

Content

What is Passive PoE	1
Where is it Used	2
Ordering Information	3
STC-024FP-24V	4
STC-014GP-24V	5
STC-028FP-24V	6
STC-028GP-24V	7
STC-1116CGFP-24V	8
STC-2216GP-24V	9
STC-2224GP-24V	10
STC-0224GFP-24V	11
STC-2024GP-24V	12
Case Study	13
Application	13
PDs	13
Model	14
Conclusion	14
FAQ	15

What is Passive PoE

Passive PoE is a non-standard technology that allows network switches to send both power and data through an Ethernet cable **without negotiation** between the power source and the device being powered.

Passive PoE systems typically operate at 24V DC, but can also be 12V or 48V.

For standard PoE(48V), the PSE(power supplying equipment) will detect the PD(powered device) if it receives a voltage around 48V.

If yes, it will continuously supply power.

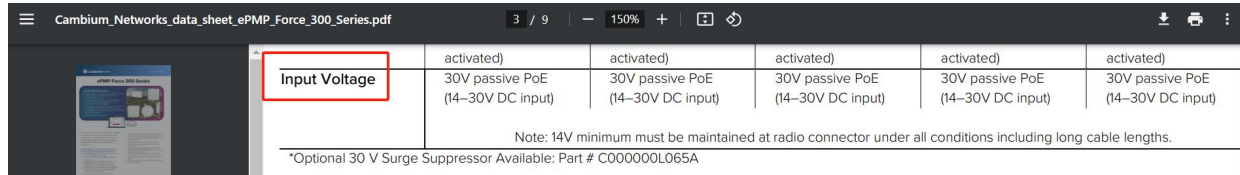
If not, it will only transmit networking data to the PD, no power is carried in the transmission.

This is about the negotiation or communication process.

Where is it Used

1. Wireless radio equipment

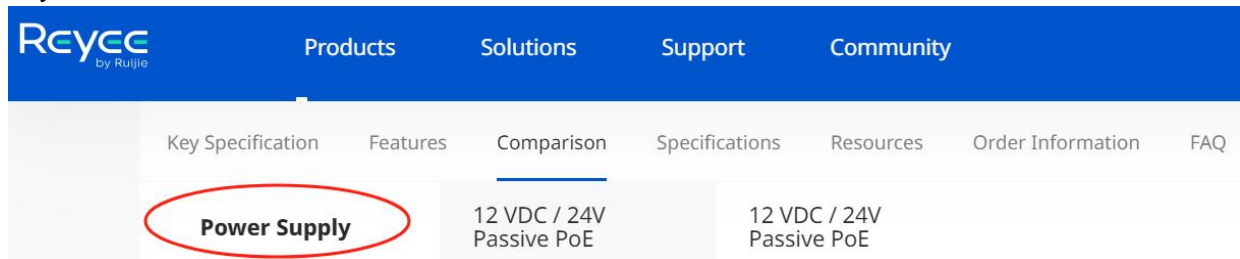
Example: Cambium networks ePMP™ Force 300 Series



Input Voltage	activated)	activated)	activated)	activated)	activated)
30V passive PoE (14–30V DC input)	30V passive PoE (14–30V DC input)	30V passive PoE (14–30V DC input)	30V passive PoE (14–30V DC input)	30V passive PoE (14–30V DC input)	30V passive PoE (14–30V DC input)

Note: 14V minimum must be maintained at radio connector under all conditions including long cable lengths.
*Optional 30 V Surge Suppressor Available: Part # C000000L065A

Reyee WIFI Antenna: RG-EST310 V2



REYEE by Ruijie

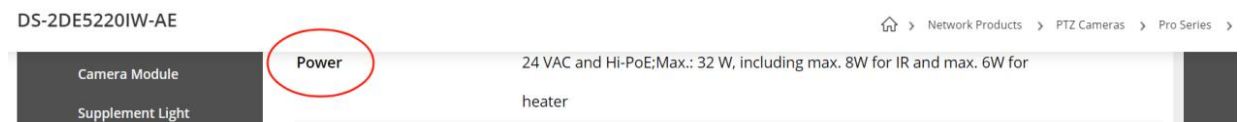
Products Solutions Support Community

Key Specification Features Comparison Specifications Resources Order Information FAQ

