SUNPOE is the new POE screen for use with the SUNGROUP innovative and intelligent resource management system.

Introducing New Design Digital Signage Series

A Series



B Series



C Series



D Series



- SUNPOE has a large wide screen with 1024 x 768 resolutions for crystal clear display for MULTI purpose use. Environmentally friendly, low power, solid state design using
- A10 and A20 processor with integrated graphics and Fan less cooling system with ultra-low power consumption.
- PoE (Power over Ethernet) as standard, reducing cable clutter or traditional power input option.
- Robust IP65 front panel resistance to water and dust ingress.(Option)
- Low profile sleek design with VESA Mounting capability.
- Central server managed by Iseeboard.com so fully scalable for enterprise wide solutions.





About Display

Model Name	SUN-SGxxxCTIPOE (With or without 2 Speakers)
LCD Display	10.1'/12"/15.6" TFT LCD 4:3 & 16:9 Panel
Viewable Size (H x V)	10.1"/12"/15.6" active matrix TFT XGA LCD
Dot Pitch (H x V)	0.3075 x 0.3075mm
Contrast ratio	450~700 : 1 (different panel)
Brightness	250 ~ 330 cd/m2 (different panel)
Response Time	16 < ms
Viewing Angle	L/R: 100°~ 140 + - 10, U/D: 50 ~ 110° + - 10 (different panel)
Display Color	12.1 ~ 17.0 Millions (different panel)
Chipset IC	Boxchip A13 (Optional)
Cpu	Cortex A8 Single-Core Max 1.2Ghz)
- r -	Mali 400(optional)
O.S.	Android version
Memory	1GB (option)
External USB	3G Dongle (optional)
Wi-Fi	802.11 b/g/n (option)
Audio support formats	MP3/WMA/OGG/FLAC/APE/AAC/AC3/ATRA/DTS (option)
Video support formats	Video decoding (Full HD), MPEG 1/2/4, H.263/264, DViX3/4/5/6
• •	XViD,WMV7/8, VP6, AVS (option)
Photo support formats	JPEG, BMP, GiF, PNG (option)
Flash Play	Version 11.1
PC Interface	RJ45 (Ethernet) /Micro SD/SD card/USB/power ports/USB x 2 (Max 5
	(option)
Life of light Source	50,000 hours (option)
Max Resolution	Max 1366 x768 (different panel)
HDTV Compatible	480p, 720p, (different panel)
Horizontal & Vertical frequency	Fh: 29.0 ~ 86 KHz, Fv: 50 ~60 Hz
Speakers	3 W x 2 pcs (Option)
Power Adaptor	Input AC 100 ~ 240V 50 / 60Hz
	Output DC 12V 4A
Operating Conditions	Temperature 0 ~ 50°C, Humidity 5% ~ 95%
Storage Conditions	Temperature -10 ~ 60°C, Humidity 5% ~ 95%
High Brightness Panel	Option
Wide View Angle Panel	Option
Ethernet software	Option
VESA Mount	75 x 75or 100 x 100mm
Note: Specifications are subjected to	change without prior notice

Complies with IEEE 802.3at Power over Ethernet (PoE) HUB Requirement.

The features 8 IEEE 802.3at Power over Ethe net (PoE) ports, which supply up to 30 watts of power per port. It can convert standard 100- 240V AC power into low- voltage DC, which runs over existing LAN cables to supply power to IEEE 802.3at compliant network accessories. The Hub should also features PoE detection, to verify whether the connected device is IEEE 802.3at compliant; if it is not a PoE device, only data will be sent through the LAN cable.

FEATURES & TECHNICAL SPECIFICATIONS Requirement.

- Complies with IEEE 802.3, 802.3u, 802.3x, 802.3af, and 802.3at standards
- Supplies 48V DC with 30W output per port
- Automatically detects powered devices (PD) and power consumption levels
- Supports auto fault detection (over/under current & voltage)
- Supports IEEE 802.3az Energy Efficient Ethernet

About PoE

Advanced Fully Integrated Embedded PoE⁺ PD Module AHPD Module



1. Description

The AHPD module is designed as an embedded isolated and advanced PoE⁺ (IEEE802.3at compliant) PD solution. AHPD module is fully integrated and ultra-high DC/DC converting efficiency (92% @ full load condition) PD module. AHPD improves thermal effect more efficiently and power saving that is caused by its ultra-high DC/DC converting efficiency.

