

IO-Power IOP-DPOE-OSW1248-4

**Dedicated to
Lightning Area**

Outdoor DC to DC Power over Ethernet (PoE) 4Ports Switch

Input 12~24VDC to 4Port 120W (Max) support 48V-30W Standard Mode

(To be completed with online 12~24VDC DC UPS Power System)



IOP-DPOE-OSW1248-4 is an outdoor DC-to-DC Power over Ethernet (PoE-PSE) 4Ports Switch. To respond to outdoor DC UPS power system, the power source is from online outdoor DC UPS system or general 12~24VDC power adapter. Complete with DC-to-DC PoE-PSE 4Ports Switch, supplying power for the device through Ethernet cable (RJ-45). 4Ports PoE Switch can switch each port data in four PoE-PSE Ports and 1 data port.

DC to DC PoE-PSE 4Ports Switch is adopted industrial level of Iron metal thermal protection shell and waterproof dust reached IP67 of mechanism design and the Waterproof and heat-resistant beam head to handle the outside tough temperature at $-40^{\circ}\text{C} \sim +80^{\circ}\text{C}$ to maintain the outdoor system normally working during day and night.

IOP-DPOE-OSW1248-4 adopts the compatibility with IEEE 802.3af and IEEE 802.3at standard and automatically detecting the data



transmission port (by chip communication protocols). It been applied for IEEE 802.3af 100Mbps Ethernet power supply port and IEEE 802.3at 1000Mbps Ethernet power supply port.

The IOP-DPOE-OSW1248-4 is especially to design PoE 4Ports total 120W Max for output power & 1000Mbps (1Giga) bandwidth for each port. The output voltage is from minimum 45VDC to maximum 56VDC, standard voltage is 48VDC. The minimum output power is 15W while the 4Ports output power is $15W+15W+15W+15W=60W$ by 12VDC 6A (8A Max) for those devices. The maximum output power is 30W while the 4Ports output power is $30W+30W+30W+30W=120W$ by 24VDC 6A (8A Max) for those devices.

The IOP-DPOE-OSW1248-4 is special design for outdoor wireless devices, outdoor IP Camera surveillance system , outdoor IP Speed Dome (IP PTZ), outdoor emergency rescuing system, mobile power supply system, outdoor surveillance recording system (NVR), outdoor public sign and indication system (Sensor) , elevator security monitoring system, fire security system, expressway charges trading surveillance system, etc.

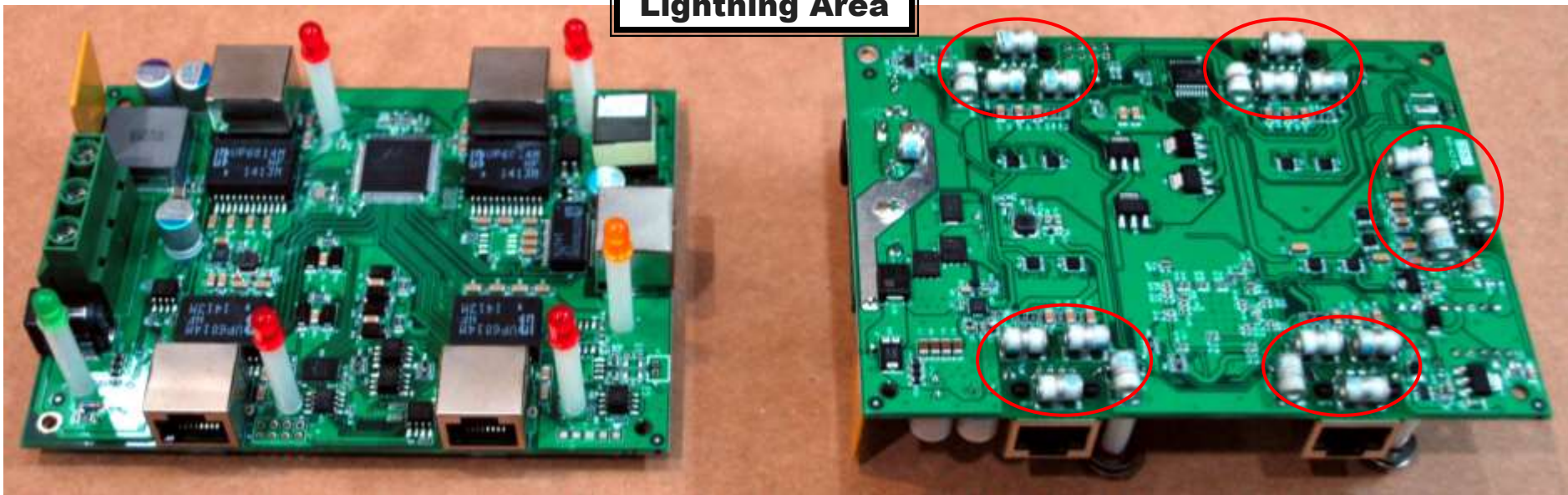
The IOP-DPOE-OSW1248-4 uses 12~24V (11.5~28V) DC input power as its main designing originality, which is different from the general AC input power model. Being able to complete with DC-required adapters or power supply system, for example, 12~24VDC adapters, 12~24VDC UPS systems, 12~24VDC solar UPS systems, 12~24VDC wind power UPS systems and general 12~24VDC UPS systems, etc.

