Ultra-Wide High Voltage Input Power Supply

——New Energy Application Type

The ultra-wide high voltage input series products are DC-DC new energy power supplies provided by AMCHARD for customers. This series includes multiple types such as module type, din-rail, enclosed type, and semi-potted configurations, with a power range of 6-350W and a maximum input voltage of 1500VDC.

These products are widely applicable in photovoltaic power generation, renewable energy systems, high voltage freqency conversion, industrial control system, semiconductor fabrication equipment, electro-mechanical apparatus, DC bus centralized application, energy storage system(ESS), charging pile, and power supply rails. They deliver stable operating voltage for load equipment, while their integrated multiple protection features enhance the safety performance of both the power supply and connected loads under abnormal operating conditions.

Product advantage

Ultra-Wide Input Voltage Range
80VDC-1500VDC

Wide Operating Temperature Range
3000V/4000V isolation

Reinforced Insulation
-40°C to +85°C voltage

Complete Protection Functions
short circuit/over load/
over temperature/over voltage

Multiple Types Available
module/din-rail/enclosed

Diverse Industry Adaptability
PV/energy storage/equipment
/systems

Selection Guide

PV-DD60-600SXX

- Type: Din-rail
- Size: 92.3*76.3*60.5mm
- Power: 60W
- Efficiency: 85%
- Input Voltage: 600VDC(100-1000)
- Output Voltage: 12V/15V/24V
- Isolation Voltage: 3000V

PV-DM100-400SXX

- Type: Enclosed
- Size: 159*99*38mm
- Power: 100W
- Efficiency: 81%-84%
- Input Voltage: 400VDC(100-700)
- Output Voltage: 12V/15V/24V/48V
- Isolation Voltage: 3000V

PV-DM100-600SXX

- Type: Enclosed
- Size: 159*99*38mm
- Power: 100W
- Efficiency: 79%-84%
- Input Voltage: 600VDC(300-1000)
- Output Voltage: 5V-48V
- Isolation Voltage: 3000V

PV-DM200-900SXX

- Type: Enclosed
- Size: 230*127*40.5mm
- Power: 200W
- Efficiency: 88%-91%
- Input Voltage: 900VDC(300-1500)
- Output Voltage: 24V/28V/36V/48V
- Isolation Voltage: 3000V

PV-DM350-900SXX

- Type: Enclosed
- Size: 230*127*40.5mm
- Power: 350W
- Efficiency: 88%-91%
- Input Voltage: 900VDC(300-1500)
- Output Voltage: 24V/27V/36V/48V
- Isolation Voltage: 3000V

PV-DP06-400SXX

- Type: Module
- Size: 32*20*15mm
- Power: 6W
- Efficiency: 76%-83%
- Input Voltage: 400VDC(100-700)
- Output Voltage: 5V-24V
- Isolation Voltage: 3000V

PV-DP10-400SXX

- Type: Module
- Size: 32*20*15mm
- Power: 10W
- Efficiency: 66%-83%
- Input Voltage: 400VDC(100-700)
- Output Voltage: 3.3V-24V
- Isolation Voltage: 3000V

PV-DP15-600S/DXX

- Type: Module
- Size: 70*48*23.5mm
- Power: 15W
- Efficiency: 76%-80%
- Input Voltage: 600VDC(100-1000)
- Output Voltage: 5V-24V/±12V/±15V
- Isolation Voltage: 2500V

PV-DP25-400SXX

- Type: Module
- Size: 51*25.5*15.5mm
- Power: 25W
- Efficiency: 89%-90%
- Input Voltage: 400VDC(100-700)
- Output Voltage: 12V/15V/24V
- Isolation Voltage: 4000V

PV-DP40-600SXX

- Type: Module
- Size: 89*63*25mm
- Power: 40W
- Efficiency: 85%-87%
- Input Voltage: 600VDC(200-1200)
- Output Voltage: 12V/15V/24V
- Isolation Voltage: 3000V

PV-DP40-900SXX

- Type: Module
- Size: 89*63*25mm
- Power: 40W
- Efficiency: 85%-87%
- Input Voltage: 900VDC(200-1500)
- Output Voltage: 12V/15V/24V
- Isolation Voltage: 3000V

PV-DP60-400SXX

- Type: Module
- Size: 109*58.5*30mm
- Power: 60W
- Efficiency: 85%-88%
- Input Voltage: 400VDC(80-750)
- Output Voltage: 12V/15V/24V
- Isolation Voltage: 4000V

PV-DP60-400SXXR2

- Type: Module
- Size: 89*63*25mm
- Power: 60W
- Efficiency: 84%-87%
- Input Voltage: 400VDC(80-750)
- Output Voltage: 12V/15V/24V
- Isolation Voltage: 3000V

PV-DP60-600SXX

- Type: Module
- Size: 109*58.5*30mm
- Power: 60W
- Efficiency: 84%-86%
- Input Voltage: 600VDC(200-1000)
- Output Voltage: 12V/15V/24V
- Isolation Voltage: 4000V

