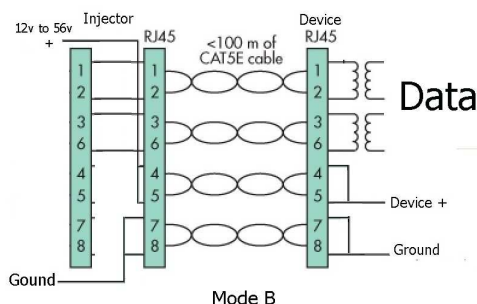




Multi Port Passive POE injector

Using your WS-POE-IO-1.35



Passive PoE injector/Splitter for SHORT applications

This device can be used to power a low power device via Ethernet cable. Please note that Ethernet cable is AWG 24 wire – quite thin. If you are powering a 5v device that needs 2 amps – the Ethernet wire will lose about 1 volt every 10 feet. You can calculate the loss from our web site at <http://wifiqos.com/poe-calc.html> Connect the injector to your Ethernet switch, router or hub and existing power supply. Any Ethernet cable will work. Since cameras operate at about 2 mb/s max – even CAT-5 cable will work fine up to 328 ft. Connect the remote end to a splitter, and connect the output of the splitter to the device.

Do not use with a PoE Switch.

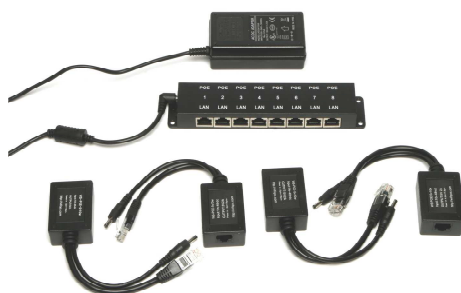
Which PoE ? Please see <http://wifi-texas.com> "Find a PoE" – you can enter your device and we will show you the PoE you need.

How PoE works

A device needs power to operate. Not volts or amps – power - expressed as watts. That power can be supplied at different voltages. The electronics inside the device needs usually about 3.3 or 5 volts. But at low voltages, the wires from power supply have a lot of loss beyond about 6 feet. So for short distance power, 5v Cameras are shipped with a 5v power supply because 5v supplies cost less. But if you try to make a longer DC cord there are problems.

If the device needs 2 amps at 5 volts, that is 10 watts. With our active splitter, 10 watts at 24v is less than .5 amps. There are no problems with 24v on Ethernet wire at up to 328 feet if our active splitter is used.

5v DC-DC converter: Active Splitter for Cameras, Kiosks and other 5v or USB devices to 328 feet.



We have kits of 1, 3, 4, 8, 12 and 16 cameras. We also have 12 volt splitters.

Each splitter can handle 10 watts or 2 amps max. Cameras typically need about 7 watts each, so your power supply can be selected for the number of cameras connected. Our 3 and 4 camera kits have a 30 watt supply, the 8 camera kit has a 60 watt supply. The 12 camera kit has a 120 watt supply.

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URL: <http://wifiqos.com/> Skype:wifiqos

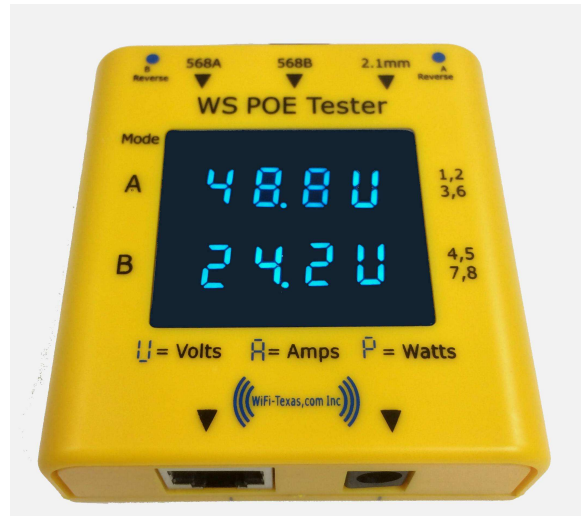
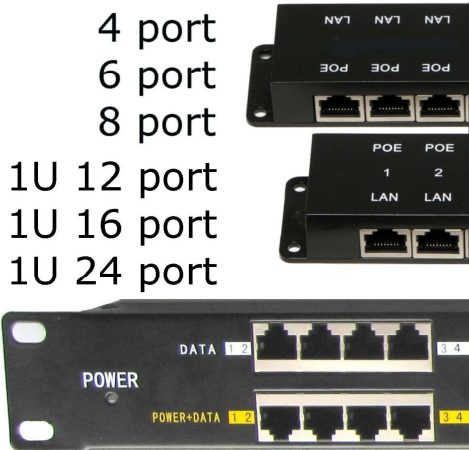
Here is why 24v or 48v is used on Ethernet cables

A device needs power – a simple non-IR camera needs about 4 watts. So at 5 volts – that is .8 amps. The power cord in the 5v supply is very short – say 6 feet. The loss in 6 ft of power cord is about 120 milliwatts – not a problem. Power loss is the current squared times the distance.

If we use 24 volts for a 4 watt device, – the power is the same, but the current is lower – about 160 milliamps. An ethernet wire can be up to 328 ft – so the loss is 50 times greater than at 6 ft, but since the current is 5 times lower – the power loss (a square of the current) is 25 times lower – the loss in the entire cable is therefore 310 milliwatts. A 10 watt device will cause about 2 watts to be lost in 328 ft of cable, so we should budget 12 watts worst case total per 10 watt device. At 5 volts – the cable loss over 328 ft for a 10 watt device would be 40 watts

Other Products, either 10/100 and/or gigabit

PoE Injectors



Multiport PoE Injectors



PoE Tester



Switch + PoE Injector

802.3af compatible splitter