Power Supply 12 VDC / 24V Passive PoE 12 VDC / 24V Passive PoE

2. Cameras

Example: Hikvision DS-2DE5220IW-AE



DS-2DE5220IW-AE

Home > Network Products > PTZ Cameras > Pro Series >

Camera Module Supplement Light

Power 24 VAC and Hi-PoE;Max.: 32 W, including max. 8W for IR and max. 6W for heater

3. 24V powered network system(See Case Study)

Under this background, Saga Telecom presents a series of 24V passive PoE switches to enrich PoE-related application scenarios.

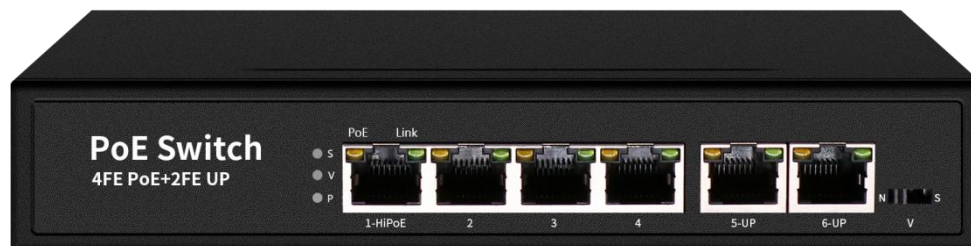
Meanwhile, its ideal to include our 802.3bt switches and PoE accessories to build a PoE package for your Ethernet transmission projects.

Ordering Information

Commercial Unmanaged Passive PoE Switch Series, 24V PoE Output		
Model	Description	Price
STC-024FP-24V	2*10/100M RJ45+4*10/100M PoE af/at RJ45 65W, Passive PoE, AC100V~240V input, with rack-mount brackets	14usd/pc
STC-014GP-24V	1*10/100/1000M RJ45+4*10/100/1000M PoE af/at RJ45 65W, Passive PoE, AC100V~240V input, with rack-mount brackets	20usd/pc
STC-028FP-24V	2*10/100M RJ45+8*10/100M PoE af/at RJ45 120W, Passive PoE, AC100V~240V input, with rack-mount brackets	20usd/pc
STC-028GP-24V	2*10/100/1000M RJ45+8*10/100/1000M PoE af/at RJ45 120W, Passive PoE, AC100V~240V input, with rack-mount brackets	31usd/pc
STC-1116CGFP-24V	1*1G SFP/RJ45(Combo)+1*10/100/1000M RJ45+16*10/100/1000M PoE af/at RJ45 150W, Passive PoE, AC100V~240V input, with rack-mount brackets	51usd/pc
STC-2216GP-24V	2*1G SFP+2*10/100/1000M RJ45+16*10/100/1000M PoE af/at RJ45 300W, Passive PoE, AC100V~240V input, with rack-mount brackets	84usd/pc
STC-2224GP-24V	2*1G SFP+2*10/100/1000M RJ45+24*10/100/1000M PoE af/at RJ45 300W, Passive PoE, AC100V~240V input, with rack-mount brackets	92usd/pc
STC-0224GFP-24V	2**10/100/1000M RJ45+24*10/100M PoE af/at RJ45 300W, Passive PoE, AC100V~240V input, with rack-mount brackets	84usd/pc
STC-2024GP-24V	2*1G SFP+24*10/100/1000M PoE af/at RJ45 300W, Passive PoE, AC100V~240V input, with rack-mount brackets	90usd/pc
Power cord is included in both the packing box and unit pricing. SFP transceiver is NOT included in both the packing box and unit pricing. Those models are FREQUENTLY asked and ordered, there are some more similar models available. Please let us know if you need any customized model.		

