

# Faster and New SATA Flash Storage

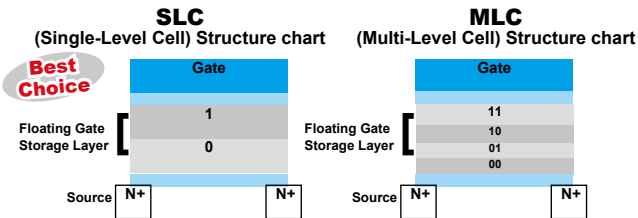
The anti-vibration IEI SLC flash modules featured low power consumption, high performance and perfect reliability are best for SATA SSD and SATA DOM solutions. The SSD not only has much higher performance than the HDD, but also can be operated anytime due to the lack of moving parts such as motor, bearing or rotating head. In addition, the SSD is able to fulfill any specialized application in any harsh environment.

## Complete Industrial SLC Solution



Interface	IDE PATA	SATA 1.5Gb/s	SATA 3Gb/s
Data Transfer Rate	66/100/133 MB/sec.	SATA 6Gb/s	SATA 6Gb/s 3Gb/s
Reliability	Fair	Better	Better
Power Consumption	Higher	Lower	Lower
Heat Delivery	Fair	Better	Better
Chipset Support after 945G/GM	No	Yes	Yes

## SLC vs. MLC Comparison Table



	SLC	MLC
Endurance (Erase cycle)	100,000	5,000-10,000
Operating Temp. Range	Support Wide Temp. -40°C~+85°C	0°C~+70°C
Power Consumption	Lower	Higher
Read/Write Performance	Better	Worse

## IEI SATA Flash Module Selection

Item	IFM-3010IS(WS)/IFM-3010IL(WL) IFM-3010IPS(WPS)	IFD-2520IS (WS)
Picture		
Capacity	1GB~32GB	1GB~32GB
Interface	SATA 6Gb/s	SATA 6Gb/s
IDE Transfer Mode	PIO Mode 0-4 MwDMA Mode 0-2 UltraDMA Mode 0-2	PIO Mode 0-4 UltraDMA Mode 0-6
Data Transfer Rate	Read-300MB/sec. ; Write-130MB/sec.	Read-510MB/sec. ; Write-340MB/sec.
Operating Temp.	-0°C~+70°C ; -40°C~+85°C	iFD-25102S: 0°C~+70°C iFD-2520WT: -40°C~+85°C
Storage Temp.	-55°C~+95°C	-55°C~+95°C
Humidity	10%~95%, non-condensing	10%~95%, non-condensing
Vibration	20G	20G (7~2000Hz)
Shock	1500G/10 ms	1500G/0.5 ms
ECC Technology	High reliability based on the internal ECC function	High reliability based on the internal ECC function
MTBF	>3,000,000 hours	>3,000,000 hours
R/W Endurance	2,000,000 times	2,000,000 times
Wear-Leveing	Support	Support
DC Input Voltage	+5V single power supply operation	+5V single power supply operation
Power Mode	Auto stand-by and sleep mode	
Power Consumption	200 mA	
Enclosure Material	PC mechanical cover	Metal mechanical cover
Dimensions (WxLxH)	20.5 x 39.2 x 8 mm	69.8 x 100.1 x 9.3 mm
Certificate	RoHS / CE / FCC	

### Ordering Information

#### Industrial SATA Flash Card

Part No.	Interface	Capacity
IFM-3010IS-XXXX	Vertical SATA 6Gb/s 7 pin	1G~32G
IFM-3010WS-XXXX	Vertical SATA 6Gb/s 7 pin	1G~32G
IFM-3010IL-XXX	Vertical SATA 6Gb/s 7 pin	1G~32G
IFM-3010WL-XXXX	Vertical SATA 6Gb/s 7 pin	1G~32G
IFM-3010IPS-XXXX	Horizontal SATA 6Gb/s 7 pin	1G~32G
IFM-3010WPS-XXXX	Horizontal SATA 6Gb/s 7 pin	1G~32G

#### Industrial SATA 2.5" Flash Disk

Part No.	Interface	Capacity
IFD-2520IS-XXXX	SATA 6Gb/s 7+15 pin	8GB-128GB
IFD-2520WS-XXXX	SATA 6Gb/s 7+15 pin	8GB-64GB

XXXXX=Capacity-128MB/256MB/512MB/1GB/2GB/4GB/8GB/16GB/32GB/64GB/128GB  
 I= Standard grade operation temp.: 0°C~70°C  
 W=Industrial grade operation temp.: -40°C~85°C



