the independent web site PlugLoadSolutions made by CLEAResult, the biggest North American provider of energy efficiency programs and services.

The high 12V output, up to four PCI Express connectors (depending model) and the newest Intel ATX 12V 2.4 standard ensure a future-proof system.

We recommend to read this manual carefully and especially paying attention for the security advices to enjoy this power supply for a long time.

2. Signs and symbols

Symbols	Meaning
	Handling and effects of safety instructions.
	Allusion to dangerous situation which can cause injury or death if not prohibited.
 Flammable	Allusion to dangerous situation which can cause fire.
HINWEIS	Allusion to property damages and general information.

3. Safety

3.1 Intended use

This device is made only for indoor use and for mounting in computer cases.

Don´t use and store the device inside humid rooms or near water.

Don´t use it close to source of heat. The additional heat could lead to overheating and fire.

3.2 General information

Please read this manual carefully before installing or using this product.

Keep this manual and pass it by passing the product.

Please follow the instructions and warnings of this manual before using the product.

The inobservance of this manual can cause violations and damages.

We disclaim liability for violations and damages caused by inobservance of this manual.

3.3 Danger and protection



Don´t stick any items into the power supply (electric strike).

Don´t pull the plug by pulling at the cable.



Don´t use any patched or damaged cable or plug.

Don´t place the device close to source of heat .

In case of strange noise or smell pull the power cord out of the socket.

Flammable

Don´t open the housing of the device (fire hazzard/ electric strike).

Ensure that all cables are fixed permanently.

Keep the product away from children.



Don´t remove the cable with wet hands (electric strike).

Don´t use the product with wet hands (electric strike).

Please remove the power cord from socket in case of longer non-use (Could led to overheating, fire hazard or electric strike).



Keep the product free of dust (Overheating or fire).

Look for sufficient airflow and ventilation to avoid overheating or fire.

Leave service or cleaning only authorized and qualified personnel.

Flammable

4. Technical data

4.1 General data

Standard	Intel ATX 12V 2.4	
Input voltage	100 – 240 V~ AC, 50-60Hz	
Input current	GPS-600	110V – 8A / 230V – 4A
	GPS-700	110V – 9A / 230V – 4,5A
	GPS-800	110V – 10A / 230V – 5A
	GPS-900	110V – 10A / 230V – 6A
PFC	Active	
Power factor	> 0,90 at 100% load	
Stand-by	0,367W	
MTBF	100,000h at 25°C	
Environmental	Operation	0 – 40°C
		-85% not condensing
	Storage	-20 – 90°C
		-95% not condensing

4.2 Output

Max.	Total	3,3V	5V	Combined 3,3V + 5V	12V	-12V	5Vsb
GPS-600	600W	15A	15A	100W	50A	0,3A	2,5A
GPS-700	700W	15A	15A	100W	58A	0,3A	2,5A
GPS-800	800W	15A	15A	100W	66A	0,3A	2,5A
GPS-900	900W	20A	20A	100W	75A	0,3A	2,5A

4.3 Safety

OPP	Over-Power-Protection	Power supply will shut down if the output is more than 130% of the nominal output.
OCP	Over-Current-Protection	Power supply will shut down if the current of the output lines will exceed the tolerance value.
OVP	Over-Voltage-Protection	To prevent further damages the power supply will shut down if a fault causes a higher output voltage.
SCP	Short-Circuit-Protection	Power supply will shut down in case of a short circuit on secondary output lines.
NLP	No-Load-Protection	Power supply will shut down in case of no load on secondary output lines to prevent damages.

4.4 Efficiency 230V~

Load		10%	20%	50%	100%
GPS-600	600W	88,90 %	92,10 %	92,90 %	90,50 %
GPS-700	700W	90,60 %	93,20 %	93,30 %	90,20 %
GPS-800	800W	91,30 %	93,80 %	93,40 %	90,20 %
GPS-900	900W	87,70 %	92,60 %	93,40 %	90,80 %

Efficiency 115V~

Load		10%	20%	50%	100%
GPS-600	600W	87,40 %	90,60 %	90,60 %	87,20 %
GPS-700	700W	89,40 %	91,40 %	91,40 %	87,20 %
GPS-800	800W	90,00 %	92,20 %	91,40 %	87,10 %
GPS-900	900W	87,40 %	90,70 %	91,20 %	87,80 %

5. Connectors

All connectors are standardized and made against reverse connection.

In case of difficulties during connection, please make sure to use the right connector or rotate the connector by 180°.

Don´t try to insert a connector forcibly.

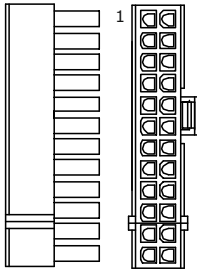
5.1 Quantity

	ATX 20+4pin	EPS/ P4 4+4pin	IDE 4pin	SATA 15pin	FDD 4pin	PCIe 6+2pin
GPS-600	1	2	3	6	1	4
GPS-700	1	2	3	6	1	4
GPS-800	1	2	3	6	1	4
GPS-900	1	2	3	6	1	4

5.2 Pin configuration

5.2.1 P1 ATX-Mainboard connector 20+4 pin

Signal	Pin	Signal	Pin
+3,3V	1	+3,3V DC	13
+3,3V	2	-12V DC	14
COM	3	COM	15
+5V DC	4	PS_ON	16
COM	5	COM	17
+5V DC	6	COM	18
COM	7	COM	19
PWR_ok	8		20
+5V SB	9	+5V DC	21
+12V DC	10	+5V DC	22
+12V DC	11	+5V DC	23
+3,3V	12	COM	24

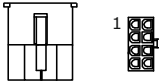


Pins 11/ 12/ 23/ 24 are made as separate jacks. It can be swung away in case of using older Mainboards.