The IOP-DPOE-OSW1248-4 can be as voltage booster and data splitter. When you input 12VD, it will boost up to 48VDC, 0.65A Max.

The IOP-DPOE-OSW1248-4 can be used with 12VDC~28VDC, integrated into DC UPS power supply, regulated power supply, impact against power spikes and noise filtering power features, used in indoor and outdoor surveillance systems, military police patrol car, truck equipment, van bus surveillance system, public transportation bus surveillance

power supply, the power supply system of rail transit equipment ... And so on; battery capacity depending on the design of matching sizes, device or system without interrupting the power supply can be, when without input power source the power supply available for ~ 1 hour for 168 hours (7 days).

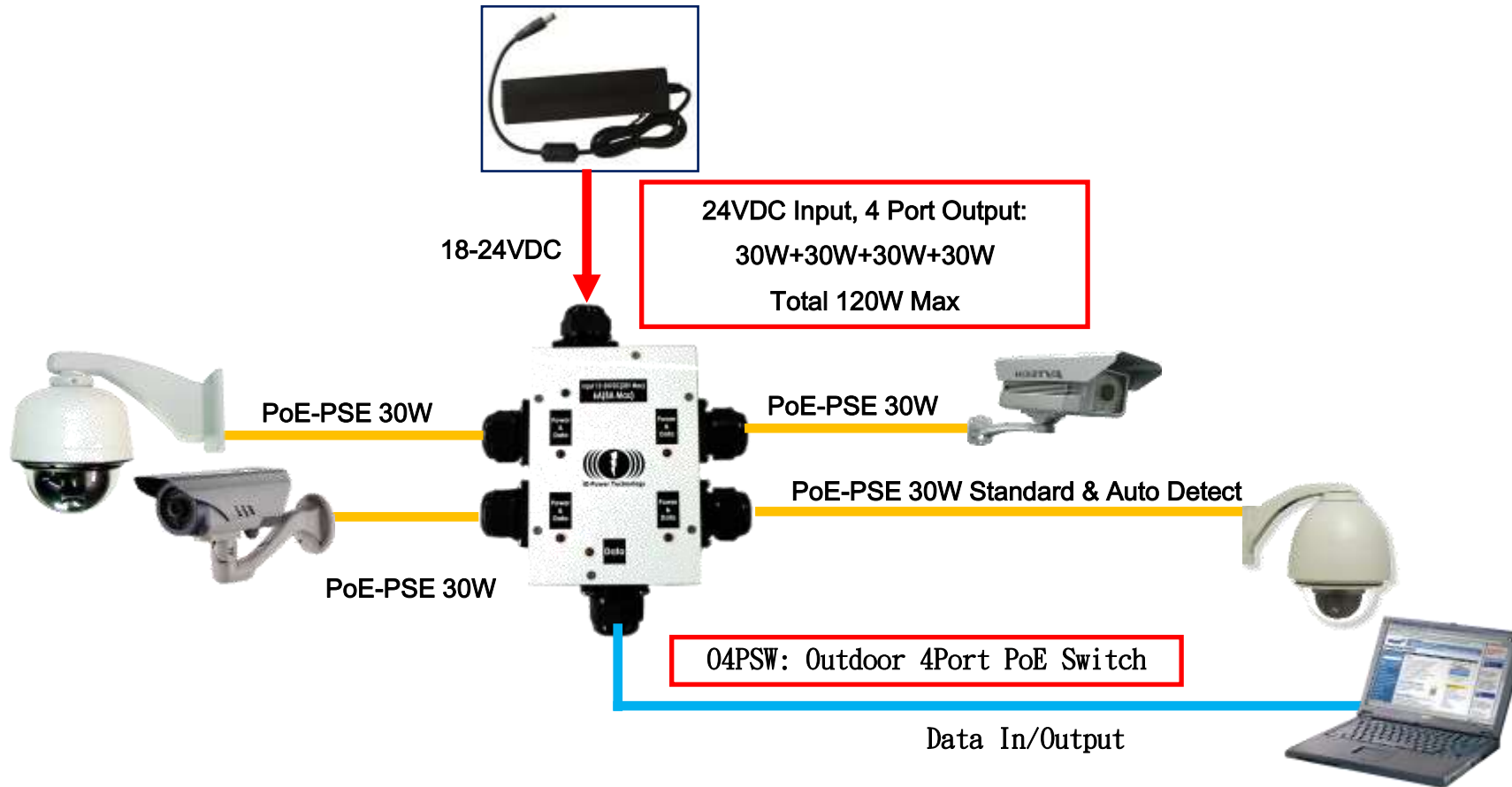
**Dedicated to
Lightning Area**