# 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 (depending 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

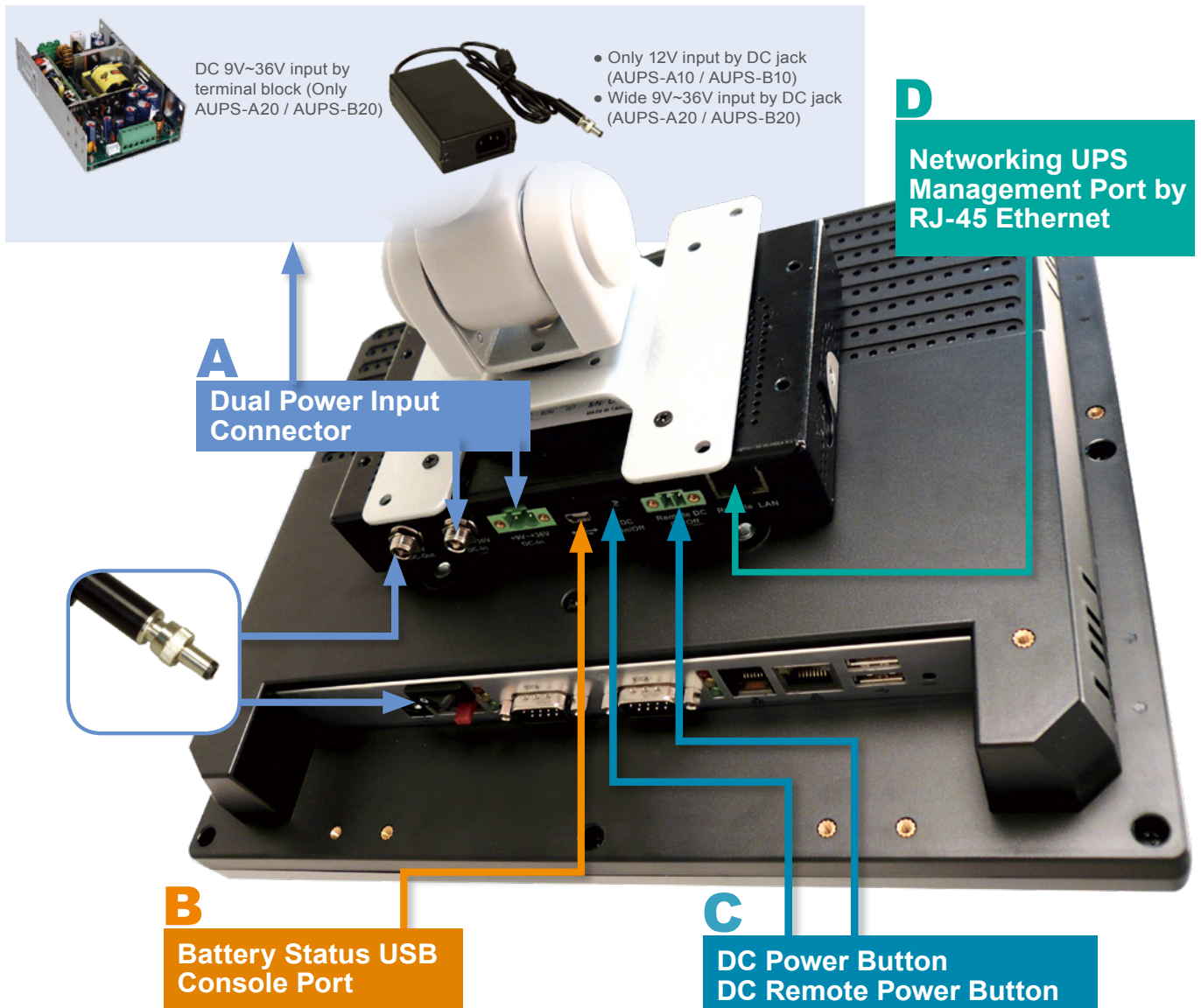


Model Name	AUPS-A10 / AUPS-A20	AUPS-B10 / AUPS-B20
Input Power	AUPS-A10 (12V)	AUPS-B10 (12V)
	AUPS-A20 (9~36V)	AUPS-B20 (9~36V)
Dimensions (mm)	150 x 95 x 34	170 x 150 x 34
Battery Capacity	28 Wh (Watt/Hour)	56 Wh (Watt/Hour)
Output Power	60W (5A@12V)	100W (8.3A@12V)
VESA Support (mm)	75 x 75	75 x 75 / 100 x 100

# 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.



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

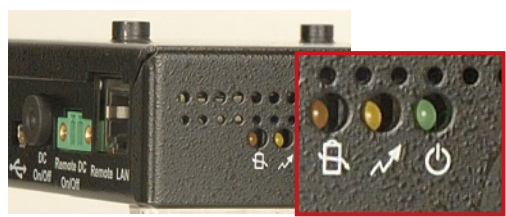
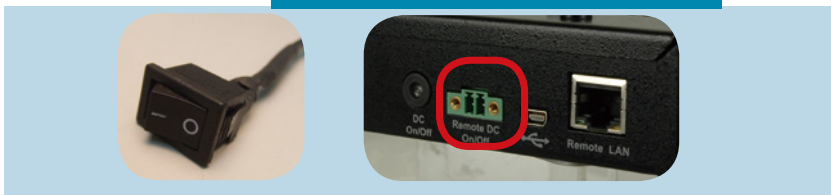
- Only 12V input by DC jack (AUPS-A10 / AUPS-B10)
- Wide 9V~36V input by DC jack (AUPS-A20 / AUPS-B20)

**D**  
Networking UPS Management Port by RJ-45 Ethernet

**A**  
Dual Power Input Connector

**B**  
Battery Status USB Console Port

**C**  
DC Power Button  
DC Remote Power Button



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



# AUPS Network Administration Tool

## Intelligent Software Utility

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



## Network Remote Management Software Battery Capacity Status

### UPS Status Monitoring

**Stack Version:** v1.3  
**Build Date:** May 10 2018 00:08:00

- STATUS** - display UPS status and change UPS ON/OFF
- Send E-mail** - Send UPS status with E-MAIL
- Configuration** - setup IP Address and enable DHCP...