The AHPD module is compliant with IEEE 802.3at power classification (type 1 and type 2), Class 0 to Class 4 signature and support PSE Alternative A / B connections. Maximum output power can reach 25.5W (12V/2.125A). Maximum peak output power can be up to 30W (12V/2.5A). The size is 75mm (L) x 30mm (W) X15.5mm (H), input voltage range is from 37Vdc to 60Vdc and less external components, only one output decoupling capacitor is needed. Operating temperature range is from -25°C to 70°C, @ Full load.

AHPD module is designed by a more advanced concept to reach higher efficiency reliability, and AHPD module has same pin definition with THPD module.

2. Feature

- IEEE802.3at compliant and backward compatible with IEEE802.3af
- Support PoE⁺ applications in both of
- Fast / Gigabit Ethernet environments
- Support wide input voltage range -
- 37Vdc to 60Vdc.
- Thermal cut off
- Short circuit protection
- Over current protection
- High DC/DC converting efficiency (92%)
- Less external component –
- one output decoupling capacitor
- Isolation level 1.5KVrms
- On board thermal pads
- Enhanced surge protection and output filter
- Internal build in 2 channel bridge rectifiers
- support end-point and mid-span mode

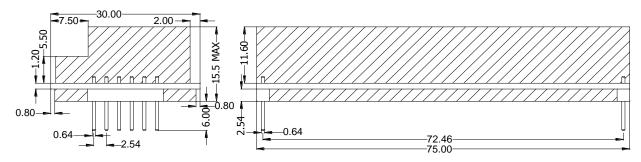
3. Applications

- Wireless Access Point (AP)
- VoIP Phone
- Surveillance System
- IP Camera
- PTZ Camera
- Security System
- Fingerprint Identification
- WiMAX Base Station
- PoE Clock
- Network Attached Storage (NAS)
- Remote Display Board
- Point of Sale (POS) System
- Media Converter
- Stand Alone PoE⁺ Splitter
- Isolated DC/DC Converter

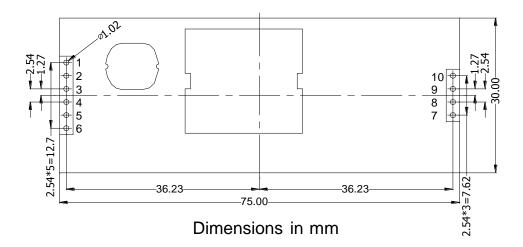
4. AHPD Series Product Lit

Part Number	Nominal Output Voltage / Current	Maximum Output Power	Nominal Input Voltage	Marking
AHPD-12	12Vdc / 2.125A	25.5W @ 25°C	48Vdc	AHPD-12