STC-024FP-24V

Model	STC-024FP-24V
Product Name	6 port 10/100Mbps Ethernet Passive PoE Switch
Fixed Port	4*10/100Base-TX PoE port(Data/Power) 2*10/100Base-TX Uplink RJ45 port (Data)
PoE Port	1-4 port support IEEE802.3at, max 30W/port, PoE out 24V
PoE Pin	af/at 45+ 78-
PoE Budget	Max 65W
Bandwidth	1.6Gbps
Packet Forwarding	1.15Mpps
MAC	1K
Buffer	768K
Network Medium	10Base-T: Cat3,4,5 or above UTP(≤250m) 100Base-TX: Cat5 or above UTP(≤150m)
LED Indicator	P: Power(over-power LED) Uplink: (LED=10/100M Link/Act LED) PoE Port: Orange=PoE, Green=LAN Link V: (Port isolation LED) S: (Super mode LED, 250-meter PoE distance)
Power	AC100~240V input, built-in AC-DC converter
Operating Temperature	-10°C~+55°C
Humidity	5%~90% RH Non-condensing
Storage Temperature	-40°C~+75°C
Humidity	5%~95% RH Non-condensing
Dimension L*W*H	Device: 190*130*35mm Packing Box: 265*220*68mm
N.W/G.W(Kg)	0.6Kg/1.0Kg
Lightning Protection Level	6KV 8/20us IP30
Installation	Desktop, Wall, Rack mountable(with mounting hangers)
Certificate	CE-EMC EN55032; CE-LVD EN62368 FCC Part 15 Class B; RoHS
Warranty	1 Year



STC-014GP-24V

Model	STC-014GP-24V
Product Name	5 port 10/100/1000Mbps Ethernet Passive PoE Switch
Fixed Port	4*10/100/1000Base-TX PoE port(Data/Power) 1*10/100/1000Base-TX Uplink RJ45 port (Data)
PoE Ports	1-4 port supports IEEE802.3at, max 30W/port, PoE out 24V
PoE Pin	af/at: 45+ 78-
PoE Budget	Max 65W
Bandwidth	10Gbps
Packet Forwarding	7.44Mpps
MAC	2K
Buffer	2.5M
Network Medium	10Base-T: Cat3,4,5 or above UTP(≤250m) 100Base-TX: Cat5 or above UTP(≤150m) 1000Base-TX: Cat6 or above UTP(≤150m)
LED Indicator	P: Power LED(over-power LED) Uplink: (Link LED=10/100M Link, 1000M=Gigabit Link) Port: (Orange=PoE LED, Green=LAN Link LED)
Power	AC100~240V input, built-in AC-DC converter
Operating Temperature	-10°C~+55°C
Humidity	5%~90% RH Non-condensing
Storage Temperature	-40°C~+75°C
Humidity	5%~95% RH Non-condensing
Dimension L*W*H	Device: 190*130*35mm Packing Box: 265*220*68mm
N.W/G.W(Kg)	0.6Kg/1.0Kg
Lightning Protection Level	6KV 8/20us IP30
Installation	Desktop, Wall, Rack mountable(with mounting hangers)
Certificate	CE-EMC EN55032; CE-LVD EN62368 FCC Part 15 Class B; RoHS
Warranty	1 Year



