

Intelligent DC UPS Module

12V/9~36V DC Input, 12V DC Output Uninterruptible Power Supply Module with Diagnostics

- VESA 75 or VESA 100 mounting
- 9-36V input through terminal or power jack, or 12V through power jack only
- Battery status and charge monitoring utility. Remote network management capabilities

Features

- 60W (5A @ 12V) or 100W (8.3A @ 12V) output
- 28Wh or 56Wh, for more than 140 minutes operation time (dependent on panel PC power requirements)
- Rugged metal enclosure for standard VESA 75/100 mounting
- Web-based, remote network management, no software installation required
- Local PC-based monitoring software for input detection and battery status monitoring
- Auto shut down when battery low
- Remote DC output ON/OFF switch for external switch installation
- Provides stable power to the PC during line sags and spikes and absorbs power surges and transients, protecting expensive equipment

| Model Name | AUPS-A10-R10 AUPS-A20-R10 | AUPS-B10-R10 AUPS-B20-R10 |
|------------------|------------------------------|------------------------------|
| Input Power | AUPS-A10-R10 12V | AUPS-B10-R10 12V |
| | AUPS-A20-R10 9~36V | AUPS-B20-R10 9~36V |
| Dimension | 150x95x34mm | 170x150x34mm |
| Battery Capacity | 28 Wh (Watt/H our) | 56 Wh (Watt/Hour) |
| Output Power | 60W (5A@12V) | 100W (8.3A@12V) |
| VESA Support | 75x75 mm | 75 x 75 mm |
| | | 100 x 100 mm |

AUPS-A10
VESA 75, 12V DC Input
12V DC, 5A, 60W Output

AUPS-A20
VESA 75, 9V~36V DC Input
12V DC, 5A, 60W Output

AUPS-B10
VESA 75/100, 12V DC Input
12V DC, 8.3A, 100W Output

AUPS-B20
VESA 75/100, 9V~36V DC Input
12V DC, 8.3A, 100W Output

Intelligent UPS Module

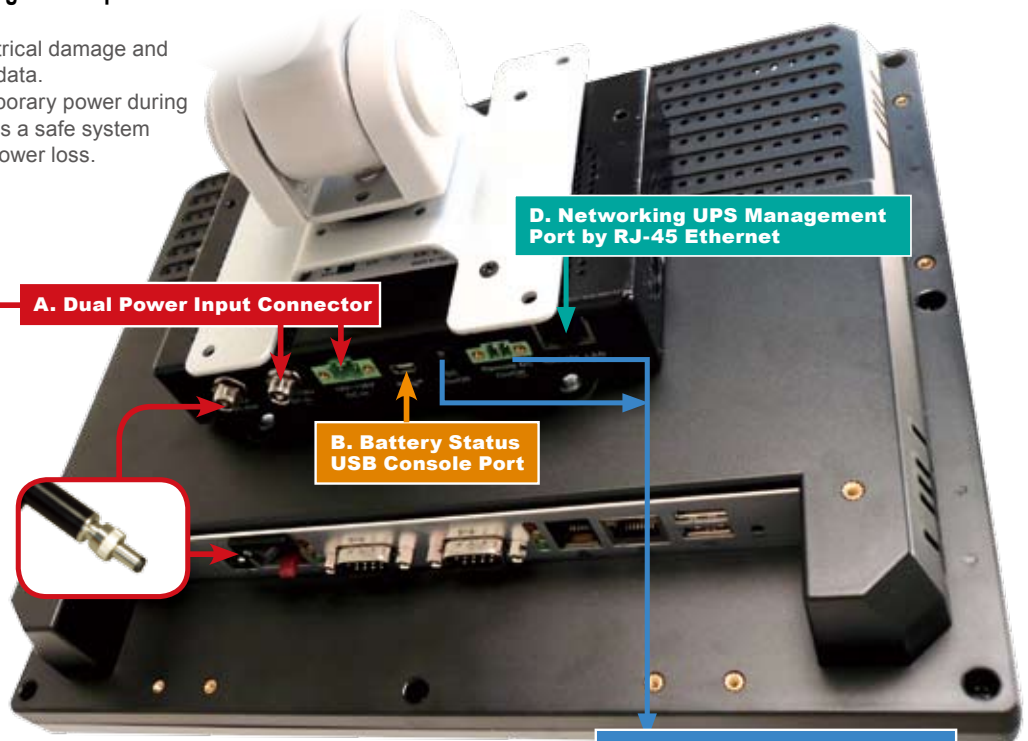
High Energy Density / Lightweight / Compact DC to DC UPS & Power Module

Protect your panel PC from electrical damage and greatly reduce the risk of losing data. The UPS module serves as temporary power during a short break in power and allows a safe system shutdown for longer periods of power loss.