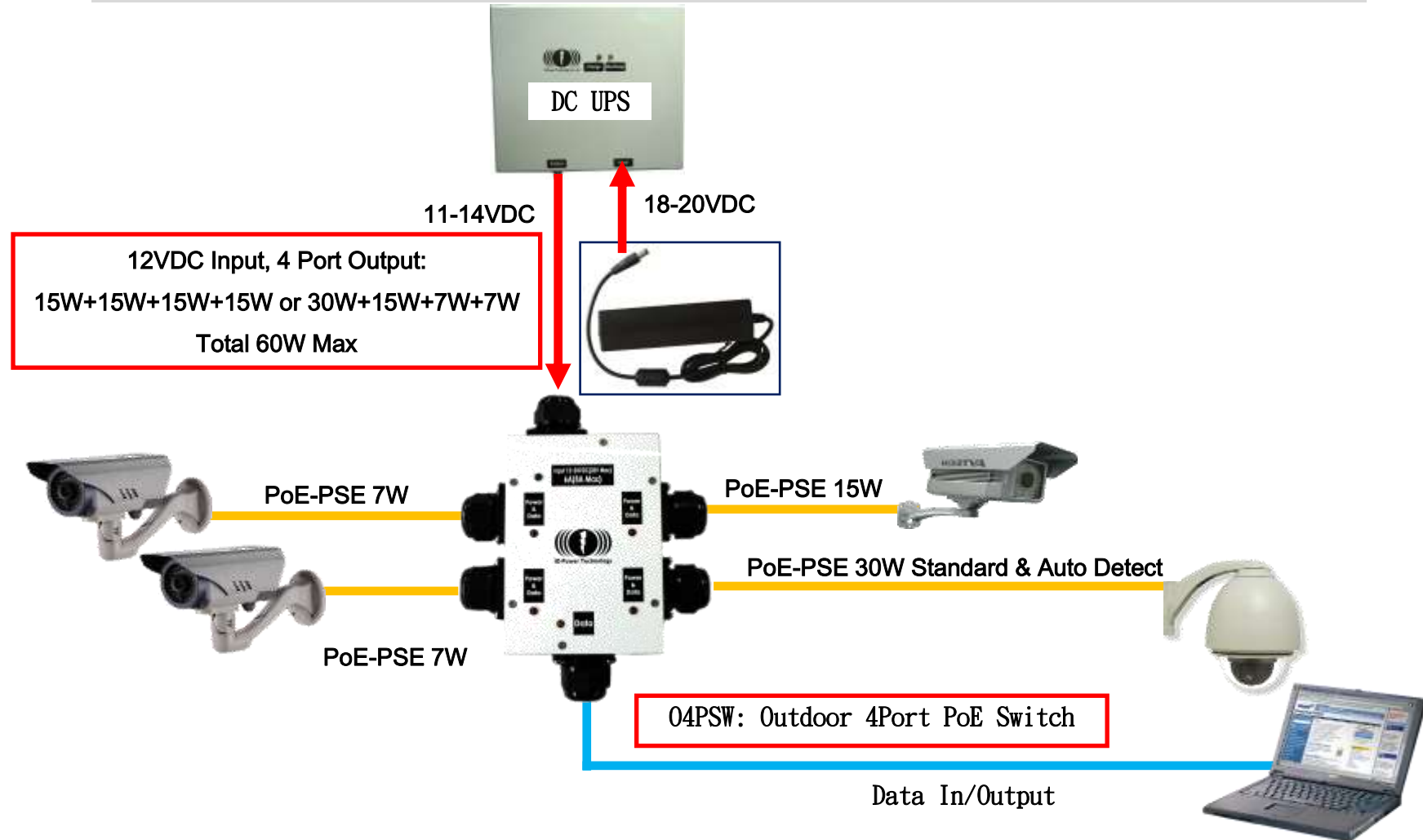
Design of Lightning Surge

Each Ethernet port, were designed more than industrial-grade shocks of lightning surge protection around 10KA, power supply 300 meters above and still be able to do so through network cable, 1Gbps data transmitted over the network bandwidth up to 180 meters.

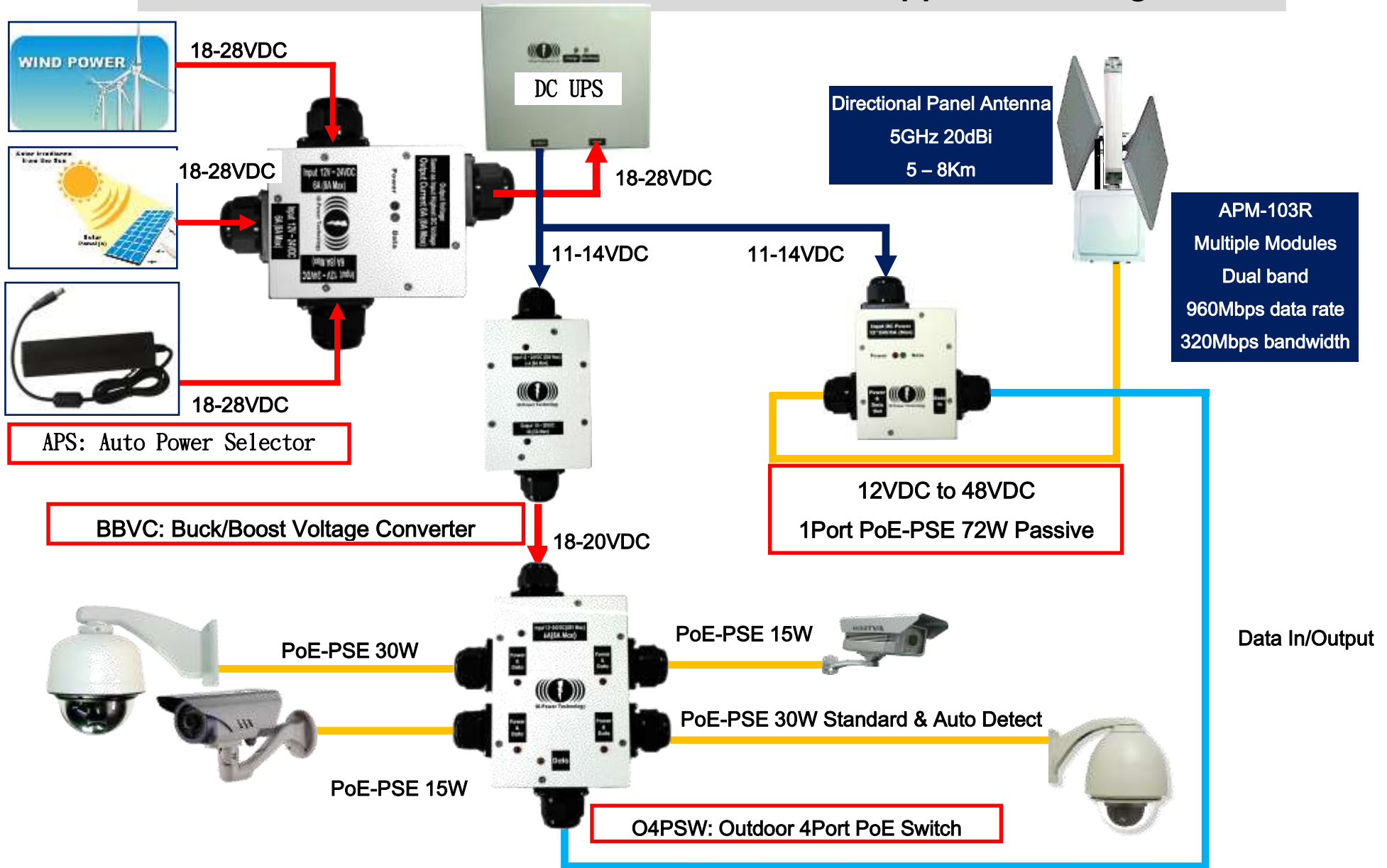
O4PSW- Outdoor 4 Ports PoE Switch Power Supply 120W System