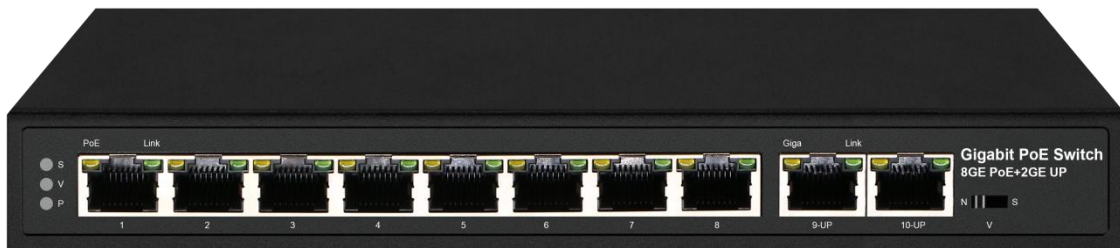
STC-028FP-24V

Model	STC-028FP-24V
Product Name	10 port 10/100Mbps Ethernet Passive PoE Switch
Fixed Port	8*10/100Base-TX PoE port(Data/Power) 2*10/100Base-TX Uplink RJ45 port (Data)
PoE Ports	1-8 port supports IEEE802.3at, max 30W/port, PoE out 24V
PoE Pin	af/at: 45+ 78-
PoE Budget	Max 120W
Bandwidth	2Gbps
Packet Forwarding	1.48Mpps
MAC	2K
Buffer	768K
Network Medium	10Base-T: Cat3,4,5 or above UTP(≤250m) 100Base-TX: Cat5 or above UTP(≤150m)
LED Indicator	P: Power LED(over-power LED) Uplink: (LED=10/100M Link/Act LED) Port: (Orange=PoE LED, Green=LAN Link LED)
Power	AC100~240V input, built-in AC-DC converter
Operating Temperature	-10°C~+55°C
Humidity	5%~90% RH Non-condensing
Storage Temperature	-40°C~+75°C
Humidity	5%~95% RH Non-condensing
Dimension L*W*H	Device: 210*150*35mm Packing Box: 265*220*68mm
N.W/G.W(Kg)	0.8Kg/1.2Kg
Lightning Protection Level	6KV 8/20us IP30
Installation	Desktop, Wall, Rack mountable(with mounting hangers)
Certificate	CE-EMC EN55032; CE-LVD EN62368 FCC Part 15 Class B; RoHS
Warranty	1 Year



STC-028GP-24V

Model	S1100P-8G-2G-24V
Product Name	10 port 10/100/1000Mbps Ethernet Passive PoE Switch
Fixed Port	8*10/100/1000Base-TX PoE port(Data/Power) 2*10/100/1000Base-TX Uplink RJ45 port (Data)
PoE Ports	1-8 port supports IEEE802.3at, max 30W/port, PoE out 24V
PoE Pin	af/at: 45+ 78-
PoE Budget	Max 120W
Bandwidth	20Gbps
Packet Forwarding	14.88Mpps
MAC	2K
Buffer	2.5M
Network Medium	10Base-T: Cat3,4,5 or above UTP(≤250m) 100Base-TX: Cat5 or above UTP(≤150m) 1000Base-TX: Cat6 or above UTP(≤150m)
LED Indicator	P: Power LED (over-power LED) Uplink: (Link LED=10/100M Link, 1000M=Gigabit Link) Port: (Orange=PoE LED, Green=LAN Link LED)
Power	AC100~240V input, built-in AC-DC converter
Operating Temperature	-10°C~+55°C
Humidity	5%~90% RH Non-condensing
Storage Temperature	-40°C~+75°C
Humidity	5%~95% RH Non-condensing
Dimension	Device: 210*150*35mm
L*W*H	Packing Box: 265*220*68mm
N.W/G.W(Kg)	0.8Kg/1.2Kg
Lightning	6KV 8/20us
Protection Level	IP30
Installation	Desktop, Wall, Rack mountable(with mounting hangers)
Certificate	CE-EMC EN55032; CE-LVD EN62368 FCC Part 15 Class B; RoHS
Warranty	1 Year



STC-1116CGFP-24V

Model	STC-1116CGFP-24V
Product Name	19 port 10/100&1000Mbps Ethernet Passive PoE Switch
Fixed Port	16*10/100Base-TX PoE port(Data/Power) 1*10/100/1000Base-TX Uplink RJ45 port (Data) 1*1000M SFP/RJ45(Combo)
PoE Ports	1-16 port supports IEEE802.3at, max 30W/port, PoE out 24V
PoE Pin	af/at: 45+ 78-
PoE Budget	Max 150W
Bandwidth	20Gbps
Packet Forwarding	6.55Mpps
MAC	8K
Buffer	4M
Network Medium	10Base-T: Cat3,4,5 or above UTP(≤250m) 100Base-TX: Cat5 or above UTP(≤150m) 1000Base-TX: Cat6 or above UTP(≤150m)
Optical Media	SFP: 1000M single and multimode optical module, Max distance ≤ 100Km
LED Indicator	POWER: Power LED(over-power LED) 18: SFP connection indicator S: Super mode LED, 250-meter PoE distance Uplink: (Link LED=10/100M Link, 1000M=Gigabit Link) Port: (Orange=PoE LED, Green=LAN Link LED)
Power	AC100~240V input, built-in AC-DC converter
Operating Temperature	-10°C~+55°C
Humidity	5%~90% RH Non-condensing
Storage Temperature	-40°C~+75°C
Humidity	5%~95% RH Non-condensing
Dimension	Device: 295*195*45mm
L*W*H	Packing Box: 410*278*95mm
N.W/G.W(Kg)	1.6Kg/2.4Kg
Lightning	6KV 8/20us
Protection Level	IP30
Installation	Desktop, Wall, Rack mountable(with mounting hangers)
Certificate	CE-EMC EN55032; CE-LVD EN62368 FCC Part 15 Class B; RoHS
Warranty	1 Year



