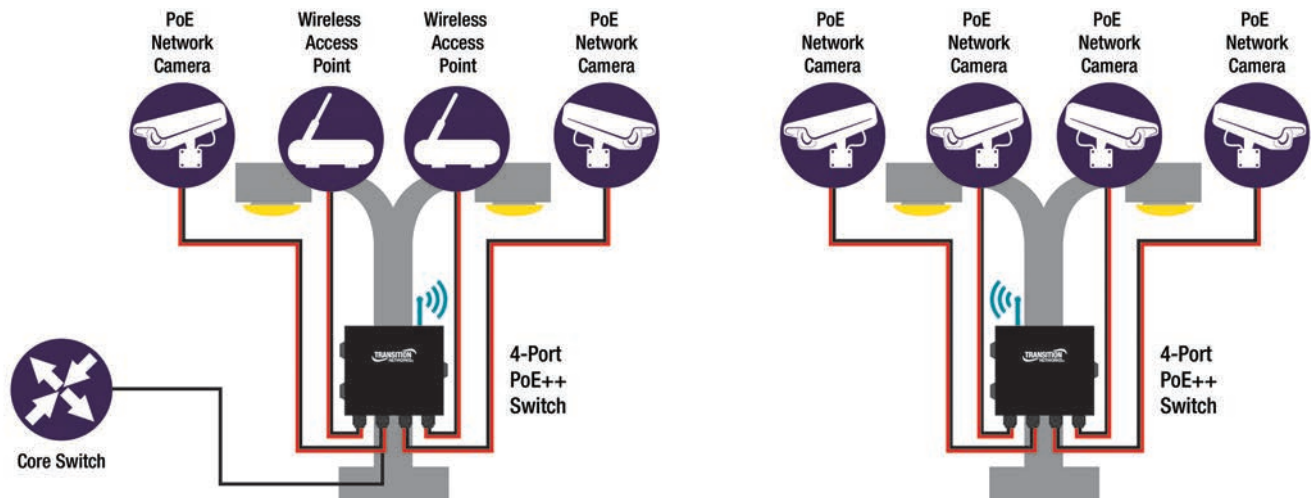


# Self-Enclosed Managed Hardened Gigabit Ethernet PoE++ Switch



## Applications

- In AC- or DC-powered environments, switch can be used as a PSE to provide up to 90 Watts of PoE++ power per port for up to 4 PoE-powered devices such as high-powered PTZ cameras, digital signage or PoE lighting
- In situations where AC or DC power is not available, use switch as a PoE-powered PD/PSE to provide power to multiple PoE-powered devices and provide auxiliary power for other accessories such as heaters or lighting (switch can also be powered using a copper cable running parallel to fiber optic cabling)
- With optional Passive PoE Module, use switch to provide 24VDC passive PoE power to connected items such as wireless radios, eliminating the need for additional power sources for those devices

## Features

## Benefits

Integrated NFC	Saves time and labor expense by allowing laborers of any skill level to easily configure switch prior to powering up and to repeat the configuration across multiple switches
Integrated BLE Radio	Allows remote access to switch for troubleshooting and changing settings, reducing time and hassles related to console cables and ladders or scissor lifts
Passive PoE Module (Optional)	Provides 24VDC passive PoE to non-standard PoE powered devices such as wireless radios
Auxiliary Port on PD	Provides additional power source for auxiliary equipment, reducing requirements for new power outlets
Integrated Management Software	Provides method for simple setup, monitoring, and control of connected devices in the network, reducing installation and maintenance costs
Mobile App	Provides mobile interface through BLE and NFC to connect to, configure, and diagnose the switch from a smartphone or tablet
IEEE 802.3af/at/bt Compliant	Enables up to 90 Watts power per port
PSE or PD Configuration	Can be used to provide PoE to other devices or to receive and provide PoE where external power sources are not available
6kV Surge Protection	Protects switch and connected devices from lightning or other surges in current
NEMA/IP66 Rated Enclosure	Protects switch from harsh outdoor environments, including rain, dust, and insects and can be easily mounted on a pole, wall or building