### Power On/OFF

(click to toggle)  
**UPS ON/OFF:**  
 ON  
 OFF  
**OS Shut Down:**  
 Yes  
 No

**STATUS** Send E-mail Configuration

**AUPS**

Stack Version: v1.3  
 Build Date: May 10 2018 00:08:00

- STATUS** - display UPS status and change UPS ON/OFF
- Send E-mail** - Send UPS status with E-MAIL

**"Battery 1":**  
**STATUS:** Charging  
**Capacity(%):** 87  
**VOLTAGE(mV):** 12175  
**Current(mA):** 2454  
**Temperature(C):** 35  
**RemainTime(min):** Not Used

**UPS ON/OFF:** (click to toggle)  
 ON  
 OFF  
**OS Shut Down:**  
 Yes  
 No

**"Battery 1":**  
**STATUS:** Charging  
**Capacity(%):** 87  
**VOLTAGE(mV):** 12175  
**Current(mA):** 2454  
**Temperature(C):** 35  
**RemainTime(min):** Not Used

Remote control DC output ON/OFF via web interface.

# AUPS Local USB Utility Tool

## Monitor the Most Critical Battery Functions on the Local Machine

The battery monitoring utility provides AUPS status monitoring and configuration ability. Uninterruptible Power Systems is a significant product that serves as emergency power when you suffer from electric event.



### MONITORING SYSTEM STATUS

Shows system status real-time monitoring

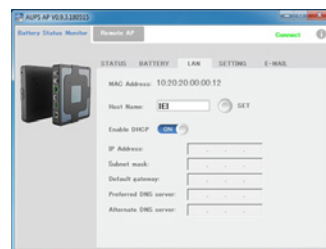
- DC Power indicator
- Battery capacity
- Battery status
- Temperature



### BATTERY STATUS

Shows battery status real-time monitoring

- Real-time information update
- Status bar



### LAN CONFIGURATION

LAN shows system IP Address information



### E-MAIL

The E-mail page is where to set the SMTP settings for sending alert notification via e-mail



### SETTING

Setting system management

Buzzer	Enable or disable the buzzer that warns when the system is switching to use battery power.
Enable LAN	Enable or disable the LAN for remote monitoring function.
Power	Click the button to power off the AUPS power module immediately.
Auto DC on	Enable to automatically power on the AUPS once DC power is applied.
Shut down condition (capacity %)	Set the battery capacity parameter for the system to shut down automatically.
DC off delay time (0~65536 sec)	Set the delay time for the AUPS series to power off after the system shut down.
System will be down-converted (capacity %)	Set the battery capacity parameter for the system to automatically switch to the Balanced power plan set in its Windows OS.
System go to sleep mode (capacity %)	Set the battery capacity parameter for the system to go into sleep mode automatically.

## 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 loss at 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	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 (LxWxH)	152mm x 96mm x 28mm		174mm x 147mm x 35mm	
	Weight	1.2 kg		1.8 kg	
LED Indicator	Green	DC power input			
	Yellow	Battery charging			
	Orange	Battery discharging			
Environment	Operating Tem.	0°C~40°C			
	Storage Tem.	-20°C~50°C			

Note1: Connecting DC input constantly is recommended. 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	31603-000072-RS		31603-000073-RS	
Battery type	Li-Ion 2S2P 7.26V		Li-Ion 4S2P 14.52V	
Battery capacity	7.26V 5200 mA AH		14.52V, 5200 mA AH	
Maximum charge voltage	8.4V		16.8V	
The end of discharging voltage	5.5V		11V	
Recommended charging current (max.)	2.55A		2.55A	
System continuous discharging current (max.)	7.5A		7.5A	
The end of charge condition	255mA / 1Min		255mA / 1Min	
Discharge protection	Over current protection			
Charge protection	Over current protection			
Ambient temperature	0°C~45°C			
Storage temperatur	-20°C~65°C			
Self-discharge rate	340uA~440uA			
Dimensions (LxWxH)	139mm x 47mm x 26mm		165mm x 76mm x 26mm	
Weight	244g		466g	
Cycle life	300 charge / discharge cycles			
Backup 60W / 10Min 100W / 10Min	50W / 10Min		100W / 10Min	
Safety class	CE, FCC, UN38.3, UL			

Note: Replacing battery module every 2 years is recommended.