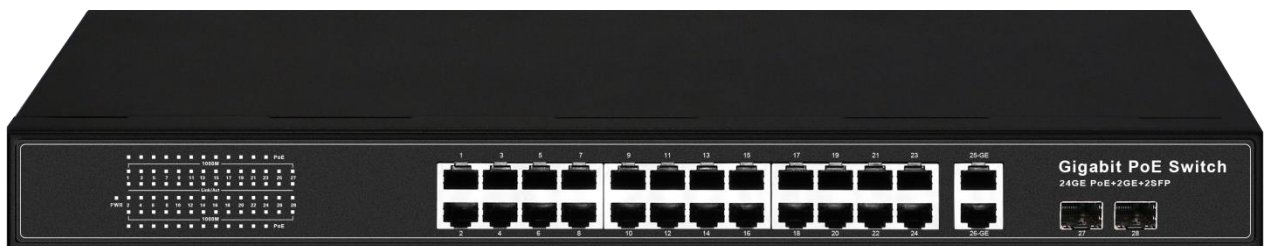
STC-2216GP-24V

Model	STC-2216GP-24V
Product Name	20 port 10/100/1000Mbps Ethernet Passive PoE Switch
Fixed Port	16*10/100/1000Base-TX PoE port(Data/Power) 2*10/100/1000Base-TX Uplink RJ45 port (Data) 2*1000M SFP
PoE Ports	1-16 port supports IEEE802.3at, max 30W/port, PoE out 24V
PoE Pin	af/at: 45+ 78-
Function	N: (Standard normal) V: (Port isolation) C: (Flow control mode)
PoE Budget	Max 300W
Bandwidth	56Gbps
Packet Forwarding	41.67Mpps
MAC	8K
Buffer	4.1M
Network Medium	10Base-T: Cat3,4,5 or above UTP(≤250m) 100Base-TX: Cat5 or above UTP(≤150m) 1000Base-TX: Cat6 or above UTP(≤150m)
Optical Media	SFP: 1000M single and multimode optical module, Max distance ≤100Km
LED Indicator	POWER: Power LED 19-20: SFP connection indicator Uplink: (10/100M=Green Link, 1000M=Orange Link) Downlink: (10/100M=Green Link, 1000M=Orange Link)
Power	AC100~240V input, built-in AC-DC converter
Operating Temperature	-10°C~+55°C
Humidity	5%~90% RH Non-condensing
Storage Temperature	-40°C~+75°C
Humidity	5%~95% RH Non-condensing
Dimension L*W*H	Device: 295*195*45mm Packing Box: 410*278*95mm
N.W/G.W(Kg)	1.6Kg/2.4Kg
Lightning Protection Level	6KV 8/20us IP30
Installation	Desktop, Wall, Rack mountable(with mounting hangers)
Certificate	CE-EMC EN55032; CE-LVD EN62368 FCC Part 15 Class B; RoHS
Warranty	1 Year