Don´t mix the separate jack with the P4 connector.

5.2.2 EPS/ P4 Mainboard connector 4+4 pin

Signal	Pin	Signal	Pin
COM	1	+12V DC	5
COM	2	+12V DC	6
COM	3	+12V DC	7
COM	4	+12V DC	8

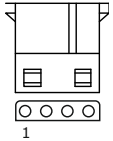


Depending your mainboard you need an 8pin or 4pin connector. For that the connector is divisible. In case of using just the 4pin connector the rest of the connector is without function.

Don´t plug it into another socket on the board.

5.2.3 IDE connector 4 pin

Signal	Pin
+12V DC	1
COM	2
COM	3
+5V DC	4



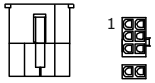
5.2.4 FDD connector 4 pin

Signal	Pin	Signal
+5V DC	1	+12V DC
COM	2	+12V DC
COM	3	+12V DC
+12V DC	4	+12V DC



5.2.5 PCI-Express connector 6+2 pin

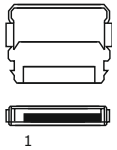
Signal	Pin	Signal	Pin
+12V DC	1	COM	5
+12V DC	2	COM	6
+12V DC	3	COM	7
COM	4	COM	8



Some graphic adapter need only a 6pin plug for connection. In this case, pull off the 2pin connector from the PCIe connector.

5.2.6 SATA connector 15 pin

Signal	Pin #
+3.3VDC	1
+3.3VDC	2
+3.3VDC	3
Masse	4
Masse	5
Masse	6
+5VDC	7
+5VDC	8
+5VDC	9
Masse	10
Masse	11
Masse	12
+12VDC	13
+12VDC	14
+12VDC	15



6. Assembling and initial operation

1. Take out the power supply and check the package content for completeness or damages.

   Please contact you local dealer for replacement in case of missing or damaged parts.

   Please keep the original package for shipping in case of warranty claim.

   Please connect the power supply to the grid after connecting all other devices.

2. Fix the power supply with the enclosed screws to the allocated space of the computer case.
3. Connect all components with the suitable cables.

   Please follow also chapter 5.2 (Pin configuration) as well as the instructions of the device manufacturers.

   A faulty connection of the components can cause damages. Please ask your local dealer or our service-hotline in case of discrepancies or questions.
4. Lay all cables in a way to avoid disturbing airflow or any rotating fan. Use the enclosed cable ties to fix the cables.
5. Connect the power supply with the electric socket.

   Use only the original power cord. In case of a damaged cable, please change it against an approved power cord from your local dealer.
6. Switch on the power supply at the backside of the power supply. Your computer is ready now.

   By power-on the power supply it is in Stand-By mode to start the computer by pressing the power button at the case front. To separate the computer totally from the electric grid power –off the power supply directly.

7. Fan Control

The power supplies of the Argus*NT*® GPS-Series are provided with an intelligent fan control (IFC) which turns the fan on only if the temperature inside the power supply exceeds 65°C and an additional cooling is necessary. If the temperature falls below 65°C the fan will be switched off and will start again if the temperature will exceed this mark again.

In addition the fan speed is regulated between 0 and 1200 rpm automatically.

This keeps the noise level of the fan very low.

8. FAQ

Error	Possible reason(s)	Help
The power supply runs shortly and stops.	Short circuit at Mainboard, HDD, FDD or CD-ROM	Check all connectors for right connection.
		Eliminate short circuit or change components.
Power supply does not start	Secondary connectors not connected	Check all connectors for right connection.
	Main switch on power supply is off	Switch on the main switch of the power supply.
	Power cord is not connected	Check if power cord is connected to power supply and electric grid.

Error	Possible reason(s)	Help
	Power cord defective	Change power cord against an approved new power cord.
	Power socket defective	Let authorized experts check the socket.



Please unplug power cord generally when working inside the computer case.

In case of checking the electric socket exists risk of electric strike.

Leave work on mains supply only authorized experts.

9. Maintenance

The power supply needs no maintenance which requires opening of the housing or working inside the power supply.

HINWEIS

But cause of the intake of air, dust can collect inside the power supply. This can lead to overheating or fire.

You can remove this dust with compressed air by yourself. To do this, unplug the power supply

from mains supply, dismount the power supply in reversed way as described before and blow the dust with compressed air through the fan grid out of the housing.

Do not use a wet or moist rag to remove dust. Hazard of electric shock.



Do not open the power supply in any circumstances. You will risk your life by an electric shock, destroy any components and lose your warranty claim.

We recommend to let authorized experts do the cleaning.



10. Disposal



Please dispose this device by using the special discharge point for electronic waste and ask your municipality or disposal company in case of further questions.
Please dispose the cardboard and plastics by using the appropriate containers of the household garbage.

11. Warranty terms

In spite of best efforts and quality controls a device can have a fault. But because the Argus*NT*® GPS- series is

made by highest quality standard we extend the legal warranty terms to totally 5 years up from purchase date at proper use. In case of a warranty claim please contact your dealer from whom you bought the product.

We will grant no warranty by:

- Missing or damaged warranty seal,
- Negligent behavior,
- Improper use,
- Nonobservance of the manual,
- External violence,
- Acts of god,
- Damages caused by manipulation, upgrading, updating or reconstruction of hardware or software
- Damages caused by other harm,

In case of data loss Inter-Tech will only be liable at wanton negligence or deliberate intention or, in all other cases, only for the recovery of data from a continuous, daily backup. Inter-Tech does not assume liability for all other matters.

Please look also at our complete warranty terms on our website.

www.inter-tech.de

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