31603-000072-RS 31603-000073-RS

### Selection Table for UPS Modules and Main Buffering Time

AFOLUX PPC	AUPS-A10	AUPS-A20	AUPS-B10	AUPS-B20
Under 50W solution				
AFL3-W07A-BT (20W)	110min	110min	220min	220min
AFL3-08A-BT (30W)	75min	75min	150min	150min
AFL3-W10A-BT (33W)	70min	70min	140min	140min
AFL3-12A-BT (42W)	55min	55min	110min	110min
AFL3-W15A-BT (50W)	45min	45min	90min	90min
AFL3-W19A-AL (40W)	55min	55min	110min	110min
50W ~ 100W solution				
AFL3-12C-ULT3 (58W)	-	-	75min	75min
AFL3-W15B-H81 (72W)	-	-	60min	60min
AFL3-W15C-ULT3 (68W)	-	-	65min	65min
AFL3-W19C-ULT3 (63W)	-	-	70min	70min
AFL3-W22C-ULT3 (65W)	-	-	70min	70min

### Ordering Information

Part No.	Description
AUPS-A10-R20	VESA 75, DC 12V input 60W UPS module with 7.26V; 5200mAH, 2S2P Li-Ion battery, R20
AUPS-A20-R20	VESA 75, DC 9V ~ 36V input 60W UPS module with 7.26V; 5200mAH, 2S2P Li-Ion battery, R20
BATKIT-2S2P5200-R10	Battery installation kit with 2S2P 7.26V 5200mAH Smart Battery pack and accessories
31603-000072-RS	Battery Pack; Li Ion; WELL DONE/WTE; EXIC011K1002; SAMSUNG; ICR18650-26J; 5200mAH; 7.26V; 2S2P; 244±10g;BAT-LI-2S2P5200; CCL; RoHS
AUPS-B10-R20	VESA 100, DC 12V input 100W UPS module with 14.52V; 5200mAH, 4S2P Li-Ion battery, R20
AUPS-B20-R20	VESA 100, DC 9V ~ 36V input 100W UPS module with 14.52V; 5200mAH, 4S2P Li-Ion battery, R20
BATKIT-4S2P5200-R10	Battery installation kit with 4S2P 14.52V 5200mAH Smart Battery pack and accessories
31603-000073-RS	Battery Pack; Li Ion; WELL DONE/WTE; EXIC021K1002; SAMSUNG; ICR18650-26J; 5200mAH; 14.52V; 4S2P; 466±10g; BAT-LI-4S2P5200; CCL; RoHS

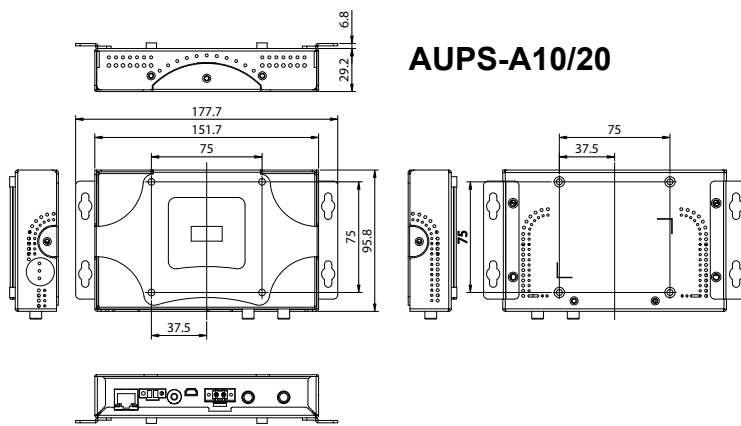
Note: The backup time could be varied on different models or operating temperature.

Packing List



Item	DC power cable, 150mm, DC plug 5.5 x 2.1 to DC plug 5.0 x 2.5 without lock	USB cable, 200mm, USB type A male to mini USB	Remote switch cable, 1200mm	Screw kit
Part Number	32000-120400-RS	32000-115500-RS	32000-124600-RS	44013-030041-RS
Q'ty	1	1	1	1

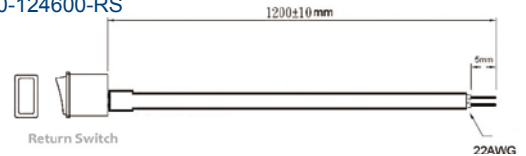
AUPS Mechanical Drawing (Unit: mm)



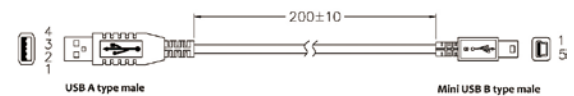
DC Power Cable (DC plug to DC plug) with lock  
32000-115300-RS



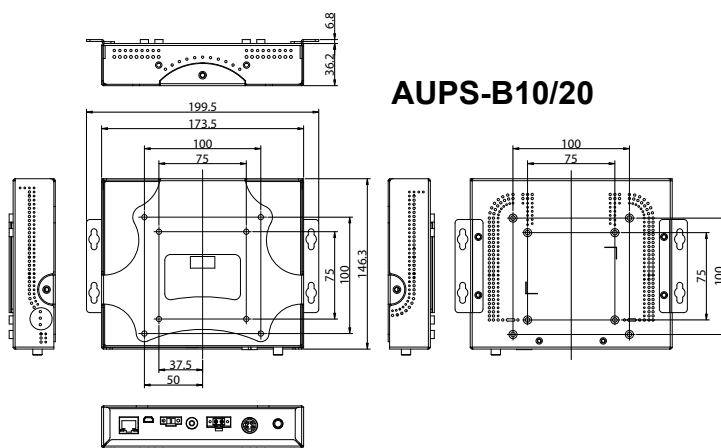
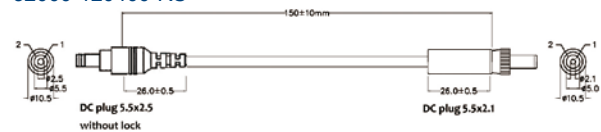
Remote Switch Cable  
32000-124600-RS