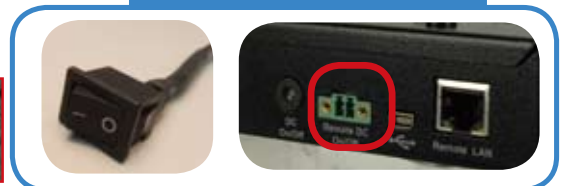
A. Dual Power Input Connector

1. DC 9V~36V input by terminal block (Only AUPS-A20 / AUPS-B20)

2. (1) Only 12V input by DC jack (AUPS-A10 / AUPS-B10)
(2) Wide 9V~36V input by DC jack (AUPS-A20 / AUPS-B20)



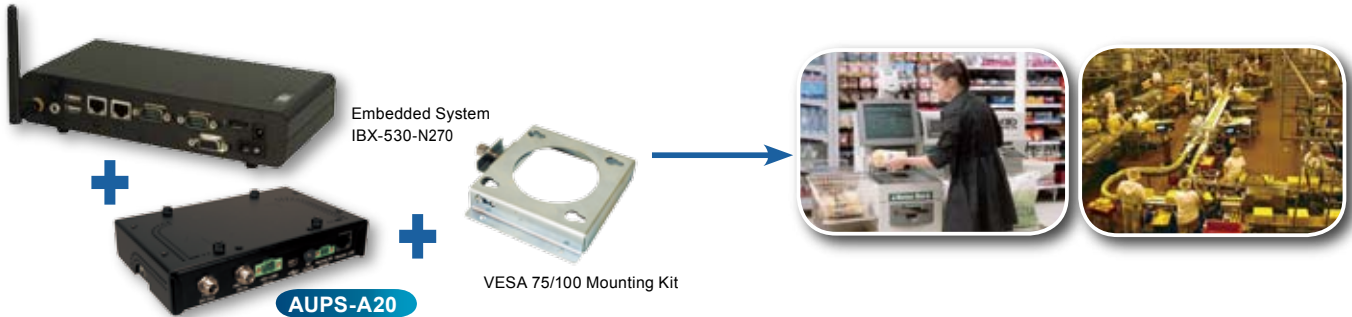
| LED Signal Table | | | |
|------------------|--------------|----------------|----------------|
| | LED 1 | LED 2 | LED 3 |
| Color | Green | Yellow | Orange |
| Function | Power Input | Charger Status | Battery Status |
| Dark | DC Power Out | | |
| Light | DC Power In | Discharging | Battery Full |
| Blinking | | Charging | Battery Low |



AUPS Applications

• Easy Deploy with VESA Mounting

Provide standard VESA mounting to fit in all kind of situations in any application. The fanless embedded system, IBX-530-N270 which only consumes 15 watts, applied with the AUPS-A20 offers reliable wide range DC input, economical power protection and more than 140 minutes operation time



• Power Bank Solution

AUPS modules act as power input regulator to prevent unstable power input damage and avoid protect against unexpected power loss.



• Mobile System Solution

AUPS provides backup power for the data sensitive part of movable equipment, allowing charging and battery replacement of the primary power without shutting down the data terminal.



AUPS Network Administration Tool

• Network Remote Management Anywhere



• Network Remote Management Software



Battery Capacity Status

Email Status Report

Power On/OFF

Remote control DC output ON/OFF via web interface.

• Intelligent Software Utility

The remote management software utility and application program allows users to easily get the status of the AUPS and to control the AUPS power functions from anywhere with an Internet connection.