PV-DP15-900SXX

- Type: Module
- Size: 89*63.5*25mm
- Power: 15W
- Efficiency: 76%-83%
- Input Voltage: 900VDC(200-1500)
- Output Voltage: 5V/12V/15V/24V
- Isolation Voltage: 4000V

PV-DU75-400SXX

- Type: Semi-Potted
- Size: 140*68*35.5mm
- Power: 75W
- Efficiency: 83%-87%
- Input Voltage: 400VDC(80-750)
- Output Voltage: 12V-48V
- Isolation Voltage: 3000V

PV-DU75-600SXX

- Type: Semi-Potted
- Size: 140*68*35.5mm
- Power: 75W
- Efficiency: 83%-87%
- Input Voltage: 600VDC(80-1000)
- Output Voltage: 12V-48V
- Isolation Voltage: 3000V

PV-DU150-900SXXG-L

- Type: Semi-Potted
- Size: 200*68*35mm
- Power: 150W
- Efficiency: 87%-91%
- Input Voltage: 900VDC(250-1500)
- Output Voltage: 24V/28V/32V
- Isolation Voltage: 4000V

PV-SDM200-900SXX

- Type: Din-rail
- Size: 50*125.1*110mm
- Power: 200W
- Efficiency: 93%-94%
- Input Voltage: 900VDC(300-1500)
- Output Voltage: 12V/24V/27V/48V
- Isolation Voltage: 3000V

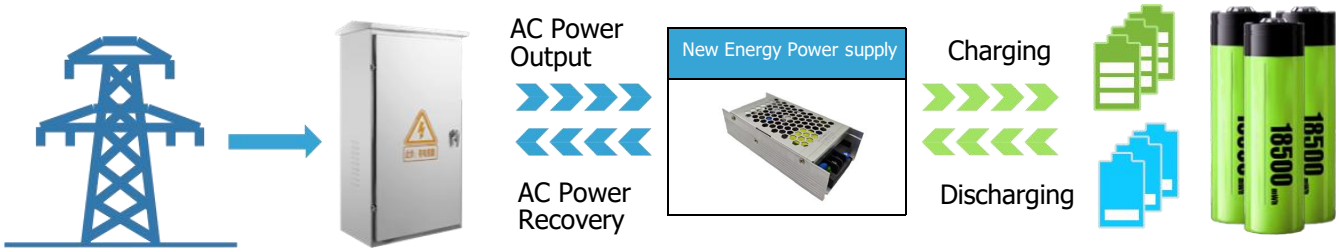
PV-SDM240-900SXX

- Type: Din-rail
- Size: 50*125.1*110mm
- Power: 240W
- Efficiency: 92%-94%
- Input Voltage: 900VDC(300-1500)
- Output Voltage: 12V/24V/48V
- Isolation Voltage: 3000V

Application Scenarios

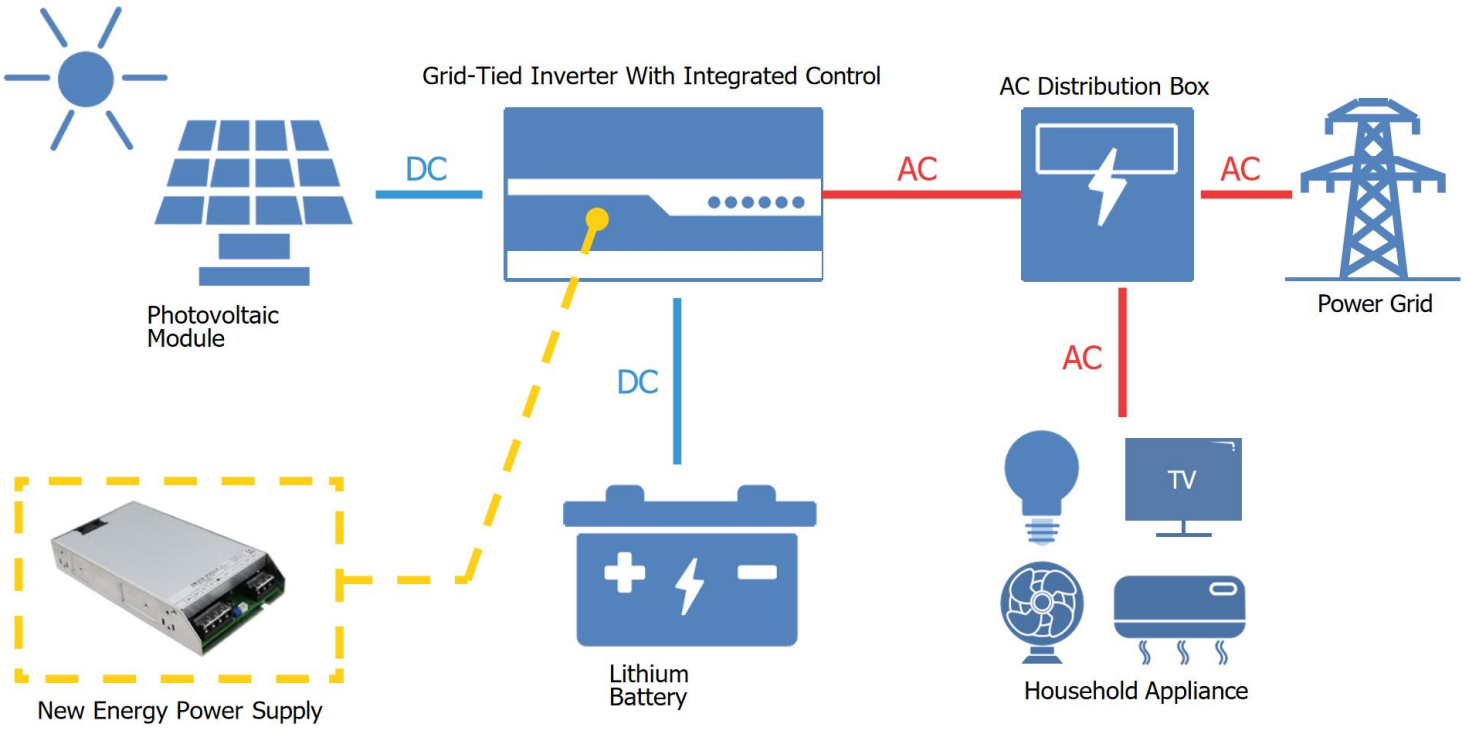
With the global advancement of "Net Zero Carbon Emissions" goals, industries such as new energy vehicles and photovoltaics have experienced rapid growth, driving the sustained expansion of the lithium battery industry. In this development, new energy power supplies play an indispensable role across critical stages—from charge/discharge testing in production to backup energy provision in household energy storage systems.