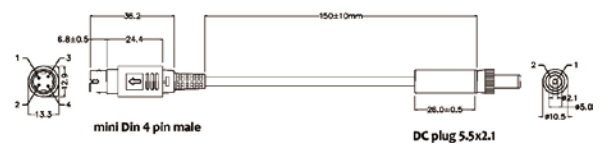
USB Connection Cable  
32000-115500-RS



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



DC Power Cable (DC plug to mini DIN)  
32002-002201-100-RS



# IDD-930160-KIT

60 W DC/DC Converter Module for AFOLUX Panel PC and Monitor



## Specifications

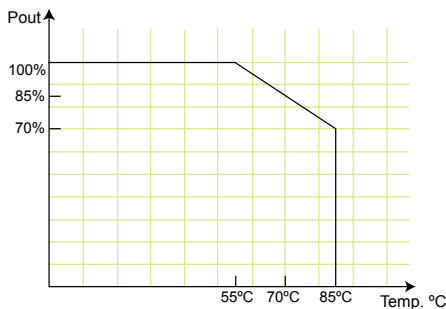
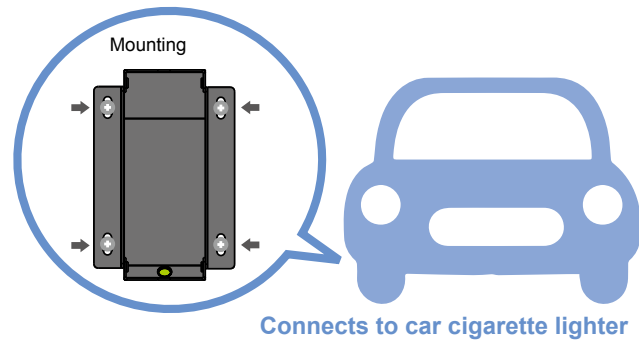
- Input voltage: 9-30 VDC
- Input current: Max. 8.2 A at 9 VDC
- Output: 12 V@5 A
- Max. total output: 60W
- Performance characteristics:
  - Noise and ripple: <120 mV
  - Line regulation: <2.5%
  - Load regulation: <2.5%
- Transient toggle rate: 250 Hz (50% duty ratio)
- Transient current step:
  - From 0% to 50% and 50% to 100% of max current
- Efficiency: typ. 95% (Vin=12 V, 80% of full load)
- Dimensions: 42 mm x 103 mm x 31 mm
- Mounting kit: 12 mm x 80 mm
- Cable length: 180 cm
- Operating temperature: -10°C~55°C
- Load down protection

## Typical Applications

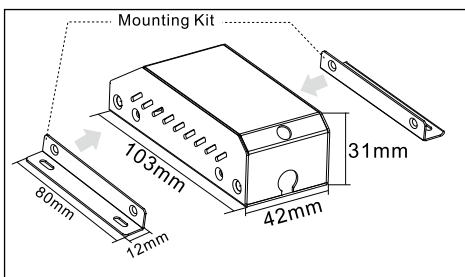


AFOLUX Panel PC 7''~15''  
AFOLUX Monitor Series

IDD-930160-KIT



## Dimensions (Millimeters)



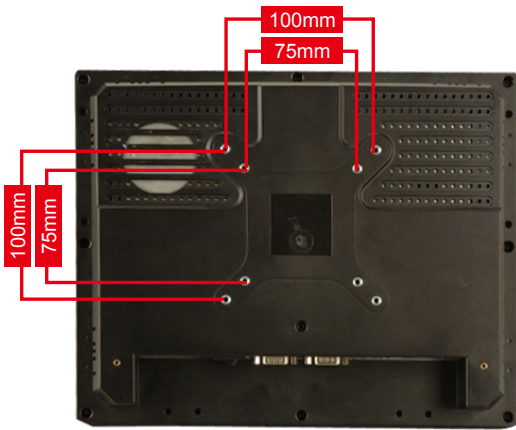
## Packing Information

1 x IDD-930160-KIT-R20
1 x Mounting kit
1 x Screw kit
1 x Anti-slip strip
1 x Utility CD

## Ordering Information

Part No.	Description
IDD-930160-KIT-R20	60 W DC/DC 9-30 VDC input vehicle power adapter





# IEI Quick Mounting Technology

## Compliant with VESA Mounting Standards

IEI panel solutions have four mounting holes compliant with the VESA (Video Electronics Standards Association) mounting standard (75mm x 75mm/100mm x 100mm) on the rear panel for stand mounting and other mounting methods.