Network Remote Management Software



Click ALARM to get each AUPS status via internet

- STATUS
- Send E-mail
- Board configuration

AUPS Local USB Utility Tool

Battery Monitoring Utility

Monitor the Most Critical Battery Functions on the Local Machine

The battery monitoring utility allows AUPS status monitoring and provides the ability to change the settings Uninterruptible Power Systems is a significant product that serves as emergency power when you suffer from electric event



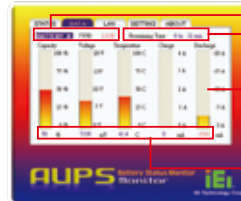
Battery Monitoring Utility Networking Remote Management

- Battery detection
- Battery capacity status
- Battery charge
- DC Input Indicator
- Battery Indicator
- Temperature warning
- Low battery alarm
- Connection port status

| | | |
|-------------------|------------------|-------------------|
| DC Input only | Charging 50% | Charging 100% |
| Normal icon | Capacity 50% | Capacity 100% |

BATTERY STATUS

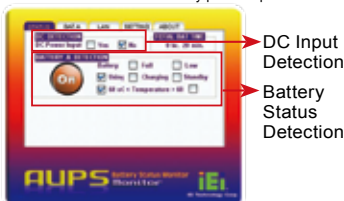
• BAT.A shows Battery status real time monitoring



- Battery Type
- Battery usage remaining time
- Battery capacity bar
- Real time information updating

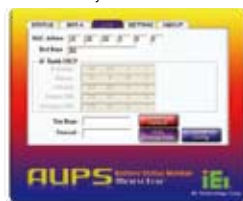
AUPS STATUS

• STATUS shows DC / Battery power input



LAN CONFIGURATION

• LAN shows system IP Address information



ABOUT

• shows AUPS Utility information



SETTING

• SETTING shows Connection Detection port



- Auto-Scan Connection port
- System shuts down condition by battery capacity setting

Meanwhile, IEI also provides AUPS API SDK and command list for customer programming under DOS or Linux system

AUPS API Content

- Inti()
- AUPS Close()
- WriteCommand()
- ReadCommand()
- Error Code Definition()

AUPS API SDK



AUPS API SDK/Content



AUPS Module Specifications

| Model Name | | AUPS-A10 | AUPS-A20 | AUPS-B10 | AUPS-B20 |
|--|---|---|-------------|--|-----------------|
| VESA Type | | VESA 75 | VESA 75 | VESA 75 and 100 | VESA 75 and 100 |
| Input Data | Input voltage Unated/range | DC +12V | DC +9V~+36V | DC +12V | DC +9V~+36V |
| | Input current rated | 1. Adapter is 12V~6A (Load is 60W) 2. Battery is 6V~12A (Load is 60W) | | 1. Adapter is 12V~9A (Load is 100W) 2. Battery is 12V~9A (Load is 100W) | |
| | Standby power consumption | 0.3A (0.2A if Network Management disabled) | | | |
| | Operation with charging current | 500mA | | | |
| | Operation with charging power consumption | 6W | | 10W | |
| Charging time with system ON/OFF | | 8hrs / 2hrs (Battery empty) | | | |
| Output Data | Output voltage for normal operation | DC +12V +/-5% | | | |
| | Output voltage for battery operation, approx. | 6~8.4V DC6 V (exhaustive discharge protection) | | 12~16.8V DC12 V (exhaustive discharge protection) | |
| | output current | 0A~5A | | 0A~8.3A | |
| Efficiency(nominal operation)/power lossat Vin=12V, Iout=80% of full loading | | 89% | 93% | 95% | 94% |
| Protection | short-circuit protection | Yes | | | |
| | Exhaustive discharge protection | 1.Battery low is 10% of Battery capacity 2.Shutdown 5% of Battery capacity (Default) 3.The end of Battery discharge voltage is 6V | | | |
| | EMC / Safety certification | UL, TUV, CE, FCC | | | |
| Monitoring | Ethernet interface | Web-based, specification 10/100Mbps with RJ-45 connection, Cat. 5 cable | | | |
| | USB interface | PC-capable, specification 2.0 with full speed, i.e. 2 Mbit/s. Standard 4-core shielded cable, USB Series "mini B" connector to DC-UPS | | | |
| Physical | Dimensions | 152mm(L) * 96mm(W)*28mm(H) | | 174mm(L) * 147mm(W)*35mm(H) | |
| | Weight | 1.2 kg | | 1.8 kg | |
| LED Indicator | Green | DC power input | | | |
| | Yellow | Battery charging | | | |
| | Orange | Bettery discharging | | | |
| Environment | Operating Tem. | 0°C~40°C | | | |
| | Storage Tem. | -20°C~50°C | | | |

Note1: Suggest to connect DC input constantly. Battery will be drained after 14 hours.