STC-2224GP-24V

Model	S2800P-24G-2TS
Product Name	28 port 10/100/1000Mbps Rack Type Ethernet Passive PoE Switch
Fixed Port	24*10/100/1000Base-TX PoE port(Data/Power) 2*10/100/1000Base-TX Uplink RJ45 port (Data) 2*1000M SFP
PoE Ports	1-24 port supports IEEE802.3at, max 30W/port, PoE out 24V
PoE Pin	af/at: 45+ 78-
PoE Budget	Max 300W
Bandwidth	56Gbps
Packet Forwarding	41.67Mpps
MAC	8K
Buffer	4M
Network Medium	10Base-T: Cat3,4,5 or above UTP(≤250m) 100Base-TX: Cat5 or above UTP(≤150m) 1000Base-TX: Cat6 or above UTP(≤150m)
Optical Media	SFP: 1000M single and multimode optical module, Max distance ≤100Km
LED Indicator	PWR: Power LED(green) 1-24: 10/100/1000M Network connection indicator(green) 25-26:10/100/1000M Network connection indicator(green) 27-28: SFP connection indicator(green) PoE: PoE indicator(orange)
Power	AC100~240V input, built-in AC-DC converter
Operating Temperature	-10°C~+55°C
Humidity	5%~90% RH Non-condensing
Storage Temperature	-40°C~+75°C
Humidity	5%~95% RH Non-condensing
Dimension	Device: 440*290*45mm
L*W*H	Packing Box: 515*375*95mm
N.W/G.W(Kg)	2.9Kg/3.6Kg
Lightning	6KV 8/20us
Protection Level	IP30
Installation	Desktop, Wall, Rack mountable(with mounting hangers)
Certificate	CE-EMC EN55032; CE-LVD EN62368 FCC Part 15 Class B; RoHS
Warranty	1 Year



STC-0224GFP-24V

Model	STC-0224GFP-24V
Product Name	26 port 10/100&1000Mbps Ethernet Passive PoE Switch
Fixed Port	24*10/100Base-TX PoE port(Data/Power) 2*10/100/1000Base-TX Uplink RJ45 port (Data)
PoE Ports	1-24 port supports IEEE802.3at, max 30W/port, PoE out 24V
PoE Pin	af/at: 45+ 78-
PoE Budget	Max 300W
Bandwidth	16Gbps
Packet Forwarding	6.55Mpps
MAC	8K
Buffer	4.1M
Network Medium	10Base-T: Cat3,4,5 or above UTP(≤250m) 100Base-TX: Cat5 or above UTP(≤150m) 1000Base-TX: Cat6 or above UTP(≤150m)
LED Indicator	PWR: Power LED(green) 1-24: 10/100M Network connection indicator(green) 25-26: 10/100/1000M Network connection indicator(green) PoE: PoE indicator(orange)
Power	AC100~240V input, built-in AC-DC converter
Operating Temperature	-10°C~+55°C
Humidity	5%~90% RH Non-condensing
Storage Temperature	-40°C~+75°C
Humidity	5%~95% RH Non-condensing
Dimension L*W*H	Device: 440*290*45mm Packing Box: 515*375*95mm
N.W/G.W(Kg)	2.9Kg/3.6Kg
Lightning Protection Level	6KV 8/20us IP30
Installation	Desktop, Wall, Rack mountable(with mounting hangers)
Certificate	CE-EMC EN55032; CE-LVD EN62368 FCC Part 15 Class B; RoHS
Warranty	1 Year