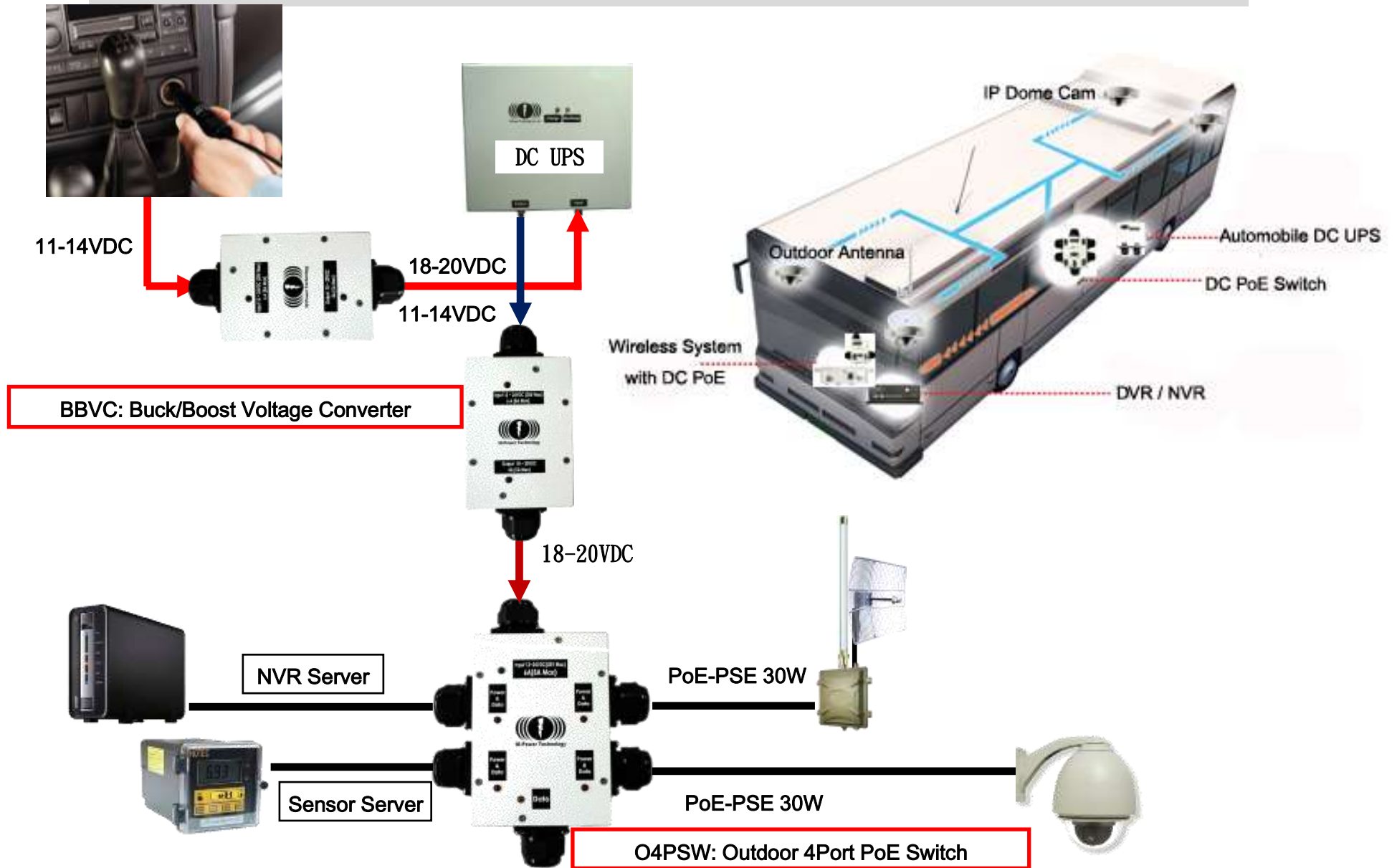
O4PSW- Outdoor 4 Ports PoE Switch Power Supply 60W System



