



UNMANAGED AI POE SWITCH, 2 \* RJ45 +  
1 \* SFP COMBO UPLINK PORTS;  
LONG DISTANCE IEEE 802.3af/at,

**S21602B20AI**  
**S22402B25AI**  
**S21602B30AI**  
**S22402G30AI**



## FEATURES

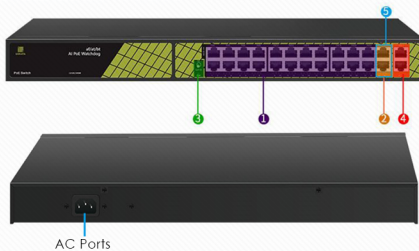
For S21602B20AI and S22402B25AI:

- 16\*10/100Base-TX PoE ports (S21602B20AI), 24\*10/100Base-TX PoE ports (S22402B25AI) + 2\*10/100/1000Base-T Uplink RJ45 ports + 1\*1000Base-X SFP Fiber combo port;
- Supports non-blocking wire-speed forwarding;
- Supports full-duplex based on IEEE802.3x and half-duplex based on backpressure;
- IEEE 802.3af/at PoE standard, automatically identifies power requirement of PoE devices without damaging non-PoE devices;
- Maximum PoE output power budget is 250W and the maximum PoE output power of a single port is 30W;
- Multi-function Switch: Long Distance Transmission Mode, ≤250 meters @10M;
- Supports VLAN Isolation, AI Self-Healing, and Power Priority mode;
- Plug and play;

For S21602B30AI and S22402G30AI:

- Using CAT5 network patch cords support power for the wireless AP/CPE and IP camera/PTZ;
- Networking standard: IEEE802.3af/at/bt;
- FE ports can support 250 meters long distance transmission automatically (S21602B30AI);
- POE power light blinks to determine the power status of the receiving end, and each blink is 2.7 watts (S22402G30AI);
- PoE Watchdog AI Function: Detection front-end PoE cameras and PD, Automatic detection, Automatic restart;
- Upload port automatic flip (Auto MDI / MDIX);
- 6KV lightning protection, 8KV surge protection, anti-reverse connection, over-current protection, over-voltage protection, over-temperature protection, Short circuit protection;
- The Max output power of the port is 60W, which is convenient for hi-power equipment;
- Zero configuration feature power supply is automatically supplied to the adaptive equipment;

## PORT DESCRIPTION



- 100Mbps PoE Ports
- 1000Mbps PoE Ports
- DC Ports
- 1000Mbps Uplink Ports
- 1000Mbps 60W Power Supply Port