## Self-Enclosed Managed Hardened Gigabit Ethernet PoE++ Switch

(4) 10/100/1000Base-T PoE++ Ports + (1) 10/100/1000Base-T or 100/1000Base-X SFP/RJ-45 Combo Port



Transition Networks' SESP1040-541-LT-xx Switch is a Layer 2 managed switch with (4) 10/100/1000Base-T IEEE 802.3bt compliant PoE++ ports and (1) combination 10/100/1000Base-T RJ-45 or 100/1000Base-X SFP port (additional optional ports available), that is ideal for use in security and surveillance, PoE lighting, digital signage and many other applications. It is self-enclosed in an outdoor NEMA 4X/IP66 rated enclosure with 6kV surge protection on the AC line. Additional fuse protection on the PoE ports and included data port eliminates the need for external circuit cross protection between the attached powered device and the switch. It can be mounted on a wall or side of a building, or optional brackets are available for mounting on a pole. The switch is available in multiple configurations: as either an AC- or DC-powered power source (PSE) providing ≤90 Watts per port (not to exceed 180 Watts total on the AC-powered unit or 240 Watts total on the DC-powered unit), or as a PoE-powered device (PD) which is also a PSE providing up to 80 Watts of total PoE power. The PD version requires PoE power from an IEEE 802.3bt Type 4 Class 8 compliant PSE, or it can receive power over copper cable running parallel to a fiber optic cable for data (i.e. composite cable).

The PD also includes a 12V Aux port which can be used to provide auxiliary power to a PC, lighting or other accessories. A second combo 10/100/1000Base-T RJ-45 maintenance or 1000Base-X SFP uplink port can be activated by installing an optional Combo Port Module. Alternatively, an optional Passive PoE Combo Port Module can be added to provide 24VDC power to non-standard PoE powered devices such as wireless radios, eliminating the need for an additional external power source for those devices. An optional Digital Input/Output Module with four optical isolators configurable as either input or outputs provide connections for alarms, event notifications or other customer designated items. All versions are equipped with Near Field Communication (NFC) to allow simple and repeatable configuration of the switch using a user-friendly app on a mobile device prior to connecting or powering up the switch. Bluetooth Low Energy (BLE) allows remote access to alarm information or to read or change equipment settings without requiring physical access using ladders or scissor lifts. The switch also incorporates integrated management software for setup, monitoring and control of connected devices.

### Features

- Management: Web GUI, CLI, SNMP
- Monitoring: SNMP, Syslog
- Jumbo Frame support 10K bytes max
- Auto-MDI/MDIX
- IPv4
- Secure Shell (SSH) / Secure Sockets Layer (SSL)
- Authentication: RADIUS/TACACS+
- Link Layer Discovery Protocol (LLDP)
- Auto Power Reset (APR)
- DHCP Server
- 6 kV surge protection
- PoE port configuration/power management/power scheduling
- VLAN: Port based VLAN, IEEE 802.1Q tag-based, up to 4K VLAN entries, Private VLAN
- DMI
- Cable diagnostics
- Tamper detection
- NTP with onboard RTC for backup
- Four Independently Configurable digital I/O channels (optional)

#### Power Cord Preinstalled

Note: Only for SESP1040-541-LT-AC  
To order the AC version with the corresponding country specific power cord, add the extension from the list below to the end of the SKU; Ex: SESP1040-541-LT-AC-xx  
**-xx = Country Code**  
-NA = North America, -EU = Europe,  
-UK = United Kingdom, -SA = South Africa,  
-JP = Japan, -OZ = Australia, -BR = Brazil,  
-AR = Argentina