Note2: System power consumption + AUPS charging power consumption = Total watts of power source

Battery Module Specifications

| Model Name | | AUPS-A10 | AUPS-A20 | AUPS-B10 | AUPS-B20 | |
|--------------------|--|--|----------|----------|----------------------------|--|
| Battery Model Name | | BAT-LI-2S2P3800 | | | BAT-LI-4S2P3800 | |
| Battery | battery type | Li-Ion 2S2P 7.4V | | | Li-Ion 4S2P 14.8V | |
| | Battery capacity | 7.4V 3800 mA AH | | | 14.8V, 3800 mA AH | |
| | Maximum charge voltage | 8.4V | | | 16.8V | |
| | The end of discharging voltage | 5.6V | | | 11.2V | |
| | Suggestive charging current (Max.) | 2A | | | 2A | |
| | System continuous discharging current(Max) | 7.6A | | | 7.6A | |
| | The end of charge condition | 250mA / 1Min | | | 200mA / 1Min | |
| | Discharge protection | Under voltage protection / Over current protection | | | | |
| | Charge protection | Over voltage protection / Over current protection | | | | |
| | Ambient temp | 0°C~40°C | | | 0°C~40°C | |
| | Storage Tem | -20°C~60°C | | | -20°C~60°C | |
| | Self-discharge rate | 340uA~440uA | | | | |
| | Dimensions | 139mm(L) * 47mm(W)*26mm(H) | | | 165mm(L) * 76mm(W)*26mm(H) | |
| | Weight | 236g | | | 450g | |
| | Cycle life | 300 charge / discharge cycles | | | | |
| | Backup | 60W / 10Min | | | 100W / 10Min | |
| | Safety class | CE, UL, TUV | | | | |

Note: Suggest to replace Battery Module every 2 years.

Selection table for UPS modules and main buffering time

| AFOLUX PPC | AUPS-A10 | AUPS-A20 | AUPS-B10 | AUPS-B20 |
|------------------------------|----------|----------|----------|----------|
| Under 50W solution | | | | |
| AFL-057-LX (15W~20W) | 145min | 145min | 290min | 290min |
| AFL-07A-N270 (20W~25W) | 100min | 100min | 200min | 200min |
| AFL-08AH-N270 (25W~30W) | 70min | 70min | 140min | 140min |
| AFL-10A-N270 (25~30W) | 70min | 70min | 140min | 140min |
| AFL-10A-9103 (40W~45W) | 50min | 50min | 100min | 100min |
| AFL-10A-LX (25W~30W) | 70min | 70min | 140min | 140min |
| AFL-12A-LX (25W~30W) | 70min | 70min | 140min | 140min |
| AFL-12B-CX2 (38W~42W) | 50min | 50min | 100min | 100min |
| AFL-12A-N270 (25W~30W) | 70min | 70min | 140min | 140min |
| AFL-12B-9103 (45W~48W) | 45min | 45min | 90min | 90min |
| 50W ~ 100W solution | | | | |
| AFL-15B-915-CM370 (58W~63W) | - | - | 35min | 35min |
| AFL-15C-9652-T7500 (65W~70W) | - | - | 30min | 30min |
| AFL-17B-915-CM370 (75W~80W) | - | - | 25min | 25min |
| AFL-17C-9652-T7500 (85W~90W) | - | - | 20min | 20min |
| AFL-19B-915-CM370 (75W~80W) | - | - | 25min | 25min |
| AFL-19C-9652-T7500 (85W~90W) | - | - | 20min | 20min |

Note: The backup time could be varied on different models or operating temperature.