## SPECIFICATIONS

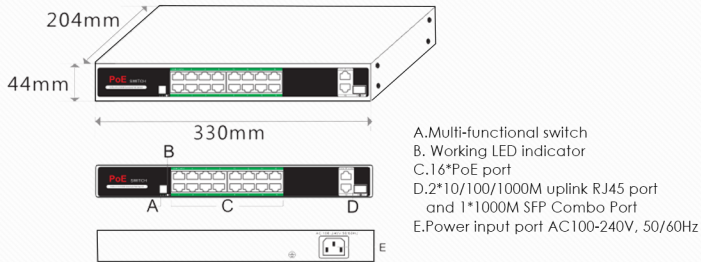
MODEL	S21602B20AI	S22402B25AI	S21602B30AI	S22402G30AI
Interface	16*10/100Base-TX PoE ports (Data/Power) 2*10/100/1000Base-T uplink RJ45 ports (Data) 1*1000Base-X SFP fiber port (Data) (combo port)	24*10/100Base-TX PoE ports (Data/Power) 2*10/100/1000Base-T uplink RJ45 ports (Data) 1*1000Base-X SFP fiber port (Data) (combo port)	14X10/100/100Mbps PoE ports (RJ45) 2X10/1000Mbps PoE ports (RJ45) uplink port (RJ45) 1X10/1000Mbps SFP	22X10/100/100Mbps PoE ports (RJ45) 2X10/100/1000Mbps PoE ports (RJ45) 2X10/1000Mbps uplink port (RJ45)
Twisted Pair Transmission	10BASE-T: Cat5 UTP (≤250 meter) 100BASE-TX: Cat5 or later UTP (≤100 meter) 100BASE-T: Cat5e or later UTP (≤100 meter)		10-BASE-T: CAT5 UTP (<=250meter) under FE ports 100BASE-TX: CAT5 or later UTP (<=130 meter) 100BASE-T: CAT3 or later UTP (<=130 meter)	
SFP Slot Port	Gigabit SFP optical fiber interface, default not matching optical modules (optional order single-mode/multi-mode, single fiber/dual fiber optical module. LC)			N/A
Optical Cable/Distance	Multi mode: 850nm/0 ~ 500M, single mode: 1310nm/0 ~ 40KM, 1550nm/0 ~ 120KM.			N/A
Functional Switch	E: When "ON", Port 9-16 supports VLAN and long distance transmission 10M/ 250m; When "OFF", 100m transmission. D: When "ON", Port 1-16 supports AI self-healing. P: When "ON", PoE total output power and priority indication.	E: When "ON", Port 17-24 supports VLAN and long distance transmission 10M/ 250m; When "OFF", 100m transmission. D: When "ON", Port 1-24 supports AI self-healing. P: When "ON", PoE total output power and priority indication.	N/A	N/A
Transmission Rate	2000Mbps Full Duplex; 10 or 100 or 1000Mbps Half Duplex			
Performance Specification	Network Latency (10 to 1000Mbps): ≤1 μs (use the 64byte package size)			

Disclaimer: Design & specifications are subject to change without prior notice.

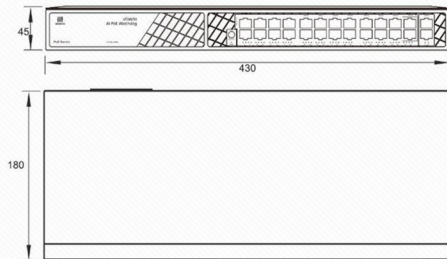


## DIMENSIONS

For S21602B20AI and S22402B25AI:

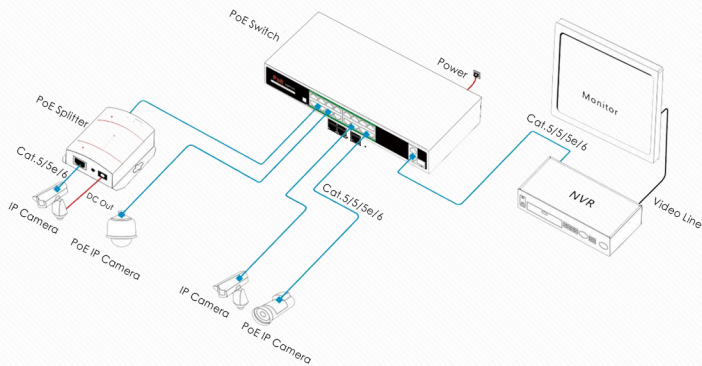


For S21602B30AI and S22402G30AI:

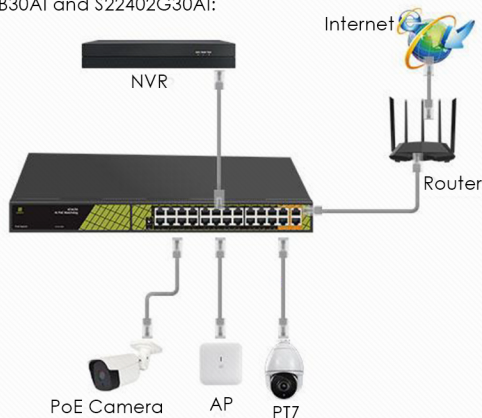


## APPLICATIONS

For S21602B20AI and S22402B25AI:



