PICO power adapter

Short description of the product

The Akyga® AK-CA-38 PICO adapter is intended to power mini-ITX motherboards.The product provides maximum power of 120W, using only 12V power source with 5.5x2.5 mm plug. PICO power module keeps full compatibility with ATX 24-pin motherboards. It is equipped with SATA, Molex and ATX 12V P4 connector that makes it compatible even with the newest generation processors.

The product is adapted to supply voltage in the range of 12V +/- 5%.
The power consumption of powering device can not exceed the power supply nominal current.

The product is compatible with the applicable national and European requirements.

What is in the box?

- AK-CA-38 PICO adapter
- P4, Molex and SATA cord

Symbols explanation:

There is a particular danger connected with service.

There is a risk of losing health or life (e.g. by electic shock).

Important tips and information.

The CE standard description on the product is the manufacturer's declaration that the marked product meets the requirements of the directive so-called The "New Approach" of the European Union (EU). For security and certification (CE) reasons, the device can not be rebuild or change in any way. In the reason of using the power supply for other purposes than those described, the product may be demaged. The incorrect use may also cause hazard such as short-circuits, burns, electric shocks, etc. Read the users manual carefully and keep it for later use. The product could be share to third partie only with the user manual included.

Product accordance with the EU directive 2002/96/EC. The symbol of the crossed out basket placed on the product means that the marked product can not be disposed of with other household waste. After use, the product must be return to collection point for used electical and electronic equipment or to the seller. Appropriate segregation of rubbish for subsequent processing, recovery or descrution contributes to avoiding negative effects on the environment and health, and also allows the recovery of raw materials from which the product is made.

The RoHS mark on the product is the manufacturer's declaration that the marked product meets the requirements of the EU Restriction of Hazardous Substances (2002/95/EC) directive, which aims to reduce the amount of hazardous substances penetrating into the environment from electrical and electronic waste.

The device is intended only for domestic use, indoors.

PICO power adapter

Safety Precautions

Connecting computer components whose demanded power is greather than power of the adapter, can cause damage (burn) of adapter.

The adapter should work in internal conditions that do not cause contact with water and direct sunlight.

During operation, the adapter should be located in a designated housing.

An electrostatic discharge occurs when two object touch each other, for example, an electric charge that occurs when user touch metal door handle after walking on a carpet . Discharging electrostatic charges from fingers or other electrostatic conductors can damage electronic components. To avoid damaging the adapter or devices connected to it, abstain from touching contacts, wires and electonic circuits. The user's contact with electronic components should be kept to a minimum.

The manufacturer of the product is not responsible for damage or insults caused in effect of disobey the safety instructions and informations contained in these user manual.

- Keep the product and the packaging out of range of children and animals. The package includes a foil that child could choke while playing.
- It is forbidden to apply the mechanical load to the product - strong shocks, impacts, dropping or crushing may cause its damage.
- The product operation in adverse conditions is not allowed. Adverse conditions are primarily: exposure to direct sunlight, high or very low ambient temperatures, strong vibrations, high humidity, surrounds of gases, dusts or flammable and aggressive liquids.
- If the product has been damaged, does not work properly or has been stored for a long period of time in bad or unfavorable conditions, safe operation of the device is not possible. It is essential to stop using the product and to protect it against re-use for security purposes.
- Take account of the user manual for other devices connected to the adapter.
- Product and power cord should not be touched with moist or wet hands under no circumstances.
- Short-circuiting the current connection is prohibited.
- Make sure that the power cord is not crushed, bent, twisted, rubbed against sharp edges or mechanically loaded in any other way. Avoid thermal load of the cable - in particular keep away from heat sources (such as stoves, radiators, fireplaces).
- Connection of adapter to electricity is made by connecting it to the 12V AC/DC power adapter.
- Before connecting the adapter to the power supply, make sure that the power of the adapter is sufficient for the components in the computer.
- It is forbidden to connect the adapter directly to the car battery. This may be damaged the adapter, causing threats to life, health and property.
- Before connecting or conservation of the adapter make sure that the power cords are not live.
- First connect adapter to computer components then connect adapter to AC/DC power adapter. Never the other way around.
- In case of any doubts regarding operation, safety or connection of the product, please contact the manufacturer or a qualified specialist for this purpose.
- All maintenance, adjustment and repair work on the product may only be carried out by a qualified person in a specialist facility.

PICO power adapter

Removing the most common problems

Problem	Cause	Solution
The adapter or computer components connected via power supply / adapter does not work	No mains voltage	• Check the correct connection of the power supply to the power network • Check the mains fuses
	The power adapter is overloaded	• Disconnect the power adapter from energy grid, check the correctness of the current parameters
	Incorrect connection of the device	• Make sure that the adapter is correctly connected to the computer components • Check that the wires are well embedded in the sockets
	There is a suspicion of a product defect	• Stop using and contact the seller
The computer turns off	The adapter has insufficient parameters	• Check if the power of the adapter covers the demand of the computer components

Connecting the adapter to the computer components:

1. Connect the 24-pin adapter's plug to 24-pin socket on mother board. Try not to touch the electronic components or contacts on the adapter.
2. Connect the P4 connector to the motherboard if it is required by CPU to stabilize the work.
3. Connect the Molex plug to a hard disk, optical drive or fan with a corresponding Molex socket.
4. Connect the SATA plug to a hard disk or optical drive with a corresponding SATA socket.
5. In case the P4, Molex and Sata plug are not used, unplug it from the adapter.
6. Then, take out the power cord of the housing, in a way that provides easy and safe access to connect an external 12V power supply without opening the case.

Cleaning the power supply:

Disconect the adapter from the electrical socket and connected devices before cleaning.

- Use soft and antistatic cloth for cleaning the adapter.
- Do not use abrasive or chemical cleaners.

Technical specfication

Product code:	**AK-CA-38**
Supply voltage:	**12V DC +/- 5%**
Maximum power:	**120W**
Efficiency:	**>95%**
Temperature:	**0-40ºC**
Mechanical switch:	**No**
Power inlet:	**5.5 x 2.5 mm**
Mainboard Power Connector:	**24-pin**
Maximum load on the +3.3V line:	**6A**
Maximum load on the +5V line:	**6A**
Combined power of +3.3V:	**20W**
Combined power of +5V:	**30W**
Current on the +12V rail:	**10A**
Maximum load on 12V line:	**120W**
Compilance with standards:	**CE, FCC, RoHS**
REACH compatibility:	**YES**
EAN code:	**5901720132956**

PICO power adapter

Product manufacturer:

Ropla Computers sp. z o.o.
ul. Wrocławska 1c
52-200 Suchy Dwór