## 1. Stand Mounting

### VESA 75/100 Universal Stand

STAND-A21-R10



Portrait/Landscape



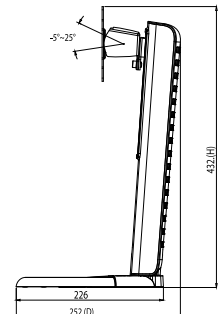
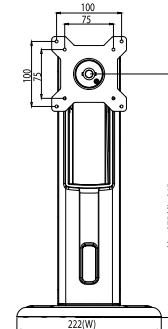
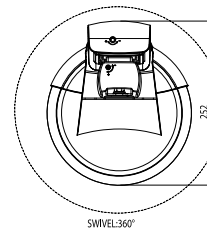
Height Adjustment (13 cm)



Right/Left Pan (360°)



Forward/Backward Tilt (+25°/-5°)

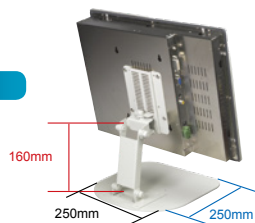


### Ordering Information

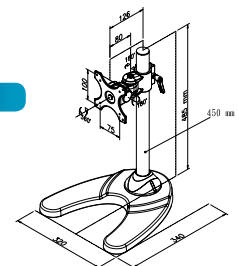
Part No.	Description
STAND-A21-R10	15"~21" VESA 75x75 mm/100x100 mm PPC/Monitor Stand, support from 6 KG to ~12 KG, Black, RoHS



STAND-100



STAND-210



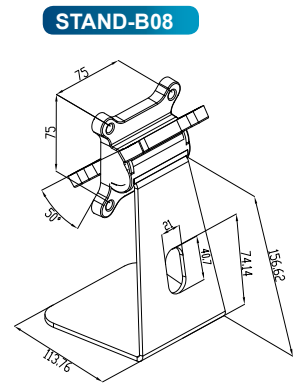
### Ordering Information

Part No.	Description
STAND-100-RS	<ul style="list-style-type: none"> <li>Material: Heavy-duty steel</li> <li>Adjustable display angle</li> <li>3kg to 8kg loading capacity</li> <li>Color: White (Pantone 413C)</li> </ul>

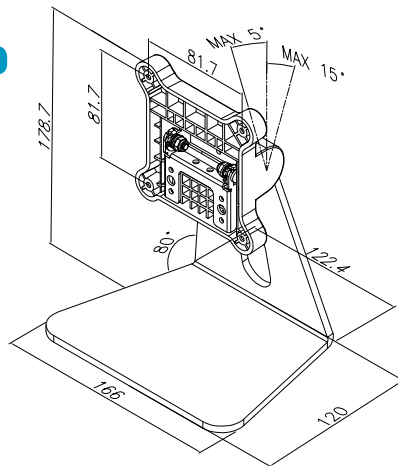
### Ordering Information

Part No.	Description
STAND-210-R11	<ul style="list-style-type: none"> <li>Support VESA 75/100 standard</li> <li>Weight capacity from 7kg~10kg</li> </ul>

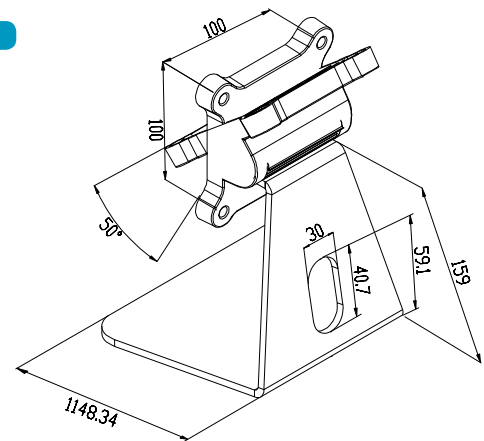
VESA 75/100 Easy Stand



**STAND-A19-RS**



**STAND-A12-RS**



Ordering Information

Part No.	Description
STAND-B08	5.6"~8.4" VESA 75x75mm PPC/monitor stand, support up to 5 kg, Silver color, RoHS
STAND-C12-R10	5.7" ~ 12.1" VESA 100x100mm, 75x75mm PPC/Monitor Stand, support up to 7.5kg, Black color, RoHS
STAND-A12-RS	10"~12.1" VESA 100x100mm PPC/monitor stand, support up to 5 kg, Silver color, RoHS
STAND-A19-RS	12.1"~19" VESA 100x100mm PPC/monitor stand, support up to 7.5 kg, Silver color, RoHS

## 2. V-STAND

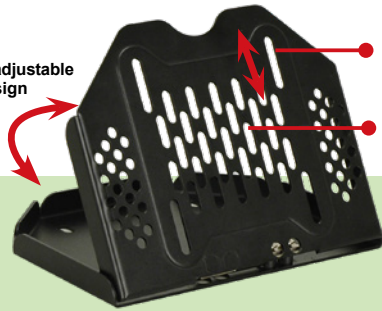
### VESA Multi-Mounting Stand

IEI patented multi-mounting V-Stand allows wall, ceiling, desk, rear and side mounting to meet diverse applications. Its 0° to 90° adjustable hinge design provides optimal viewing in various environments, such as kitchen, room or shelf.