### Specifications

Standards	IEEE 802.3 IEEE 802.3af IEEE 802.3at IEEE 802.3bt	IEEE 802.1Q IEEE 802.3ab
Ethernet Ports	(4) 10/100/1000 Mbps RJ-45 ports (1) 100/1000 Mbps SFP/RJ-45 combo ports CAT5e cable or higher recommended for 60 Watts; CAT6 cable or higher recommended for 90 Watts	
Auxiliary Power Port	2-position wire terminal block (≤12AWG) with screw retention	
Serial Console Port	RS-232 RJ-45	
MAC Address	8K MAC address table	
Max Frame Size	10K bytes	
Alarm Status	Accessible through CLI access, BLE interface or Integrated Management Software	
Dimensions	Width: 10.05" [255.3 mm] Depth: 4.34" [110.1 mm] Height: 8.48" [215.4 mm]	
Power Input	AC Version: Universal input 120-240VAC Low Voltage DC Version: 48VDC (input range 40-59VDC) PoE Powered PD Version: 90 Watts PoE	
Power Consumption (no PoE load)	AC Version: < 20 VA DC Version: < 10 W PoE Powered PD Version: ≤ 5 W	
Power-over-Ethernet	Max PoE Budget ≤90 Watts on individual ports (specific port configuration may apply) AC Version: 180 Watts total DC Version: 240 Watts total PD Version: 80 Watts total 12VDC auxiliary power (on PD version only) 2-position bare wire terminal block with screw retention up to 12AWG wire size	
Environment	Operating: -30°C to +70°C (Inside Enclosure) External Operating: -40°C to +50°C Storage: -40°C to +85°C Humidity: 5% to 95% (non-condensing)	
Weight	4.8 lbs. [2.18 kg]	
Certifications	Emission EN55022, Class A, Immunity EN55024, Meets Surge Protection as specified in GR-1089 CORE Issue 4; ITU-T K.21 6 kV on AC line, Ingress Protection IP66, NEMA 4X, CE, IEC61000-4-2 (ESD), IEC61000-4-4 (EFT), IEC61000-4-5 (Lightning), IEC60950-1, IEC60950-22, UL EN60950-1, NFC: NFC Forum Type 2 Tag, ISO/IEC 14443A; BLE: BLE 4.2	
Warranty	2 Years	

### Ordering Information

#### SESP1040-541-LT-AC

AC-powered self-enclosed switch with (4) 10/100/1000Base-T PoE++ ports + (1) combo 10/100/1000Base-T RJ-45 or 100/1000Base-X SFP port  
Note: power cord preinstalled - see note

#### SESP1040-541-LT-DC

DC-powered self-enclosed switch with (4) 10/100/1000Base-T PoE++ ports + (1) combo 10/100/1000Base-T RJ-45 or 100/1000Base-X SFP port

#### SESP1040-541-LT-PD

PoE-powered Type 4 Class 8 self-enclosed switch with (4) 10/100/1000Base-T PoE++ ports + (1) combo 10/100/1000Base-T RJ-45 or 100/1000Base-X SFP port

#### Optional Modules for Port 6

(Note: only 1 of these modules can be used at a time in Port 6)

#### SESP1040-2P-1G-CP

Additional Combo Port Module to activate a 2nd combination 10/100/1000Base-T maintenance port or 1000Base-X combo uplink port  
Note: On PD version, RJ-45 from included combo port is utilized for PoE input, so included combo port SFP is only available when unit is powered with parallel power and fiber (composite) cable instead of PoE.

#### SESP1040-2P-24V-CP

Passive PoE Combo Port Module to activate a 2nd combination 10/100/1000Base-T maintenance port with 24VDC for powering 24V non-standard PoE powered devices OR to activate a 2nd 1000Base-X uplink port

#### Optional Accessories (sold separately)

##### Hardened SFP Modules

##### SESP1040-4P-DIG

Digital Input/Output Module with 4 optical isolators and a 12V integral power source with 1500VDC isolation

##### SESP1040-4P-PMB

Pole Mount Bracket Kit  
Note: screws, pole straps, or rubber lined zip ties can be used in conjunction with brackets (not included as pole sizes vary)

##### SESP1040-4P-FMKIT

Fiber Management Kit: Includes fiber management tray, mounting screws, and alternative cable gland / inserts