This series of power supplies is designed for battery manufacturing facilities. During the battery formation and grading stages, they enable efficient charging using renewable energy sources while simultaneously feeding the energy released by batteries back into the grid for use by AC-powered devices. This bidirectional energy flow significantly reduces operational electricity costs for enterprises.



Formation & Grading Application Diagram

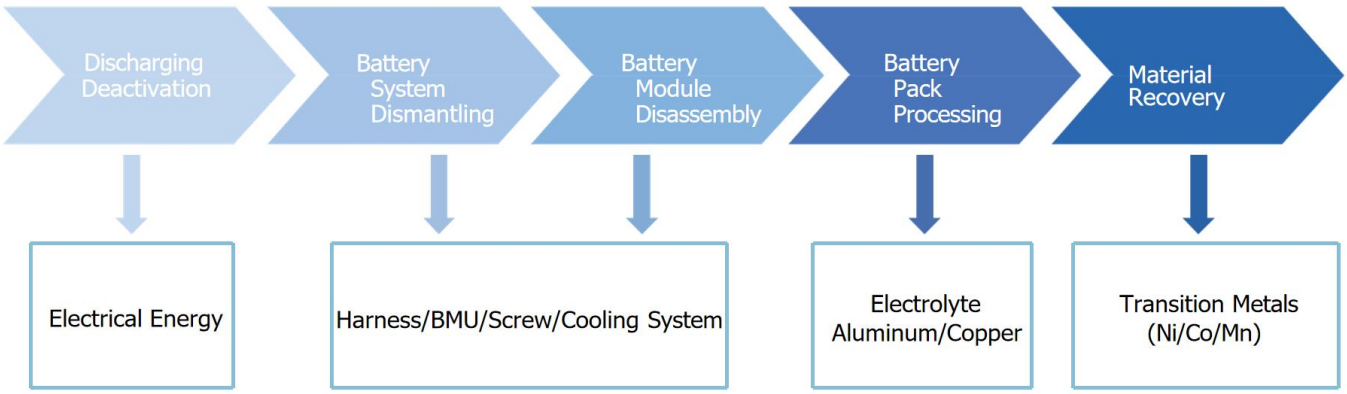
Household energy storage systems primarily consist of photovoltaic modules, lithium batteries, all-in-one grid-tied inverters with control functions, and household appliances. During nighttime, low-cost electricity from the grid is stored in lithium batteries via the integrated new energy power supply within the inverter. During daytime peak grid load periods, the stored energy is then discharged through the same power supply and fed back into the power system. This bidirectional energy management not only achieves peak shaving and valley filling to stabilize grid fluctuations but also significantly reduces household electricity expenses.



Household Energy Storage System

In recent years, driven by the widespread adoption of new energy vehicles, the demand for automotive lithium batteries has surged annually. As these batteries age, the volume of retired lithium batteries is rapidly increasing, propelling the lithium battery recycling industry to the cusp of explosive growth. Consequently, diverse battery dismantling equipment has emerged in the market.

Prior to recycling lithium batteries, it is critical to discharge them below a safe voltage threshold to prevent hazardous incidents such as fires or explosions during dismantling. New Energy Power Supplies play a vital role in these processes and are extensively utilized across battery recycling equipment, ensuring safe and efficient energy management throughout the discharge phase.



Lithium Battery Recycling Process

Premium Service | Quality Assured | Rapid Delivery

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