5. Package



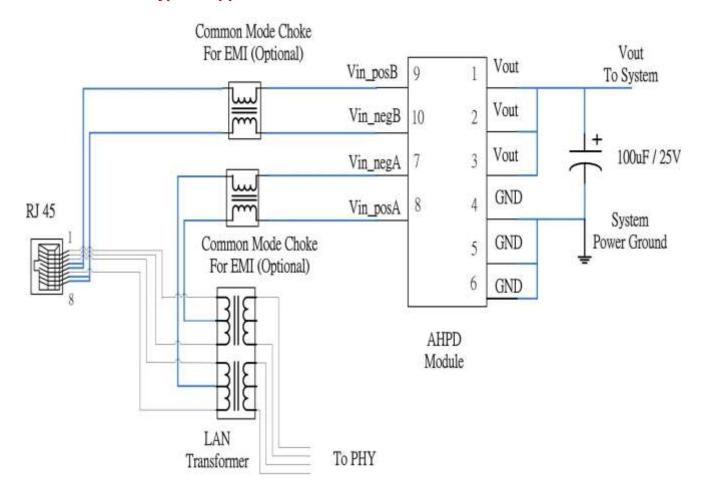
Dimensions in mm



6. Pin Definition

Pin Number	Symbol	Description			
1	Vout	Regulated DC Output. AHPD (secondary side) DC power output pin (12Vdc). Connect to system positive power input.			
2	Vout	Regulated DC Output. AHPD (secondary side) DC power output pin (12Vdc). Connect to system positive power input.			
3	Vout	Regulated DC Output. AHPD (secondary side) DC power output pin (12Vdc). Connect to system positive power input.			
4	GND	AHPD Power Ground. AHPD (secondary side) power ground. Connect to system power ground.			
5	GND	AHPD Power Ground. AHPD (secondary side) power ground. Connect to system power ground.			
6	GND	AHPD Power Ground. AHPD (secondary side) power ground. Connect to system power ground.			
7	Vin_negA	Power Interface Negative Input A (Alternative A mode). AHPD high voltage (primary side) negative voltage input A. Connect to central tap (primary side) of LAN transformer which is connected to pin 3 & 6 of the RJ45 connector. Vin_negA and Vin_posA are not polarity sensitive.			
8	Vin_posA	Power Interface Positive Input A (Alternative A mode). AHPD high voltage (primary side) positive voltage input A. Connect to central tap (primary side) of LAN transformer which is connected to pin 1 & 2 of the RJ45 connector. Vin_negA and Vin_posA are not polarity sensitive.			
9	Vin_posB	Power Interface Positive Input B (Alternative B mode). AHPD high voltage (primary side) positive voltage input B. Connect to pin 4 & 5 of the RJ45 connector. Vin_negB and Vin_posB are not polarity sensitive.			
10	Vin_negB	Power Interface Negative Input B (Alternative B mode). AHPD high voltage (primary side) negative voltage input B. Connect to pin 7 & 8 of the RJ45. Vin_negB and Vin_posB are not polarity sensitive.			

7. Fast Ethernet Typical Application



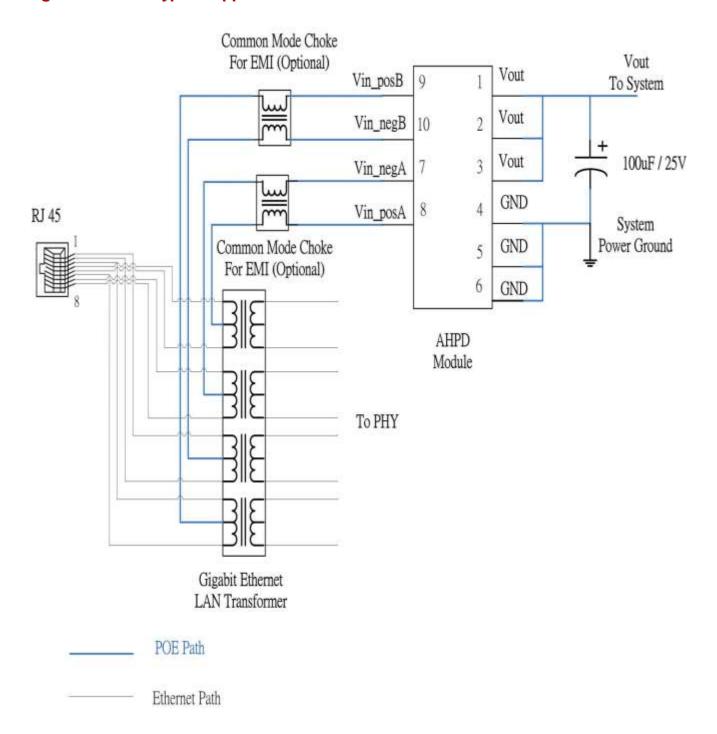
POE Path

Ethernet Path

Note

Common mode choke can eliminate EMI effect which is optional component

8. Gigabit Ethernet Typical Application



Note

Common mode choke can eliminate EMI effect which is optional component.

9. Electrical Characteristics

Item	DC Characteristic	Symbol	Min.	Тур.	Max.	Unit	Comment
1	Power Interface input	Vin_pos –	37 48	7 40	60	V	
	Voltage	Vin_neg		40	60		
2	Under Voltage Lockout	VLock out	33		37	V	
3	Output Voltage	Vout	11.4	12	12.6	V	
4	Maximum Output Power	Pout		25.5	W		
	(Vin = 48Vdc)	Poul			25.5	V V	
5	Maximum Output Current	lout			2.125	Α	
	(Vin = 48Vdc)	lout					
	Maximum Input Current						
6	Consumption	lin_max			1100	mA	@Full Load
	(Vin = 48Vdc)						
7	Vout Reverse Voltage	Vr			20	V	
8	DC/DC Converter	EFF	92%			AHPD-12	
	Efficiency	СГГ	92 /0				@Full Load
9	Isolation Level	ISO		1.5		KV	
10	Primary Side Soft Start	4		3.9		me	
	Delay	t_{ss}		3.9		ms	
11	Operating Temperature	T _{OP}	-25		70	°C	@Full Load
12	Storage Temperature	TStorage	-30	25	85	°C	

Note

- 1. Test ambient condition is 25°C.
- 2. Maximum output power and efficiency depends on ambient temperature. Maximum output power and efficiency maybe decay in high ambient temperature environment.



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