EVERSECU CP1218-30A

EVERSECU 18 Channel DC12V 30 Amp Reset Fuse CCTV DC Distributed Power Box

Model: CP1218-30A

1. Product Overview

The EVERSECU 18 Channel DC12V 30 Amp Reset Fuse CCTV DC Distributed Power Box is designed to provide stable and reliable power to multiple CCTV cameras, DVRs, and other security devices. This power supply unit features individual PTC fuses and LED indicators for each output channel, ensuring that a fault in one channel does not affect the operation of others. It incorporates multiple protection mechanisms including circuit short protection, high voltage protection, and over current protection to safeguard connected equipment.

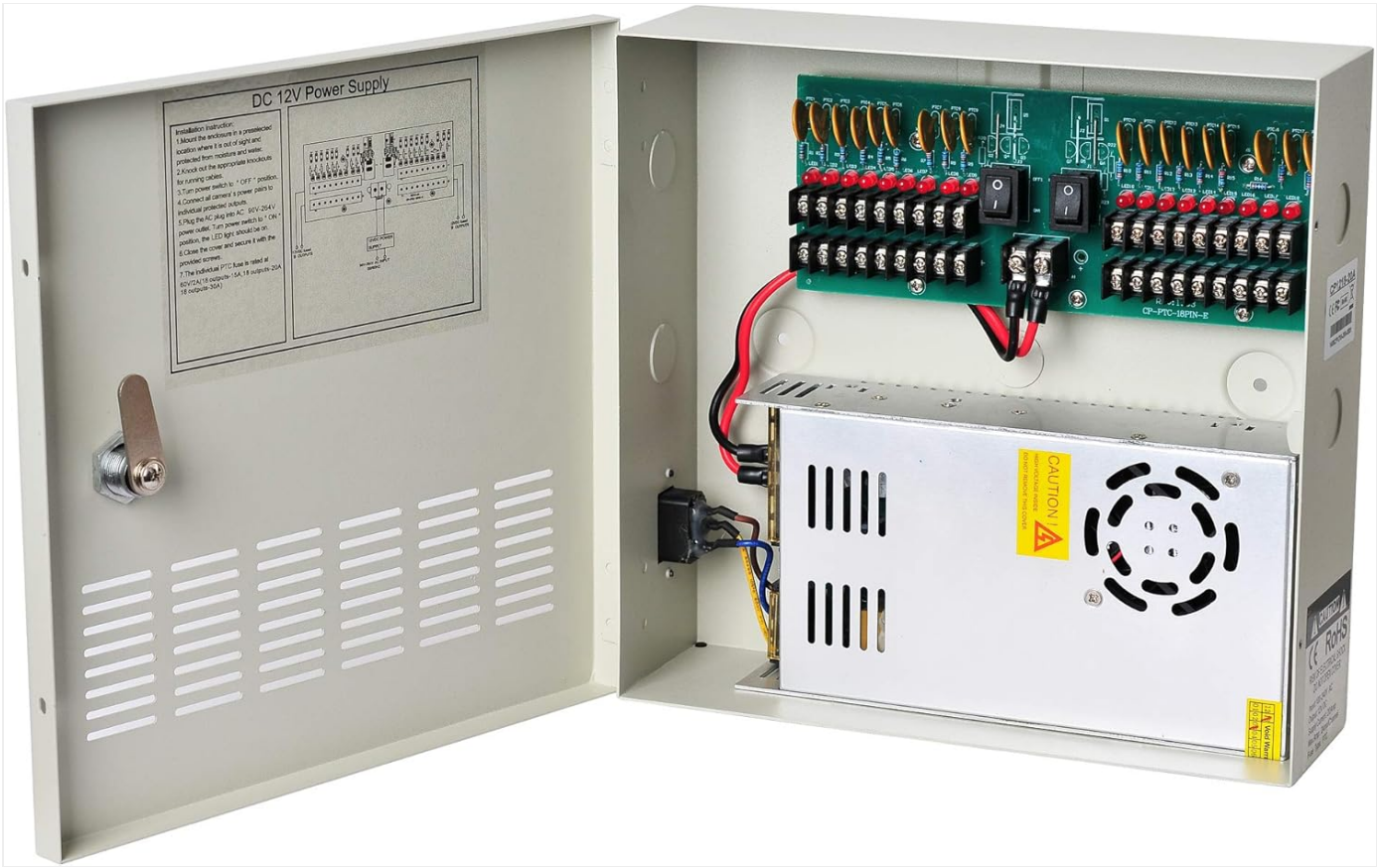

Figure 1: Internal view of the power distribution box, highlighting the power supply and individual output terminals.

2. Key Features

- **Input:** 100-240VAC; **Output:** 12VDC; **Supply Current:** 30Amp; **Max. Amp:** 2Amp/Channel; DC12V Regulator CCTV Power Supply Box, 18 Outputs with PTC Fuse.