For S21602B30AI and S22402G30AI:



## SPECIFICATIONS

MODEL	S21602B20AI	S22402B25AI	S21602B30AI	S22402G30AI
<b>CHIP PARAMETER</b>				
Network Protocol	IEEE802.3 10BASE-T, IEEE802.3i 10Base-T IEEE802.3u 100Base-TX, IEEE802.3ab 1000Base-T IEEE802.3z 1000Base-X, IEEE802.3x		IEEE 802.3i 10BASE-T IEEE 802.3u 100BASE-TX/IEEE 802.3ab 1000BASE-T IEEE 802.3xFlowControl IEEE 802.3af/at/bt Power over Ethernet	
Forwarding Mode	Store and Forward(Full Wire Speed)			
Switching Capacity	14.8Gbps(non-blocking)		Bandwidth: 12.80Gbps	Bandwidth: 12.4Gbps
Forwarding Rate@ 64byte	6.55Mpps	5.36Mpps	9.52Mpps	9.23Mpps
MAC	16K		8K	
Buffer Memory	4M			
Jumbo Frame	10K		9K	
LED Indicator	Power: PWR (Green), Network: Link (Yellow), PoE: PoE (Green), Rate: 1000M (Green)		Power (Red) Signal (Green)	
Network Latency	(10 to 1000Mbps):≤16μs (use the 64byte package size)			
Frame Filter and Transmission Rate	14880pps the most for 10M port 148810pps the most for 100M port 1488095pps the most for 1000M port		14800pps the most for 10M port, 148800pps the most for 100M port, 1488000pps the most for 1000M port	
<b>POE &amp; POWER</b>				
PoE Port	Port 1 to 16 IEEE802.3af/at @ PoE	Port 1 to 24 IEEE802.3af/at	PoE Watchdog: Port 1~16	PoE Watchdog: Port 1~24
Power Supply Pin	1/2 (+), 3/6 (-)			
Max Power Per Port	30W, IEEE802.3af/at		PoE1~14Port: 1/2(+52V), 3/6(GND)≤30W PoE 15~16 Port: 1245(+53V), 3678(GND) compatible 1/2(+52V), 3/6(GND)≤60W	PoE1~22Port: 1/2(+52V), 3/6(GND)≤30W PoE 23~24 Port: 1245(+53V), 3678(GND) compatible 1/2(+52V), 3/6(GND)≤60W
Total PWR/Input Voltage	250W (100-240V)		AC 110~220V Total≤300W	
Power Consumption	Standby<15W, Full load<240W	Standby<20W, Full load<250W	Standby<7W, Full load<300W	Standby<7.6W, Full load<300W
Power Supply	Built-in switching power supply, AC 100 ~ 240V 50-60Hz 4.1A		Built-in switch power supply, AC 90-240V, 50-60Hz 5.5A	
Protection Level	Lightning Protection: 4KV ESD Protection: 4KV		Lightning Protection: 6KV, Per: IEC61000-4-5 ESD Protection: 8KV, Per: IEC61000-4-2	
<b>PHYSICAL PARAMETER</b>				
Operation Temperature/ Humidity	-20~+55°C, 5%-90% RH Non Condensing		-30°C ~60°C (-22~140°F) 10%~90% Non-Condensing	
Storage Temperature/ Humidity	-40~+75°C, 5%~95% RH Non Condensing		-40°C~70°C (-104~158°F) 5%~90% Non-Condensing	
Dimensions (L*W*H)	330mm*204mm*44mm		430mm*180mm*45mm	
Weight	<1.7kg	<2.3kg	2.61kg	2.65 kg
Installation	Desktop, wall mounted, 19 inch 1U cabinet			
Certification	CE mark, commercial, CE/LVD EN60950, FCC Part 15 Class B, RoHS		CE mark FCCPart15, Class B VCCI ClassBEN55022 (CISPR 22) C-Tick	

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