

FREQUENTLY ASKED QUESTIONS

COSEC

What
When
Which
Where
How
Who
Why



Date: 1st April 2015

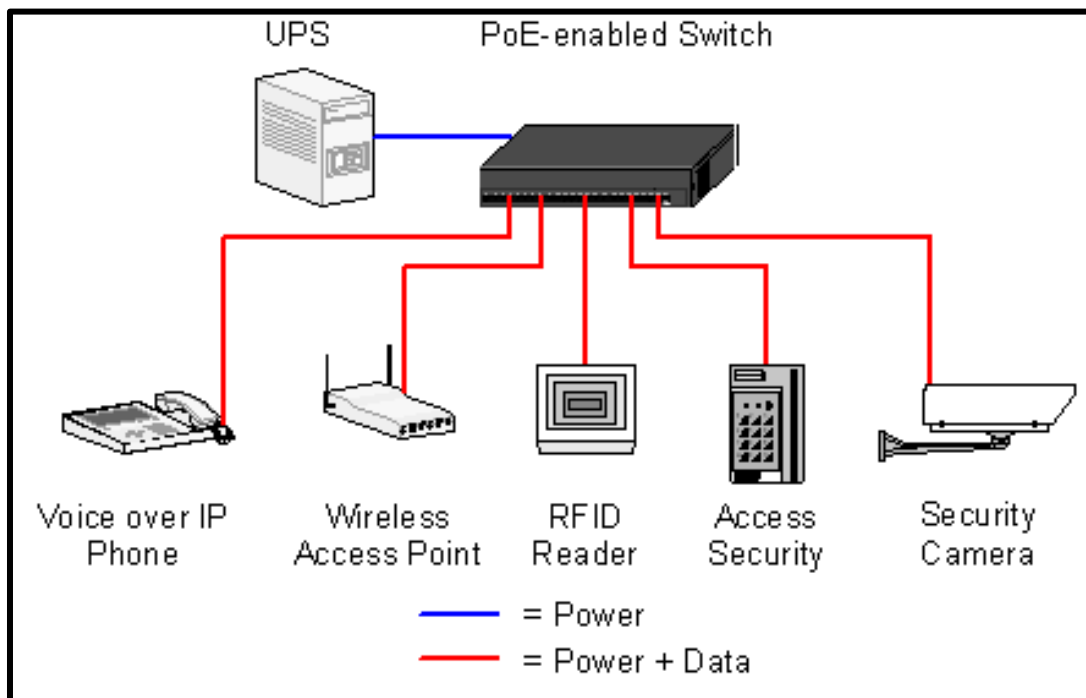
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PoE Compatibility in Matrix COSEC Devices

Introduction to PoE:

The Power over Ethernet (PoE) feature lets Ethernet cables supply the power for network devices, at the same time it is transmitting data in the normal way over Ethernet. It is a revolutionary technology that extends the already ultra-broad functionality of Ethernet by supplying reliable DC power over the same Category 5/5e twisted-pair cable that previously carries only Ethernet data.



Different PoE standards:

1. **IEEE 802.3af** – In this standard the maximum power available at the powered device is 12V@1A (~12 W).
2. **IEEE 802.3at** – This standard is also known as PoE+ in which the maximum power available at the powered device is 12V@2A (~25W).

Matrix COSEC Devices supporting PoE:

- PATH Series
- VEGA
- NGT
- ARC

All above mention Matrix COSEC devices supports IEEE 802.3af PoE standard.

Device Type	Maximum ratings of Door Lock if it is to be Powered from COSEC Device which is being operated on PoE
PATH	12V @ 500mA
VEGA	12V @ 450mA
NGT	Not Possible to supply power to the Door Lock from the Device
ARC	Not advisable to supply power to the Door Lock from the Device

Note: Make sure that the Door Lock ratings are not more than the above mentioned ratings when the Device is operated on PoE.

Selecting appropriate PoE switch for Matrix COSEC Devices:

COSEC Devices work ideally with PoE switches which provide 15.4W power on each Port simultaneously. PoE injector can also be used if it is delivering 15.4W.

Let us take a few examples so as to make sure that the appropriate PoE switch is selected for COSEC Devices.

- Cisco Catalyst 2960S-48FPD-L model has 48 Ports with 740W

Power available on each Port = $740 \div 48 = 15.4W$

Hence on all the 48 Ports of the Switch we can connect COSEC Device and will function smoothly.

- Cisco Catalyst 2960S-48LPD-L model has 48 Ports with 370W

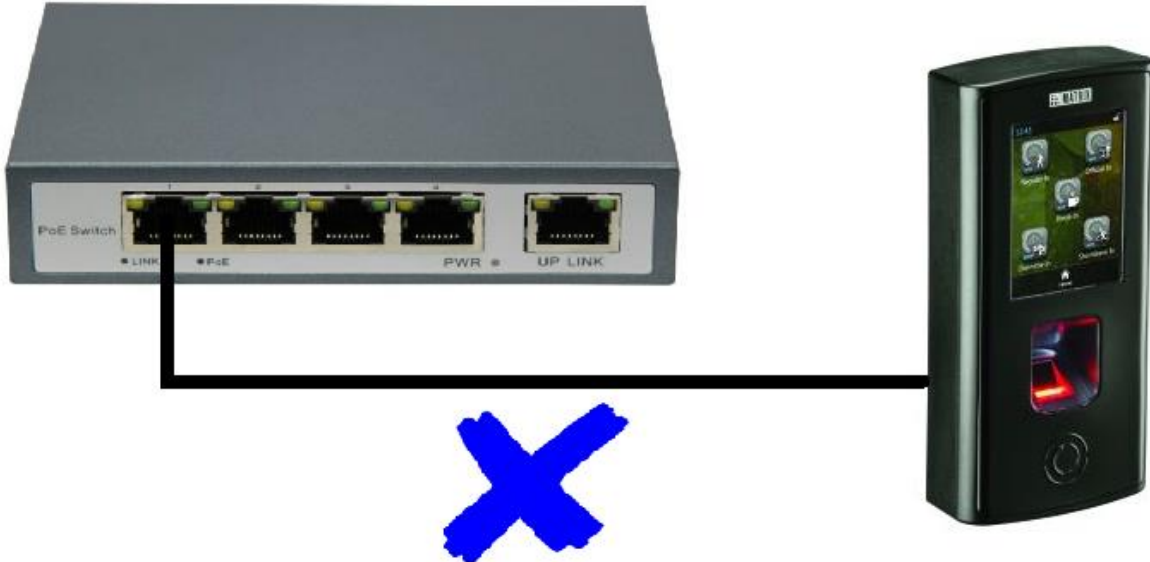
Power available on each Port = $370 \div 48 = 7.7W$

In this case we cannot connect 48 COSEC Device on each Port as the Switch is not delivering enough Power on its PoE Port.

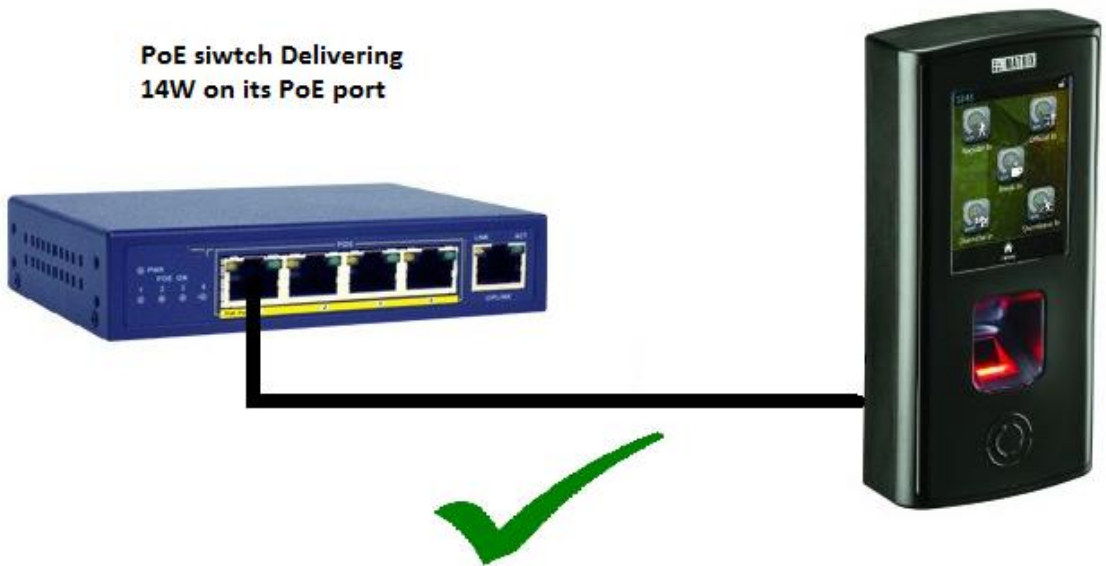
We need 15.4W on PoE Port of the switch. So $370 \div 15.4 = 24$

If only COSEC Devices are to be connected to this switch, then we have enough Power only for 24 Devices.

PoE Switch Delivering
10W on its PoE port



PoE switch Delivering
14W on its PoE port



For more information, contact
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