PoE (Power over Ethernet)

A PoE switch can provide 48 volts of direct current over two out of four pairs on an Ethernet cable, with maximum current of 400mA and maximum output power of 15.4W. IEEE has developed a new IEEE 802.3at standard, known as PoE+ to provide maximum output power of 30W.

Class	PD Power	Note
	(W)	
0	0.44 to 12.95	Default
1	0.44 to 3.84	Optional
2	3.84 to 6.49	Optional
3	6.49 to 12.95	Optional
4	Future use	Future use

PoE



Adapting Devices for PoE using Power Injector and Power Picker



EMBEDDED PoE - New Standard for Factory Installed PoE

РоЕ -Приложения



РоЕ - Приложения

FSM7326P Switch with PoE Support



РоЕ - Приложения

FSM726S Managed Switch



Реализация на РоЕ

Power over Ethernet Alternative A



Реализация на РоЕ

Power over Ethernet Alternative A



PoE – Power Over Ethernet: A relatively new technology that allows PoEenabled Ethernet networked devices to receive power (as well as data) over existing CAT-5 Ethernet cable without the need to make modifications to it.

PD - Powered Device: A Ethernet device that receives power over Ethernet. It could be a PoE-enabled IP phone, a wireless access point, a serial device server or any other IP device that requires power.

PSE – Power Sourcing Equipment: The network PoE element that inserts power onto an Ethernet cable. It may be an *endspan*device, such as a PoE-enabled switch, or a *midspan* device located between the switch and the PD.

Midspan – A midspan device is a PSE that inserts power onto the Ethernet cable. It is situated between the LAN switch and the PD. Typically, midspan devices are added to existing networks to allow the use of PoE-enabled PDs.

Endspan – An endspan device is typically a switch that incorporates PoE capabilities. Endspan devices often are implemented when a new network is created, to avoid adding midspan devices as well as the switch.

IEEE 802.3af – An IEEE standard (ratified in June 2003) that defines the transmission of power over Ethernet infrastructure. Also called *Data Terminal Equipment (DTE) Power via Media Dependent Interface*.