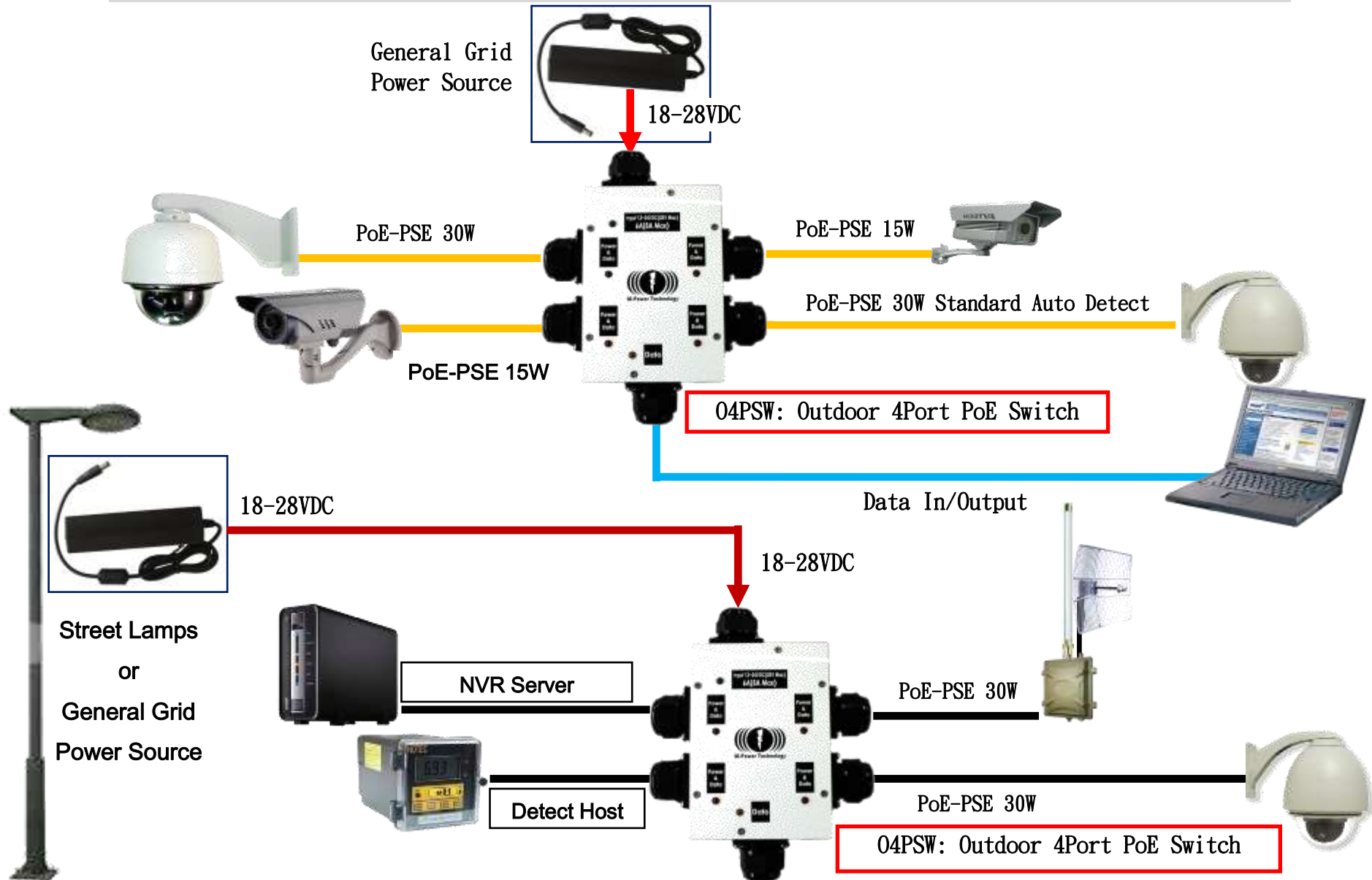
O4PSW- Outdoor 4 Ports PoE Switch Multi-application Diagrams 01