- **General Protection:** Each output has independent PTC fuse and LED indicator. Features lightning protection and a lifespan exceeding 100,000 hours. A problem in one output only affects that specific channel, allowing others to continue functioning.
- **Circuit Short Protection:** In the event of a short circuit, the independent PTC fuse will open the circuit. Once the short condition is removed, the PTC fuse automatically resets and closes the circuit.
- **High Voltage Protection:** Integrated surge protection activates during high voltage events to protect connected devices.
- **Over Current Protection:** If an over current condition occurs, the power supply automatically enters a self-protection state. It will return to normal operation once the condition is resolved.
- **Durable Construction:** Features a new metal housing that is compressive and wear-resistant, providing a reinforced enclosure structure for enhanced safety and convenience. Includes a lock with keys and an AC plug.

3. Specifications

Attribute	Value
Input Voltage	AC 100-240V
Input Voltage Frequency	50/60Hz
Output Voltage	DC 12V +/-5%
Total Output Current	30A
Total Outputs	18
Fuse Type	PTC (Resettable)
Fuse Rating	1.1A per channel
Max. Amp per Channel	2Amp
Package Dimensions	11.26 x 10.59 x 3.35 inches
Item Weight	6.75 pounds (3.07 Kilograms)
Cooling Method	Air (with fan)
Compatible Devices	CCTV Cameras, DVRs, PTZ, IR Illuminator, Video Processor, Access Control, etc.

4. Setup Instructions

Before beginning installation, ensure all power sources are disconnected to prevent electrical shock or damage to equipment.

1. **Mounting the Power Box:**

   Select a suitable, secure location for mounting the power box. Ensure the location is dry, well-ventilated, and protected from extreme temperatures. Use appropriate screws and anchors to securely fasten the power box to a wall or other stable surface. The metal housing is designed for durability and can be locked for added security.

Figure 2: Exterior view of the power distribution box, ready for mounting.

2. **Connecting AC Power Input:**

   Locate the AC power input port on the side of the power box. Connect the provided AC power cord to this port and then plug the other end into a standard 100-240V AC electrical outlet. Ensure the connection is firm and secure.

Figure 3: Side view showing the AC power input connection.

3. **Connecting DC Output Devices:**

   Open the power box using the provided key. Inside, you will find 18 pairs of DC output terminals. Each pair consists of a positive (+) and negative (-) terminal. Connect the DC power cables from your CCTV cameras, DVRs, or other 12VDC devices to these terminals. Ensure correct polarity: positive to positive, and negative to negative. Each channel supports up to 2 Amps.

   The power box features individual PTC (Positive Temperature Coefficient) resettable fuses for each output. These fuses automatically reset after a fault condition (like a short circuit or over current) is cleared, eliminating the need for manual fuse replacement.

5. Operating Instructions

Once all connections are securely made:

1. **Power On:** Ensure the main power switch inside the box (if present, some models have one) is in the ON position. Plug the AC power cord into the wall outlet.
2. **Indicator Lights:** Observe the LED indicator lights on the front panel and next to each output terminal. A lit LED typically indicates that the corresponding channel is receiving power and functioning correctly.
3. **System Operation:** Your connected devices (cameras, DVRs) should now power on. Verify their operation according to their respective manuals.

6. Maintenance

Regular maintenance helps ensure the longevity and optimal performance of your power box:

- **Keep Vents Clear:** Ensure that the ventilation openings on the power box are not obstructed. Adequate airflow is crucial for cooling, especially for the internal fan.
- **Clean Exterior:** Periodically wipe the exterior of the power box with a soft, dry cloth to remove dust and dirt. Do not use liquid cleaners or solvents.
- **Check Connections:** Occasionally inspect all power connections (AC input and DC outputs) to ensure they remain secure and free from corrosion.
- **Environmental Conditions:** Ensure the power box remains in a dry environment, away from direct sunlight, excessive heat, and moisture.

7. Troubleshooting

This section addresses common issues and their resolutions.

- **No Power to Devices / All Channel LEDs Off:**
  - Verify the AC power cord is securely plugged into both the power box and the wall outlet.
  - Check if the wall outlet is functional by plugging in another device.
  - Ensure the main power switch inside the box (if applicable) is in the ON position.
- **One Channel Not Working / Specific Channel LED Off:**
  - This indicates the independent PTC fuse for that channel may have tripped due to a short circuit or over current.
  - Disconnect the device connected to the faulty channel.
  - Inspect the wiring for any shorts or damage.
  - If the fault is cleared, the PTC fuse should automatically reset, and the LED will illuminate. Reconnect the device. If the issue persists, the connected device may be drawing too much current or be faulty.
- **Fan Noise:**

- The power box includes an internal cooling fan that is thermostatically controlled. It will activate when the internal temperature rises to dissipate heat.
- Some fan noise is normal during operation, especially under heavy load or in warmer environments.
- Ensure the power box has adequate ventilation and is not enclosed in a confined space.

- **Intermittent Power:**
  - Check all DC output connections for looseness.
  - Verify that the total current draw from all connected devices does not exceed the power supply's total output capacity (30 Amps).
  - Ensure the input AC voltage is stable and within the specified range (100-240V).

8. Warranty and Support

For warranty information and technical support, please contact EVERSECU customer service. Refer to your purchase documentation for specific warranty terms and contact details.
Additional protection plans may be available for purchase through your retailer, offering extended coverage beyond the standard manufacturer's warranty.