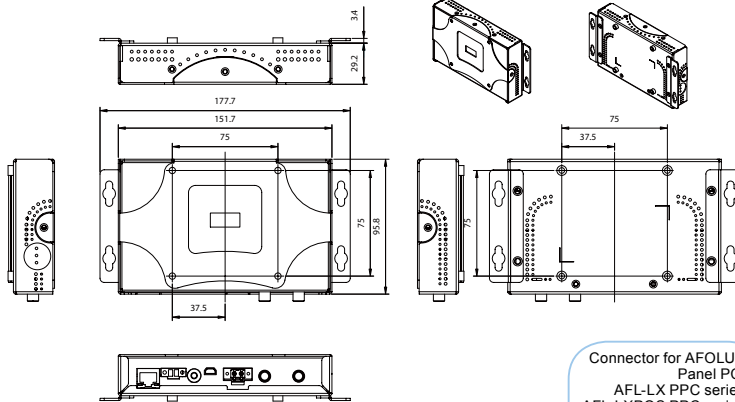
BAT-LI-2S2P3800



BAT-LI-4S2P3800

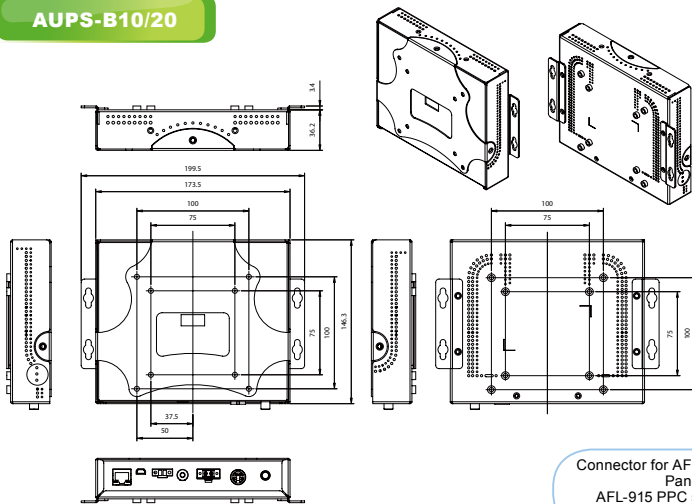
AUPS Mechanical Drawing (Unit: mm)

AUPS-A10/20



Connector for AFOLUX Panel PC:
 AFL-LX PPC series
 AFL-LXPOS PPC series
 AFL-CX2 PPC series
 AFL-9103 PPC series
 AFL-N270 PPC series

AUPS-B10/20



Connector for AFOLUX Panel PC:
 AFL-915 PPC series
 AFL-965 PPC series

Connector for AFOLUX Panel PC:
 AFL-LX PPC series
 AFL-LXPOS PPC series
 AFL-CX2 PPC series
 AFL-9103 PPC series
 AFL-N270 PPC series

DC Power Cable (DC plug to DC plug) with lock
 32000-115300-RS



Remote Switch Cable
 32000-115600-RS



USB Connection Cable
 32000-115500-RS



DC Power Cable (DC plug to DC plug)without lock
 32000-120400-RS



DC Power Cable (DC plug to DC plug) with lock
 32000-115300-RS



Remote Switch Cable
 32000-115600-RS



USB Connection Cable
 32000-115500-RS



DC Power Cable (DC plug to mini DIN)
 32000-115400-RS



DC Power Cable (DC plug to DC plug)without lock
 32000-120400-RS



Ordering Information

| Part No. | Description |
|-------------------------------|--|
| AUPS-A10-R10 | VESA 75, DC 12V input, 12V output 60W UPS module with 3800mAh, 2S2P Li-Ion battery |
| AUPS-A20-R10 | VESA 75, DC 9~36V input, 12V output 60W UPS module with 3800mAh, 2S2P Li-Ion battery |
| AUPS-B10-R10 | VESA 100, DC 12V input, 12V output 100W UPS module with 3800mAh, 2S4P Li-Ion battery |
| AUPS-B20-R10 | VESA 100, DC 9~36V input, 12V output 100W UPS module with 3800mAh, 2S4P Li-Ion battery |
| BAT-LI-2S2P3800 (AUPS-A10/20) | Smart battery ;TE9IC032K1002 ;Lithium ion battery (S2P); 7.4V;3800mAh;RoHS |
| BAT-LI-4S2P3800 (AUPS-B10/20) | Smart battery ;TE9IC042K1002 ;Lithium ion battery (4S2P); 14.8V;3800mAh;RoHS |

Packing List

| Item | DC power cable, 150mm, mini Din 4 pin male to DC plug 5.0x2.1 (AUPS-B10/B20 only) | DC power cable, 150mm, DC plug 5.5x2.1 to DC plug 5.0x2.5 without lock | DC power cable, 150mm, DC plug 5.5x2.1 to DC plug 5.0x2.5 with lock | USB cable, 200mm, USB type A male to mini USB | Remote switch cable, 1200mm | Screws kit | Utility CD (including utility software and user's guide) |
|-------------|---|--|---|---|-----------------------------|-----------------|--|
| Part Number | 32000-115400-RS | 32000-120400-RS | 32000-115300-RS | 32000-115500-RS | 32000-115600-RS | 44013-030041-RS | 7B000-000087-RS |
| Q'ty | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | | | | | | | |