PoE

Power over Ethernet

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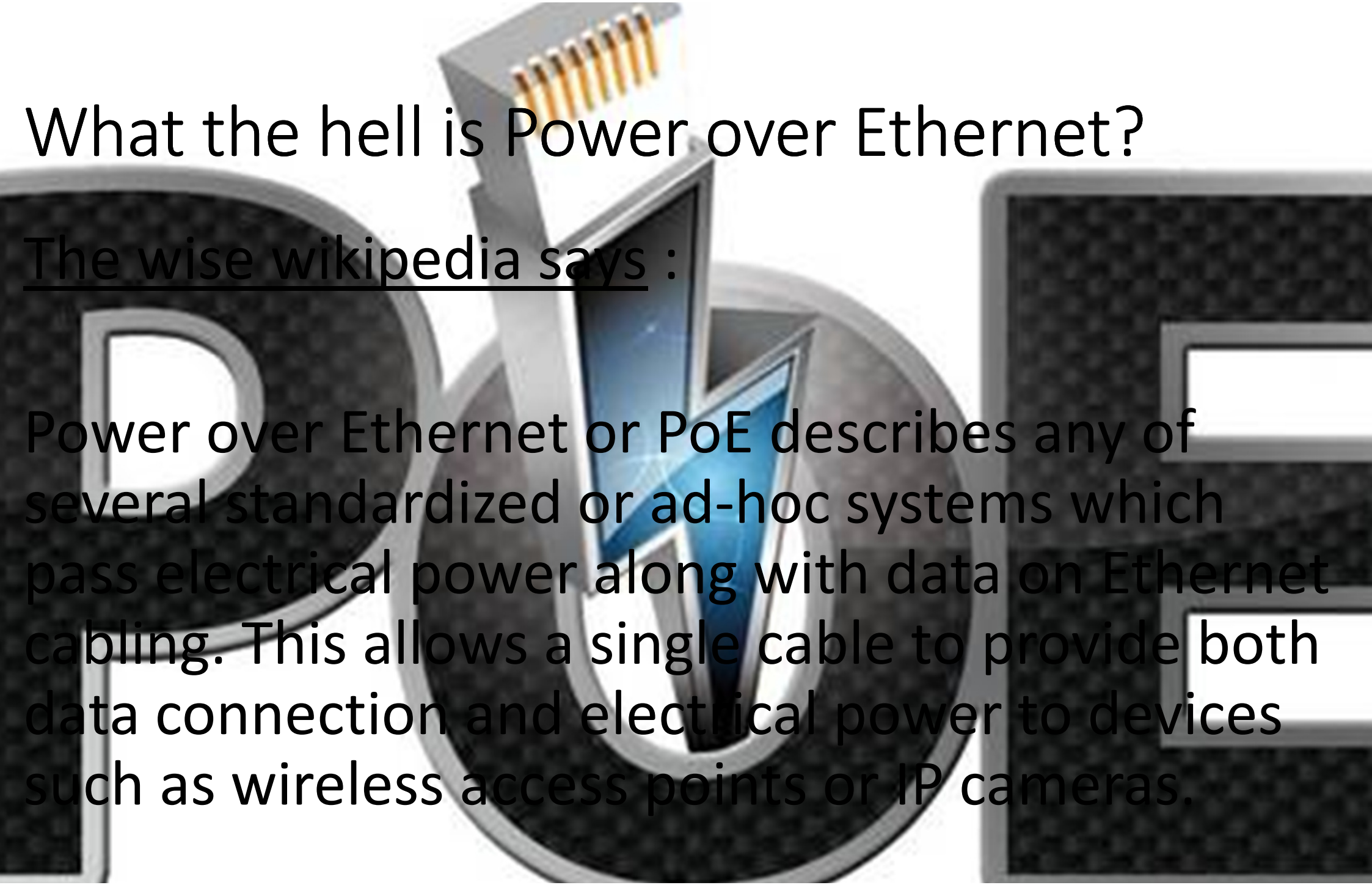
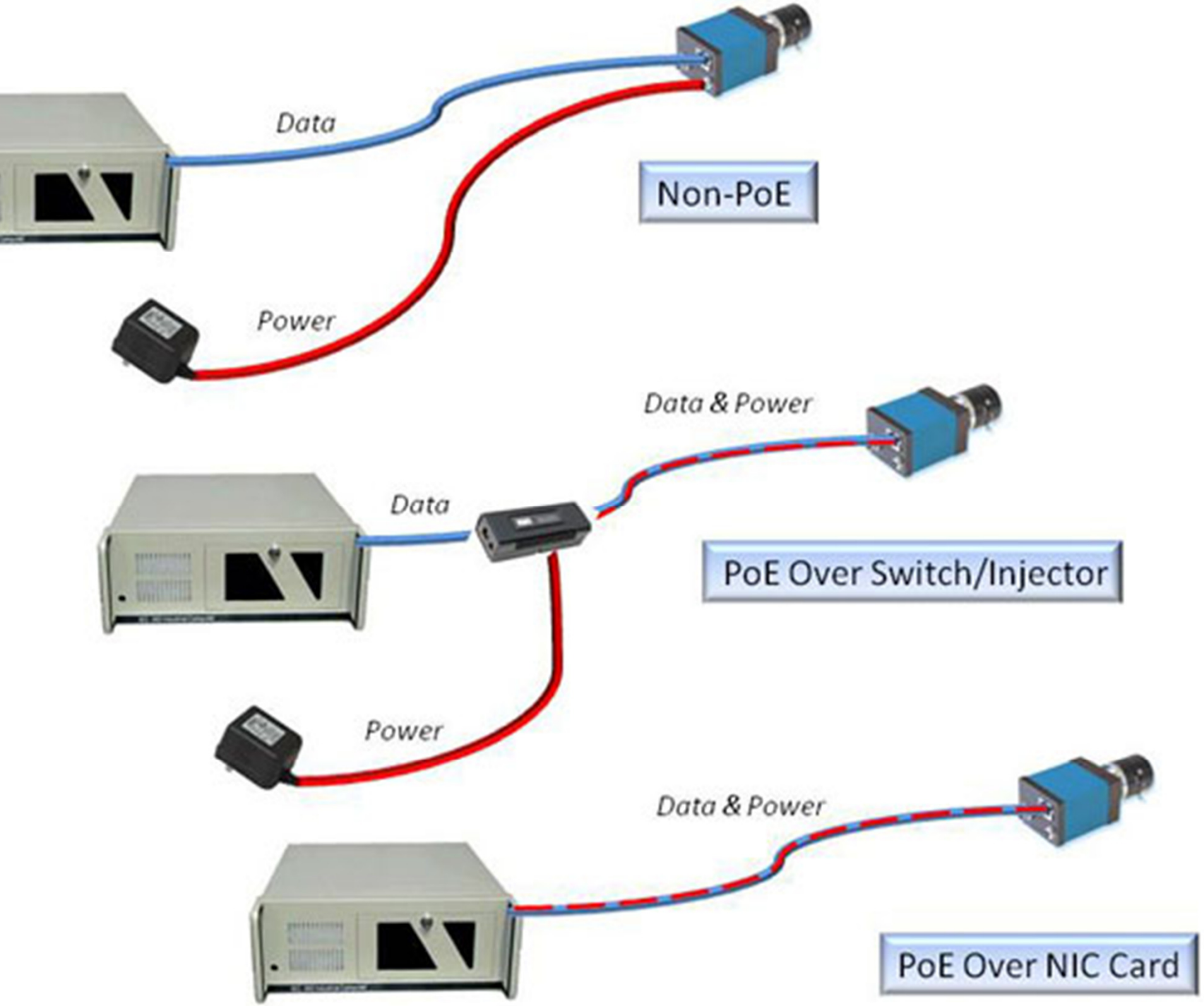
What the hell is Power over Ethernet?



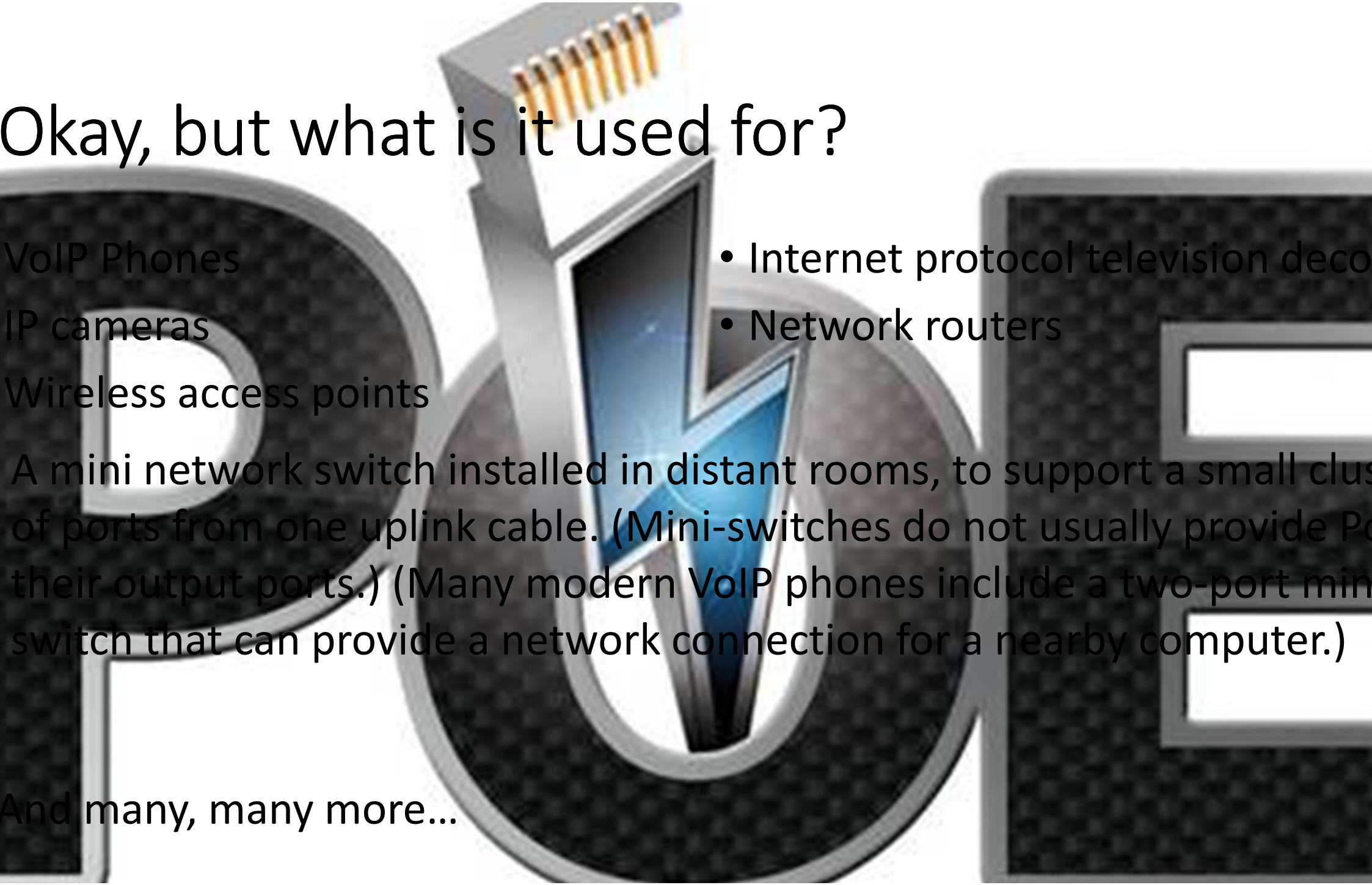
The wise wikipedia says :

Power over Ethernet or PoE describes any of several standardized or ad-hoc systems which pass electrical power along with data on Ethernet cabling. This allows a single cable to provide both data connection and electrical power to devices such as wireless access points or IP cameras.



What does it mean in practice

Okay, but what is it used for?



VoIP Phones

IP cameras

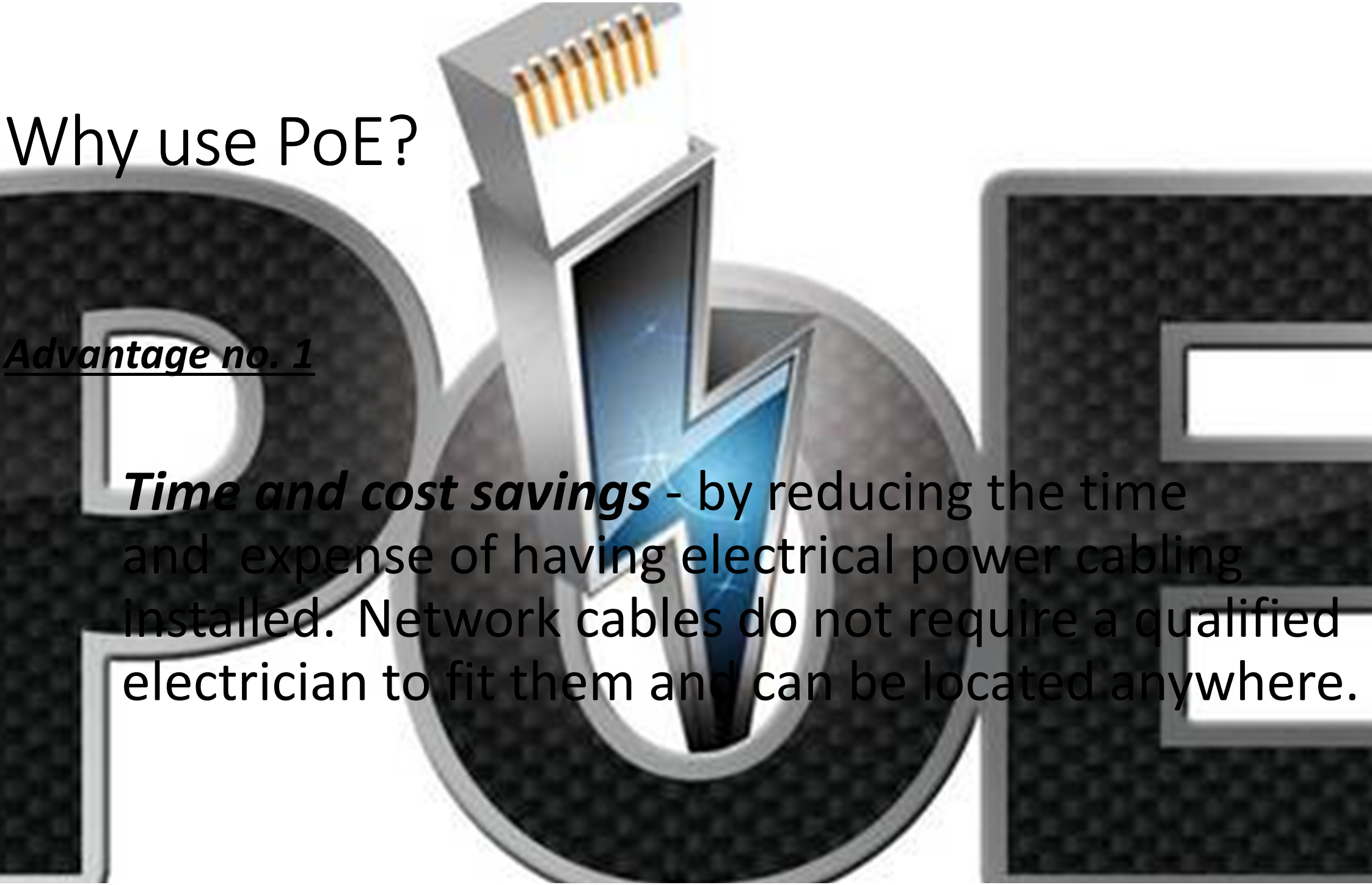
Wireless access points

- Internet protocol television deco
- Network routers

A mini network switch installed in distant rooms, to support a small clus
of ports from one uplink cable. (Mini-switches do not usually provide Po
their output ports.) (Many modern VoIP phones include a two-port min
switch that can provide a network connection for a nearby computer.)

And many, many more…

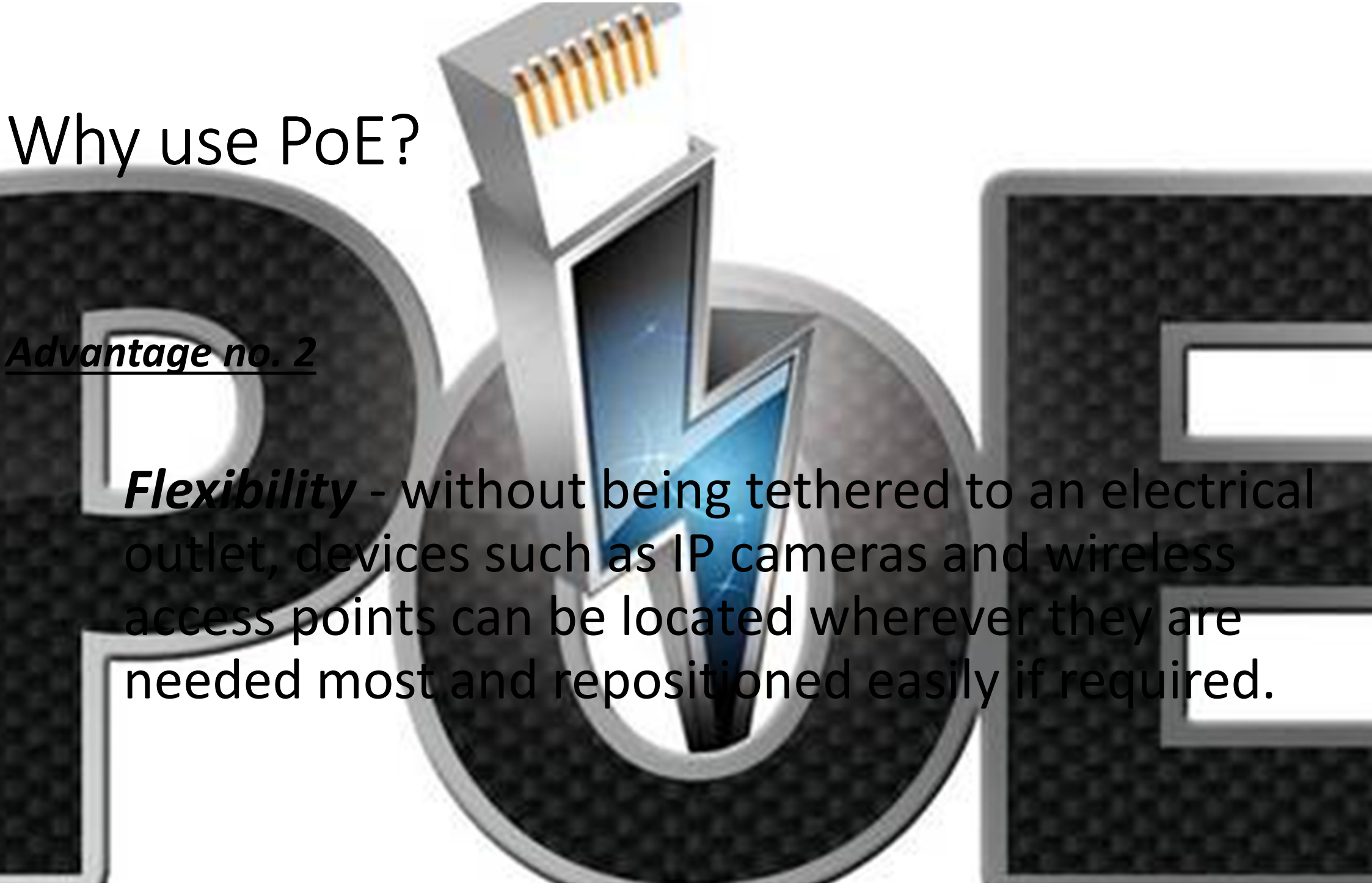
Why use PoE?



Advantage no. 1

Time and cost savings - by reducing the time and expense of having electrical power cabling installed. Network cables do not require a qualified electrician to fit them and can be located anywhere.

Why use PoE?



Advantage no. 2

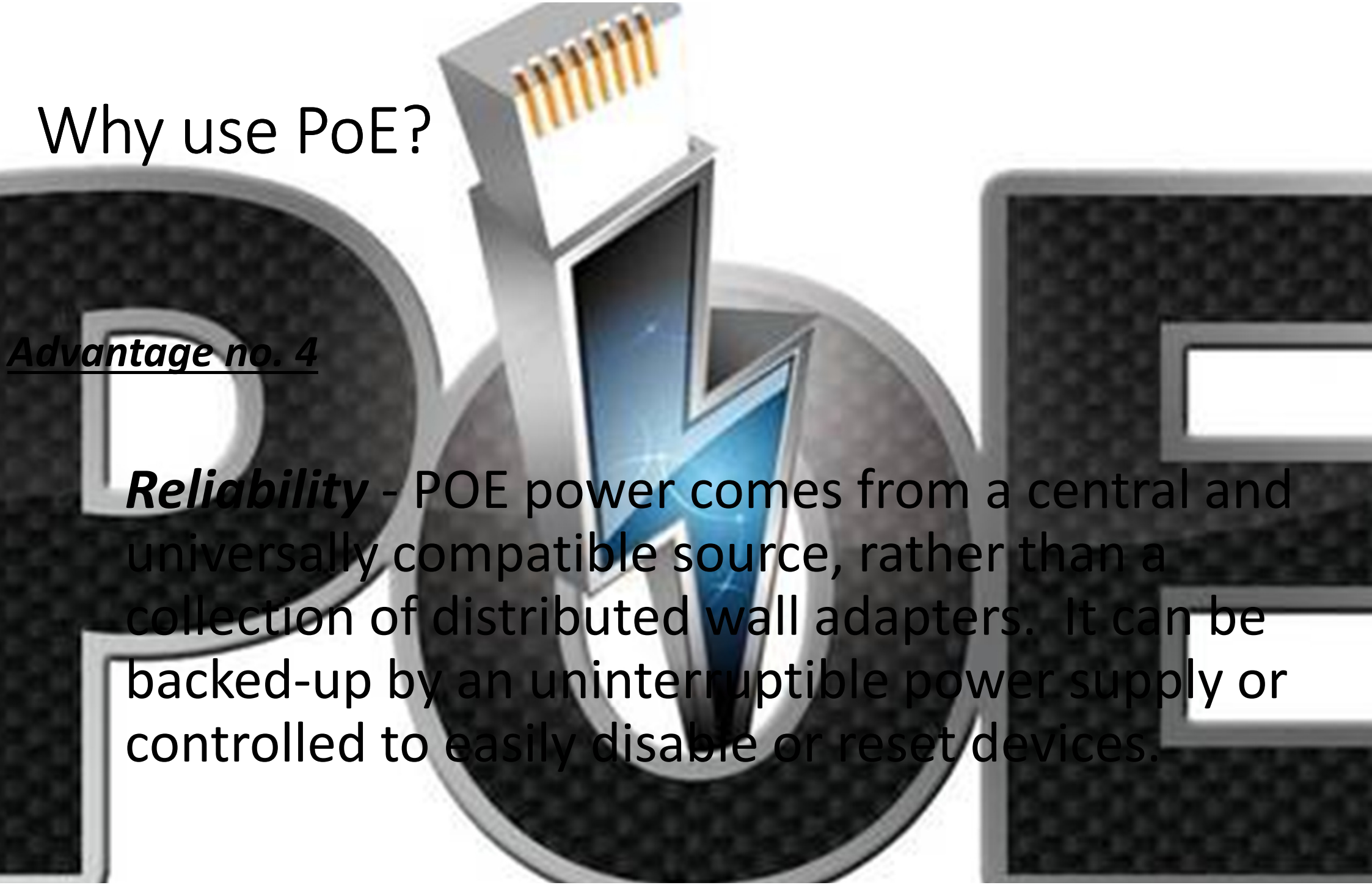
Flexibility - without being tethered to an electrical outlet, devices such as IP cameras and wireless access points can be located wherever they are needed most and repositioned easily if required.

Why use PoE?

Advantage no.3

Safety - POE delivery is intelligent and designed to protect network equipment from overload, underpowering or incorrect installation.

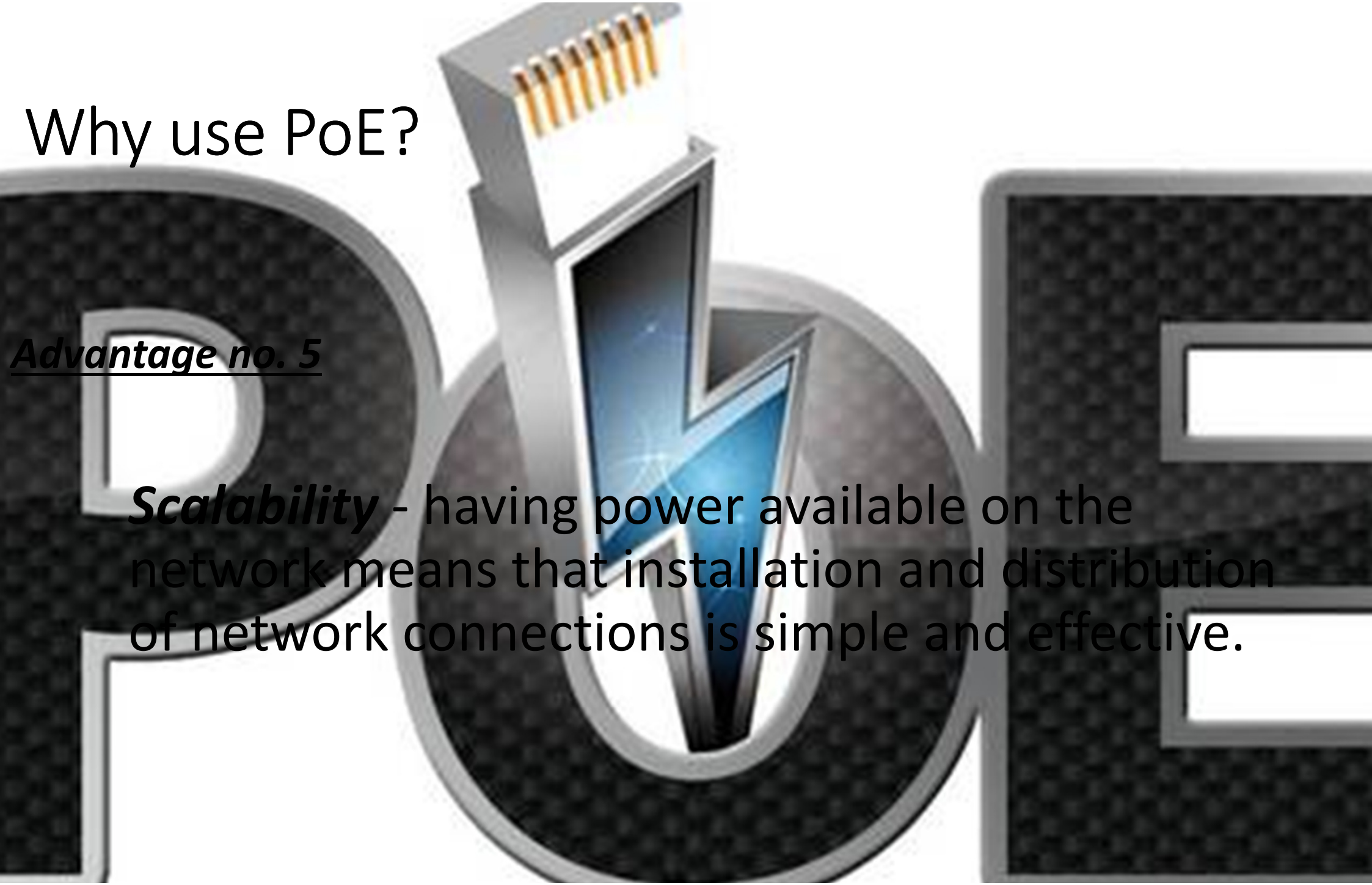
Why use PoE?



Advantage no. 4

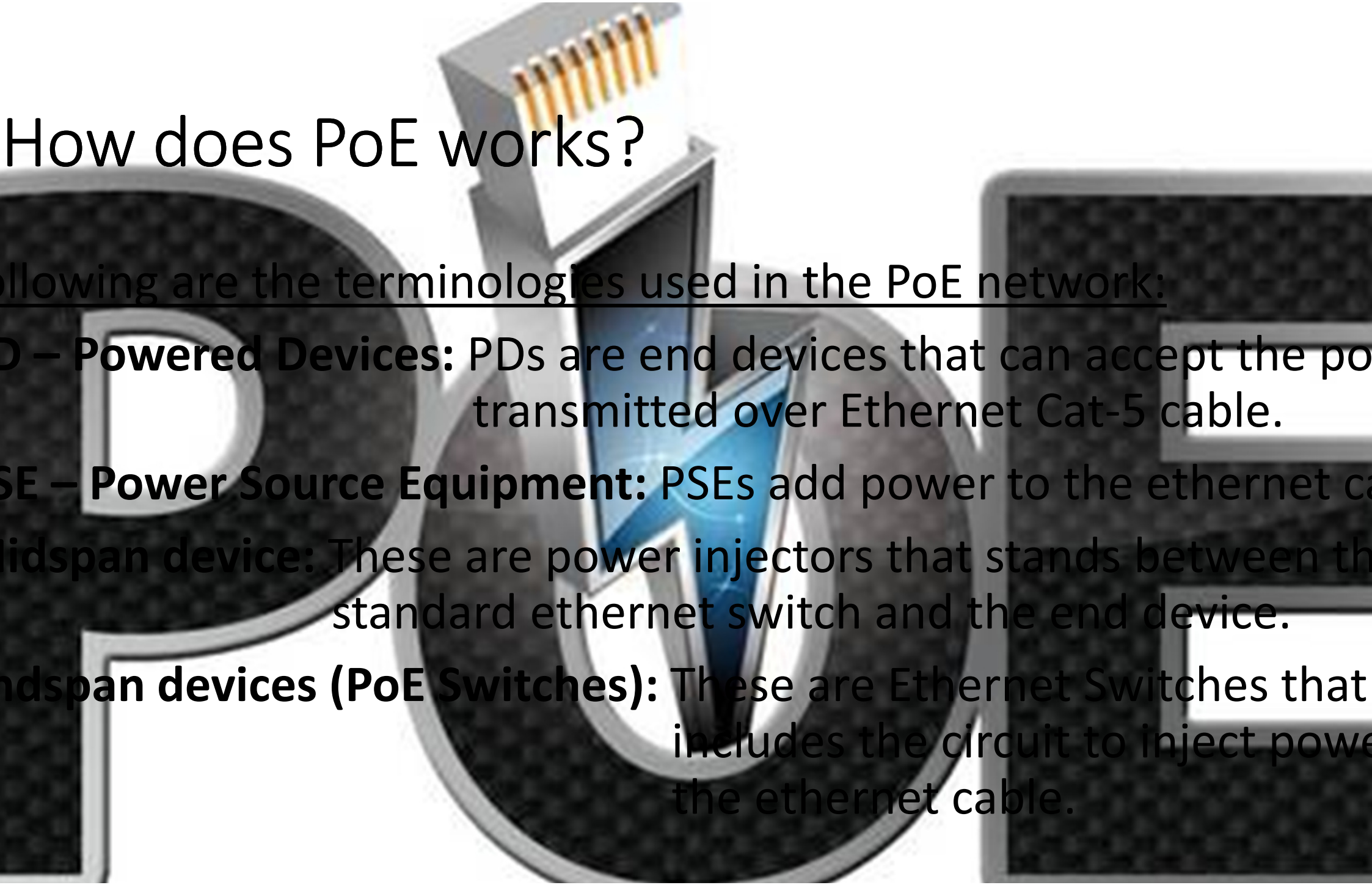
Reliability - POE power comes from a central and universally compatible source, rather than a collection of distributed wall adapters. It can be backed-up by an uninterruptible power supply or controlled to easily disable or reset devices.

Why use PoE?



Advantage no. 5

Scalability - having power available on the network means that installation and distribution of network connections is simple and effective.



How does PoE works?

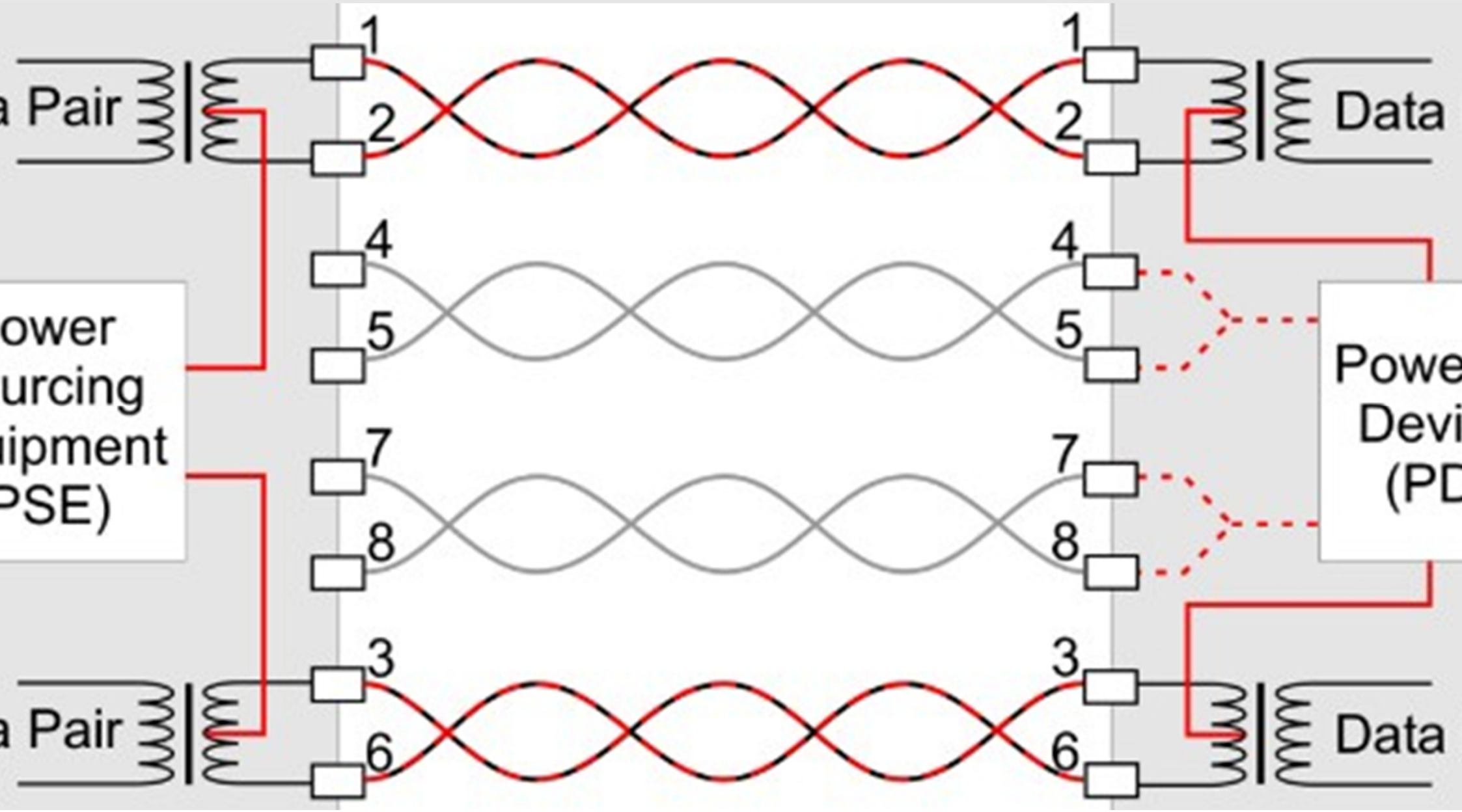
llowing are the terminologies used in the PoE network:

D – **Powered Devices:** PDs are end devices that can accept the po
transmitted over Ethernet Cat-5 cable.

SE – **Power Source Equipment:** PSEs add power to the ethernet ca

lidspan device: These are power injectors that stands between th
standard ethernet switch and the end device.

ndspan devices (PoE Switches): These are Ethernet Switches that
includes the circuit to inject powe
the ethernet cable.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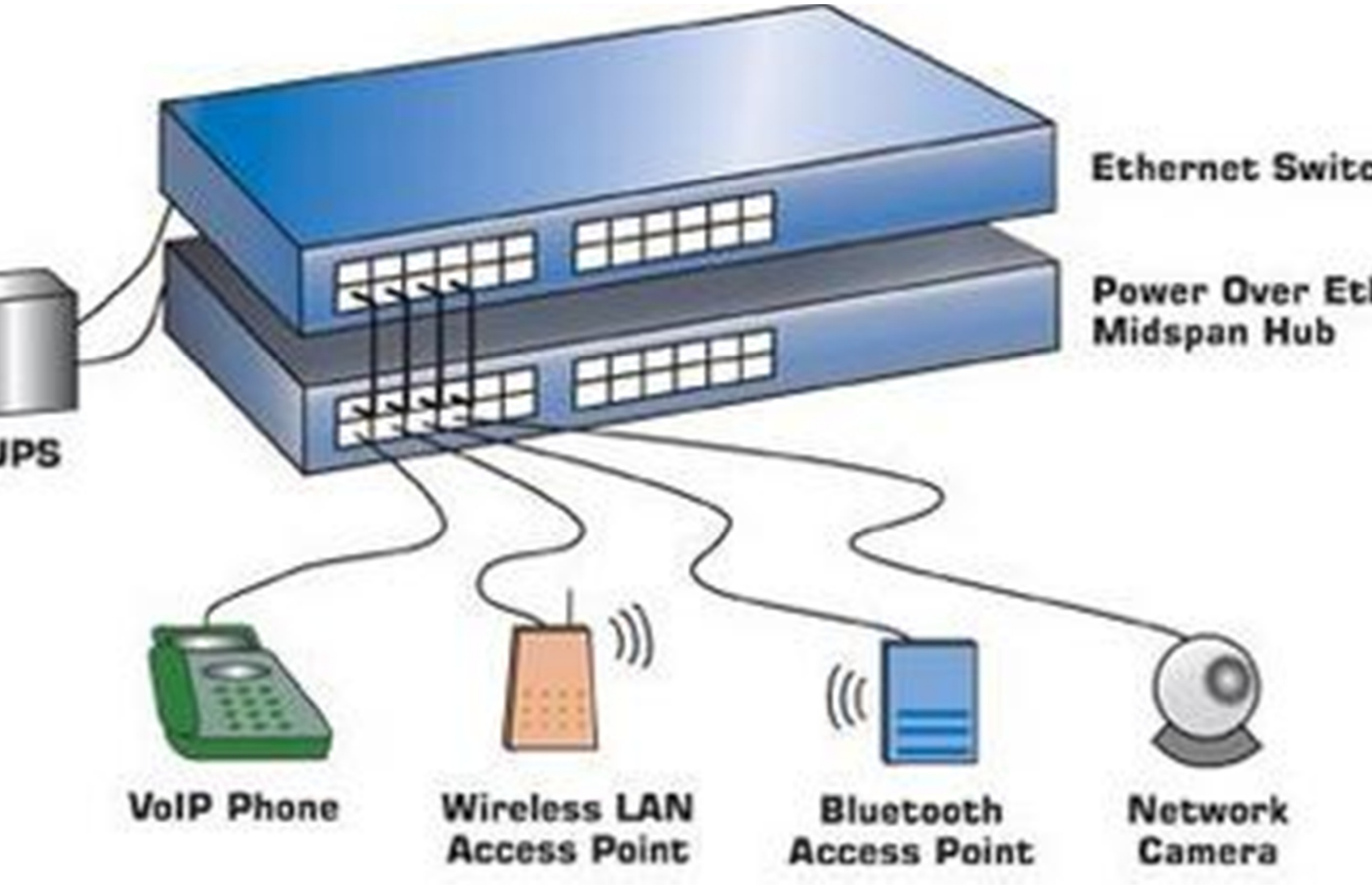
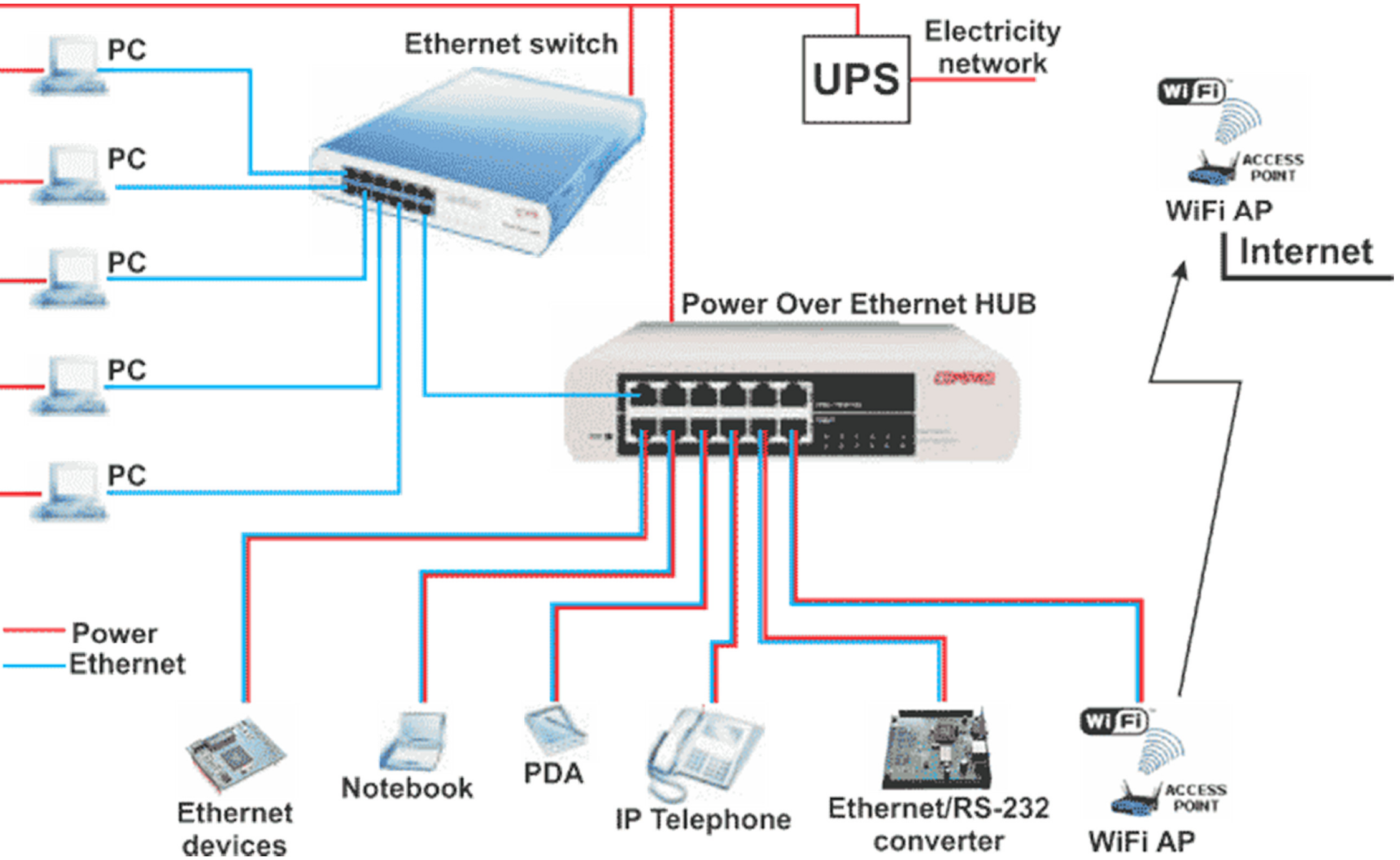

Ethernet Switc
Power Over Et
Midspan Hub
UPS
VoIP Phone
Wireless LAN
Access Point
Bluetooth
Access Point
Network
Camera


PC
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Ethernet switch
UPS
Electricity network
WiFi
ACCESS POINT
WiFi AP
Internet
Power Over Ethernet HUB
Power
Ethernet
Ethernet devices
Notebook
PDA
IP Telephone
Ethernet/RS-232 converter
WiFi
ACCESS POINT
WiFi AP

List of sample PoE technology products

dapters:

nk Power over Ethernet (PoE) Adapter – DWL-P50
nk Power Over Ethernet Adapter – DWL-P200
sys Power Over Ethernet Adapter Kit

Vireless Access Point:

k PoE Wireless Access Point – DWL-2200AP
k PoE Outdoor Wireless Access Point – DWL-7700AP

oIP Phone:

com IP Phone with Integrated PoE – IP550

PoE Switch:

- Netgear 24 Port Switch with 2 Gigabit Ports and 12 Po
  – FS726TP ProSafe

PoE Network Surveillance Camera:

- Airlink Power over Ethernet Network Camera – SkyIPCam310
- Panasonic 21x Optical Zoom Pan/Tilt Network Camera HCM580A
- Mobotix Outdoor, Wide Angle Lens, Motion Detection Camera D22M-IT

Sources:

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Thank you for watching ☺