STC-2024GP-24V

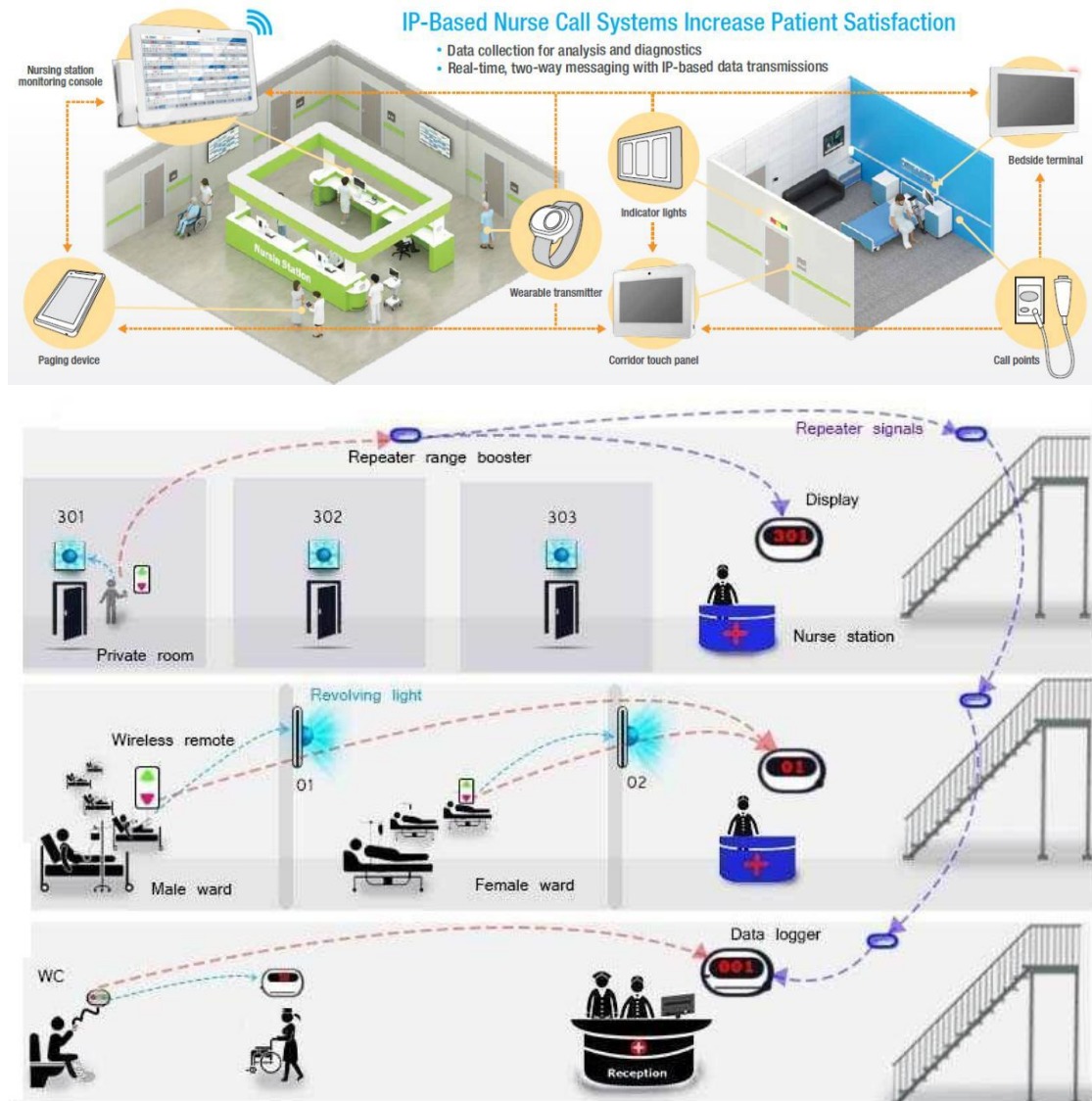
Model	STC-2024GP-24V
Product Name	26 port 10/100/1000Mbps Ethernet Passive PoE Switch
Fixed Port	24*10/100/1000Base-TX PoE port(Data/Power) 2*1000M SFP
PoE Ports	1-23 port supports IEEE802.3at, max 30W/port, PoE out 24V
PoE Pin	af/at: 45+ 78-
Function	N: (Standard normal) V: (Port isolation) C: (Flow control mode)
PoE Budget	Max300W
Bandwidth	56Gbps
Packet Forwarding	41.67Mpps
MAC	8K
Buffer	4.1M
Network Medium	10Base-T: Cat3,4,5 or above UTP(≤250m) 100Base-TX: Cat5 or above UTP(≤150m) 1000Base-TX: Cat6 or above UTP(≤150m)
Optical Media	SFP: 1000M single and multimode optical module, Max distance ≤100Km
LED Indicator	PWR: Power LED(green) 1-24: 10/100/1000M Network connection indicator(green) 25-26: SFP connection indicator(green) PoE: PoE indicator(orange)
Power	AC100~240V input, built-in AC-DC converter
Operating Temperature	-10°C~+55°C
Humidity	5%~90% RH Non-condensing
Storage Temperature	-40°C~+75°C
Humidity	5%~95% RH Non-condensing
Dimension	Device: 440*290*45mm
L*W*H	Packing Box: 515*375*95mm
N.W/G.W(Kg)	2.9Kg/3.6Kg
Lightning	6KV 8/20us
Protection Level	IP30
Installation	Desktop, Wall, Rack mountable(with mounting hangers)
Certificate	CE-EMC EN55032; CE-LVD EN62368 FCC Part 15 Class B; RoHS
Warranty	1 Year