VESA	Model
75 x 75mm	VSTAND-A07-R11
75 x 75mm / 100 x 100mm	VSTAND-A10-R11
	VSTAND-A12-R11



3. 0° to 90° adjustable hinge design



1. Height adjustable and VESA 75/100 compliant mounting holes

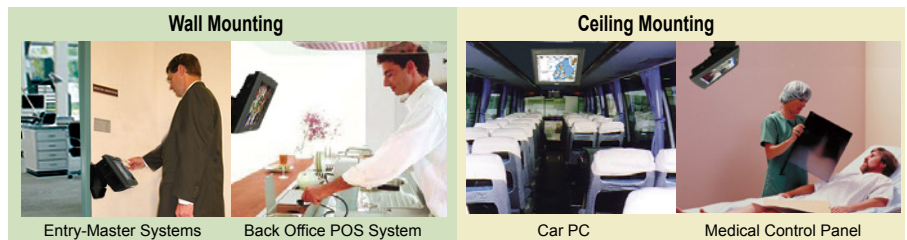
2. Heat dissipation holes help to cool down the system

#### Features:

- 0° to 90° adjustable hinge design allows comfortable viewing
- Standard VESA 75/100 compliance
- Heat dissipation holes
- Compact size, easy to use for mounting anywhere

### A. One fits all solution

The V-Stand is a compact and tilt adjustable mounting stand providing mobility and ergonomic comfort to fit common wall mounting and ceiling mounting situations.



### B. 0° to 90° excellent adjustability

You can change the angle of the stand from 0° to 90° to reach almost any point with ergonomic features for comfortable viewing.



POS System

**No Hinge Limitation!**



Self-ordering System

### C. Space saving and easy installation

Compact size provides mobility



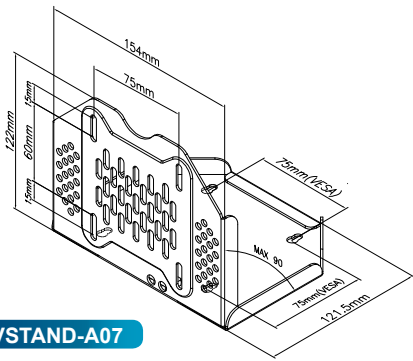
1: Tighten the screws in the rear of the AFOLUX PPC VESA mounting holes



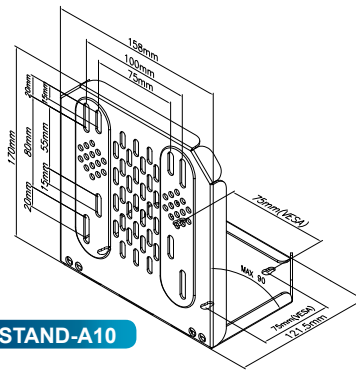
2: Select the position to mount stand kit



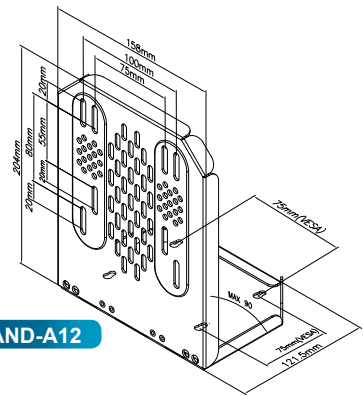
3: Plug in the system to operate



VSTAND-A07



VSTAND-A10



VSTAND-A12

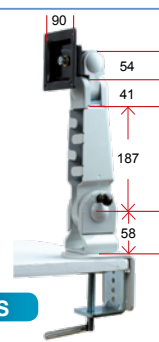
### Ordering Information

Part No.	Description
VSTAND-A07-R11	LCD monitor / PPC stand V type, for AFL series, VESA 75, 0°~90° degree adjustable hinge, support up to 2.5 kg, RoHS
VSTAND-A10-R11	LCD monitor / PPC stand V type, for AFL series, VESA 75/100, 0°~90° degree adjustable hinge, support up to 3 kg, RoHS
VSTAND-A12-R11	LCD monitor / PPC stand V type, for AFL series, VESA 75/100, 0°~90° degree adjustable hinge, support up to 3.5 kg, RoHS

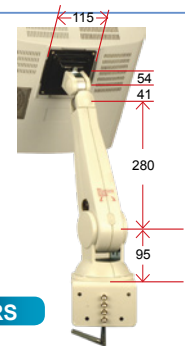
## 3. ARM

### VESA 75/100 Desk ARM

VESA	Model
75x75mm/100x100mm	ARM-11-RS
	ARM-31-RS



ARM-11-RS



ARM-31-RS

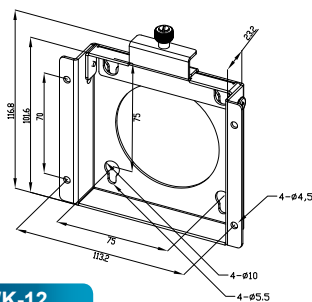
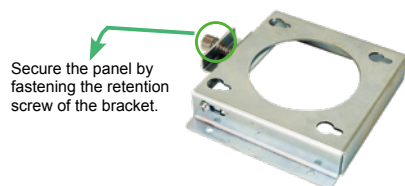
### Ordering Information

Part No.	Description
ARM-11-RS	LCD Monitor / PPC ARM, VESA 75/100, 3kg~6kg, RoHS
ARM-31-RS	LCD Monitor / PPC ARM, VESA 75/100, 7kg~14kg, RoHS