O4PSW- Outdoor 4 Ports PoE Switch Multi-application Diagrams 02



O4PSW- Outdoor 4 Ports PoE Switch Multi-application Diagrams 03



IOP-DPOE-OSW1248-4 Specification

Model Number	IOP-DPOE-OSW1248-4
<p>Outdoor DC to DC PoE 4Ports Switch</p> <p>Iron Airtight Housing</p> <p>IP 67</p> <div style="border: 2px solid black; padding: 5px; text-align: center; margin: 10px auto; width: fit-content;"> <p>Dedicated to Lightning Area</p> </div>	 <p>The image shows a white, rectangular outdoor switch with a black top cap and four black ports on the sides. The front panel features a central 'Input DC Power 12~24V/8A (Max)' label, a 'Power & Data Out' label on the top left and right, a 'Data In' label at the bottom center, and another 'Power & Data Out' label on the bottom left and right. There are two indicator lights (red and green) labeled 'Power' and 'Data'. The IO-Power Technology logo is also visible on the front panel.</p>
Input DC Voltage	12~24VDC (28V Max)
Input DC Current	12VDC 6A (8A Max) 24VDC 6A (8A Max)
Output PoE DC Voltage	48VDC (45VDC is Minimum & 56VDC is Maximum)
Output DC Current	0.65A Max Each Port 4 Port Output : 2.5A Max