Case Study

Application

Hospital Nurse Call System



PDs

LED lights: provide light in corridors, wards and bathrooms

Corridor touch panels: indicating time, diagnostic sequence, hospital information

Cameras: real-time monitoring

Speakers: play music, emergency communication, maintain order

Door contacts: added security for wards, authorized access

Call points: efficient communication, emergency call

Alarms: danger warning

Model

STC-2224GFP-24V

Specification: 2*1G SFP+2*1G Copper uplink+24*10/100M PoE downlink, 24V PoE output
Useful feature: 24V PoE output

STC-208GP-Auto

Specification: 2*1G SFP+8*10/100/1000M PoE, auto-adaptive 24V/48V PoE output
Useful feature: auto-adaptive 24V/48V PoE output

STC-4424GCP-4BT-Auto

Specification: 4*1G SFP/RJ45 Combo+24*10/100/1000M PoE, 1~4 PoE ports auto-adaptive 24V/48V PoE output, 5~8 PoE ports support PoE af/at/bt output
Useful feature: 4*1G Combo, auto-adaptive 24V/48V PoE output, PoE af/at/bt output

For above listed PDs, most receive 24V power input, some do 48V(like PoE cameras).
The recommended 3 models are well suited for such projects or similar.

24V PoE output: for 24V power input PDs

Auto-adaptive 24V/48V PoE output: for multiple PDs with both 24V and 48V power input

Combo: for flexible port combination

PoE af/at/bt: for some power-hungry devices like PTZ camera, digital signage

Conclusion

Above information explains a typical 24V passive PoE application project.

By analyzing the PDs and model features from Saga Telecom, a PoE solution package is provided and also applicable to similar projects.

Moreover: Saga Telecom also offers active PoE switches or industrial PoE switches, please talk with us for more information.

FAQ

● Leadtime

1. Production time is usually 5~7 working days for standard(non-customized) models (no more than 50pcs).
2. Shipping time is usually 4~7 days by air
3. In total, it takes 10~15 days for a client to receive the order.

● Shipment

1. We will send the goods by air(DHL, UPS or FEDEX) or by sea(for bulk order)
2. It is fine to ship purchased items via customer's shipping account or forwarder.

● MOQ

1. 1 Pc/Pair(It is NOT free, Saga Telecom do NOT do FREE SAMPLES)
2. It is fine to have sample testing before bulk order, but 1 Pc/Pair is ONLY about sample testing.
3. When testing proves fine, MOQ is 20pcs(discussion is required if it is about smaller quantity).

● Warranty

1. 1 year for commercial models(STC series) and 3 years for industrial models(STI series)
2. Please kindly refer to the "Warranty Policy" for more information.
3. Technical assistance is always available

● Payment

1. T/T transfer and PayPal, FULL AMOUNT BEFORE SHIPMENT.
2. It is fine to pay 50% first and another 50% before shipment for bulk order.
3. It is fine to be paid via customer's forwarder(this is usually about RMB payment).

● Transaction cost

1. It is standard charge 25usd for EACH T/T transfer whatever the invoice value is.
2. It is 5usd for every 100usd to PayPal a/c, this ratio is standard charge by PayPal

● RMA

1. Please contact us ASAP once there is any problem(package or usage)with the supplied products.
2. For every 100pcs, there will be 2 extra free units(2% RMA) against immediate warranty coverage.
3. This rule stands for all Saga Telecom models and even there is not an after-sales issue.

(1) If it is about missing/faulty parts in the packing box.

Please simply use the extra units for the replacement and let us know this problem(we will improve).

(2) If it is about usage problem.

Saga Telecom will provide technical support and send new units when necessary.

● OEM

1. Supported, but discussion is required if it is about complex requirements.
2. Below are usual OEM services available.
 - (1) Show client's logo/model on the device/label/management interface...
 - (2) Use client's packing box
 - (3) Design client's product PVC sticker
 - (4) Customize some parts of a model like rear panel/power input terminal block...

Please know that there might be extra cost for OEM services.