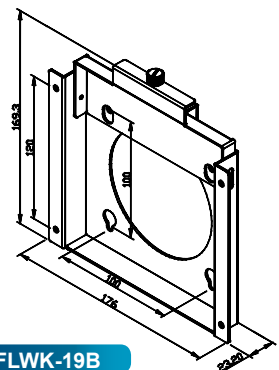
## 4. Wall Mounting

### VESA 75/100 Wall Mounting

VESA	Model
75x75mm/100x100mm	AFLWK-12
	AFLWK-19B



AFLWK-12



AFLWK-19B

### Ordering Information

Part No.	Description
AFLWK-12	5.6"~12" VESA 75x75mm PPC/Monitor Wall Mount Kit with Retention Screw, Silver color, RoHS
AFLWK-19B	15"~19" VESA 100x100mm PPC/Monitor Wall Mount Kit with Retention Screw, Silver color, RoHS

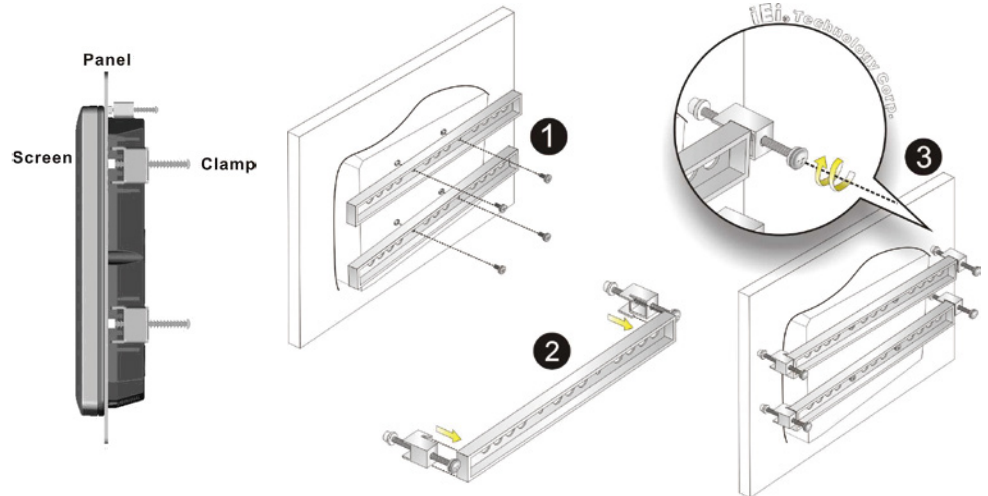
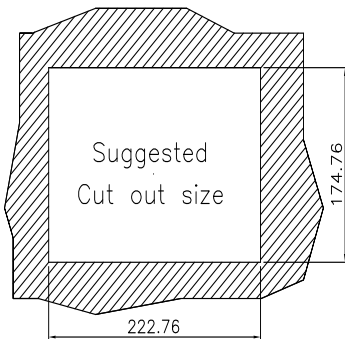
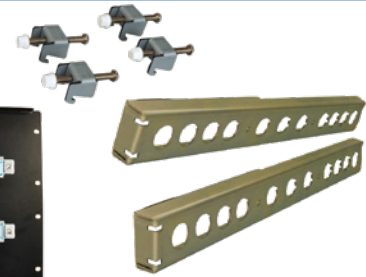


# 5. Panel Mounting \*Please refer to product datasheet for mounting way suggestion

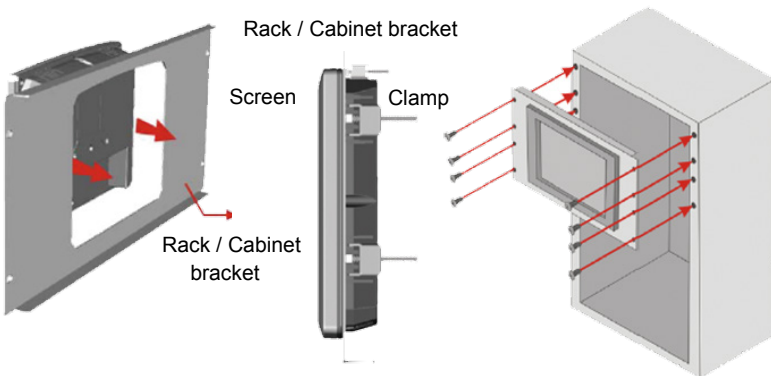
## Type A



## Type B



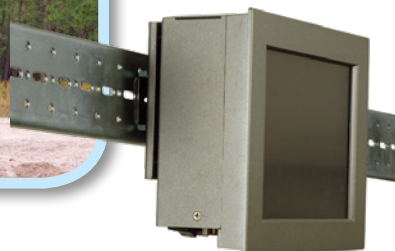
# 6. Rack Mounting



## Ordering Information

Part No.	Description
AFLRK-xx	For AFOLUX PPC/Monitor Series

# 7. Din Mounting



## Ordering Information

Part No.	Description
DK-84MS	For 6.5"~8.4" Industrial Aluminum Panel PCs/Industrial Monitors