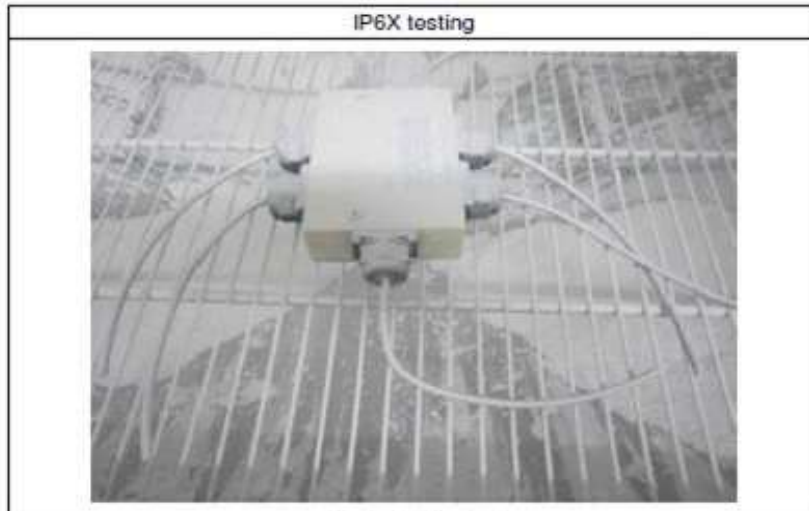
Output Power Consume Watts	30W (32W Max) Each Port 12VDC Input, 4 Port Output : 15W+15W+15W+15W or 30W+15W+7W+7W Total 60W Max 24VDC Input, 4 Port Output : 30W+30W+30W+30W Total 120W Max
MAC address	8K
Memory buffer	128KB
Ethernet Pin Number	Power + Data Output PIN : 1 ~ 8 Power PIN : 1 & 2 / 3 & 6
Ethernet Compatible	Compatible with IEEE802.3 / 802.3u / 802.3af / 802.3at PoE-PSE Standard
Support Ethernet Bandwidth	Auto Detect 10/100/1000Mbps (1Gbps) Bandwidth Each Port
Ethernet Cable SPEC	RJ-45 Cat.5 / Cat.5e / Cat.6 / Cat.6e / Cat.6A / Cat.7~
Transform Efficiency	90%~
Protection	Built-in MCU for PoE power management Automatic detection of Ethernet transmit bandwidth 10/100/1000Mbps Over discharge protection Input power overcurrent protection Input power supply over voltage protection Imported power polarity protection for anti-welding Power input ESD protection up to 1500W Network data input ESD protection up to 300W



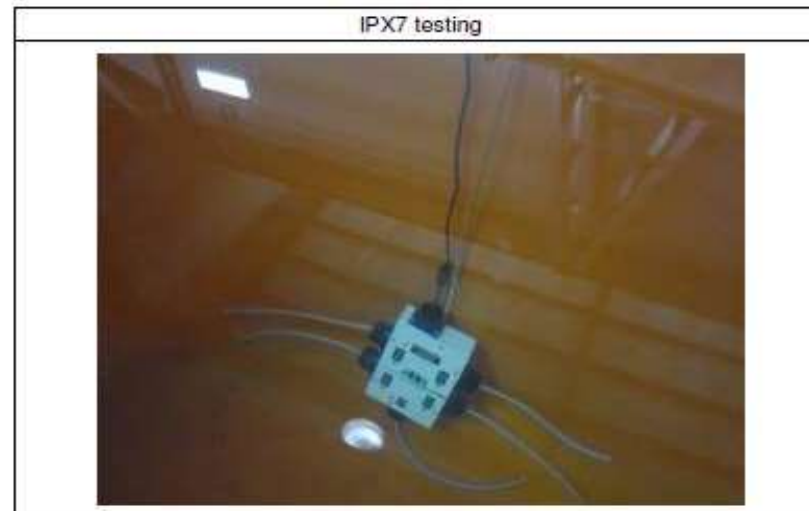
	Each Ethernet port design support surge protection around 19KA and general power unstable lightning power supply protection
Industrial Housing & Connector	Iron Airtight Housing IP 67 Gland Connector
Connector Type	Input DC Power: 11.5~28VDC Max DC Jack Female Power + Data Output: RJ-45 Port * 4 Ports Data Input:RJ-45 Port
Communication interface	RS-485 (Optional)
Operating Temperature	-40°C ~ +80°C
Storage Temperature	-40°C ~ +85°C
Rel. Humidity	5~95%RH
Dimension	230mm(L) x 185mm(W) x 45mm(H)
Weight	0.9Kg
LED Indicator	1.Plug DC Jack, Input DC Power, Red LED Light 2.RJ-45 Ethernet Cable Plug Into Power + Data Output Port, Green LED Light
Dusty & Waterproof	IP67
Approvals	CE Class B & FCC Part 15B
Installation	1.Street lamp pole mount or Upright pole mount 2.Wall mount installation
Warranty	12 months

Ps 1: Product specifications change, without notice, consultation with agent or dealer before buying the latest specifications

■ IP67 Dust-proof & Water-proof Certification



IP6X after the test



IPX7 after the test

