Power over Ethernet Switches
POEFE404
POEFEM24T2SFP
POEGEM12T2SFP

ALLOY®

2 paired UTP copper/SFP fibre Gigabit uplink ports

10/100Mbps 802.3af compliant PoE network ports supporting power and data

Complete Layer 2 management solution via web, network SNMP port or Telnet console

2 paired UTP copper/ SFP fibre Gigabit uplink ports, with copper port supporting PoE

FAST ETHERNET & GIGABIT ETHERNET POWER OVER ETHERNET SWITCHES

Alloy's range of Power over Ethernet (PoE) switches are standards-based devices designed to provide power to peripheral devices, as well as carrying network traffic. Individual models support Fast Ethernet or Gigabit Ethernet systems. Our PoE switches allows power to be supplied to end devices (for example: VoIP phones, wireless access points, security cameras) directly through the existing LAN data cables. All models in the range are easy to implement, and by supplying power to the end device, you can centralise power distribution without the need to increase infrastructure. Advanced PoE features include auto-sensing algorithms enabling automatic discovery, classification, current limit, and other necessary functions of devices that can be powered by the PoE switch. In addition, POEFEM/POEGEM models feature full Layer 2 SNMP/RMON management, allowing integration of the switch into your SNMP based network administration system.

- All models PoE standards-based - IEEE 802.3af compliant
- Non-blocking, store-and-forward and shared-memory switching technology
- Individual models support Fast or Gigabit Ethernet networks
- POEFEM24T2SFP - 24x 10/100Mbps PoE ports & 2x paired UTP copper/SFP fibre Gigabit uplinks
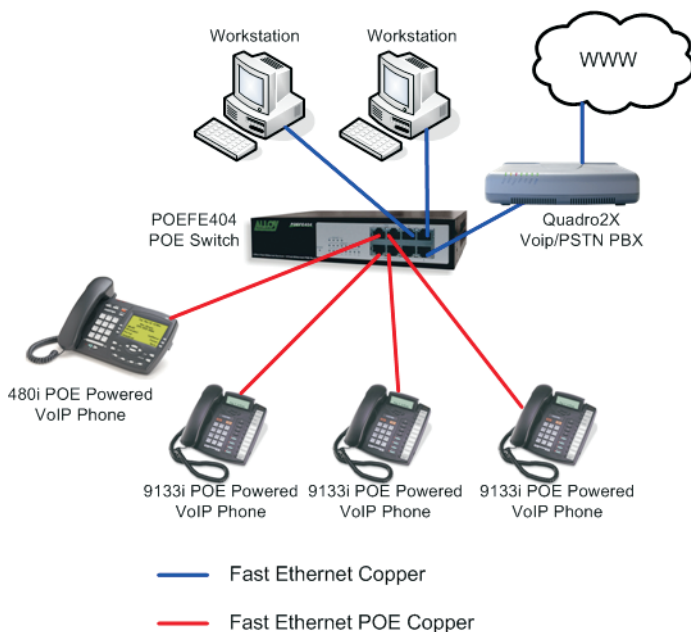
- POEGEM12T2SFP - 12x 10/100/1000Mbps PoE ports & 2x paired PoE UTP copper/SFP fibre Gigabit uplinks
- POEFE404 - 4x 10/100Mbps PoE ports & 4x 10/100Mbps data ports
- POEFEMxx models feature full Layer 2 SNMP/RMON management
- POEFEM/POEGEM model management can be accessed via web browser or SNMP/Telnet in-band interface
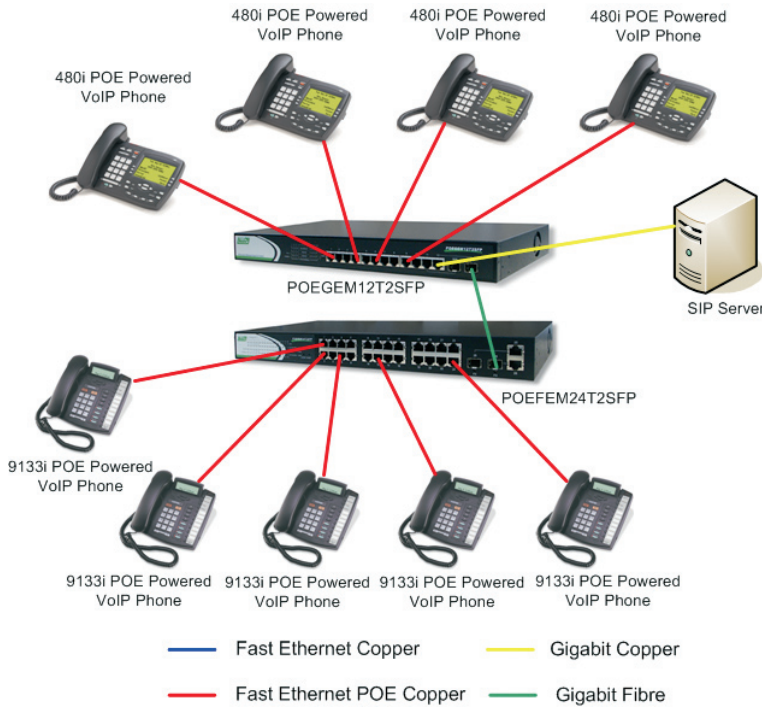
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Technical Specifications

	POEFE404	POEGEM12T2SFP	POEFEM24T2SFP
Standards Compliance	IEEE 802.3 Ethernet	As per POEFE404 plus:	As per POEGEM12T2SFP
	IEEE 802.3u Fast Ethernet	IEEE 802.3z Gigabit Ethernet	
	IEEE 802.3x Flow Control	IEEE 802.3ab GE over Copper	
	IEEE 802.3af Power over Ethernet		
Interfaces	4x 10/100Mbps PoE ports (RJ-45)	12x 10/100Mbps PoE ports (RJ-45)	24x 10/100Mbps PoE ports (RJ-45)
	4x 10/100Mbps Data ports (RJ-45)	2x 10/100/1000Mbps PoE ports (RJ-45)	2x 10/100/1000Mbps PoE ports (RJ-45)
		Paired with	Paired with
		2x 1000Mbps SFP Slots	2x 1000Mbps SFP Slots
Transmission Mode	10/100Mbps, full or half duplex	10/100Mbps, full or half duplex	As per POEGEM12T2SFP
		1000Mbps, full duplex only	
Transmission Speed	10/100Mbps for TP	10/100/1000Mbps for TP	As per POEGEM12T2SFP
		1000Mbps for Fibre SFP	
Forwarding & Filtering	100Mbps: 148,800PPS	1000Mbps: 1,488,000PPS	As per POEGEM12T2SFP
	10Mbps: 14,880PPS	100Mbps: 148,800PPS	
Packet Rates		10Mbps: 14,880PPS	
PoE	4x 802.3af PoE PSE Ports	12x 802.3af PoE PSE Ports	24x 802.3af PoE PSE Ports
	Endpoint with 48VDC power through RJ-45 pins 1, 2, 3, 6 Powered Device (PD) auto detection Classification & current limit, PoE-PSE status and activity LED indicator	Endpoint with 48VDC power through RJ-45 pins 1, 2, 3, 6 Powered Device (PD) auto detection and classification PoE-PSE status and activity LED indicator	Endpoint with 48VDC power through RJ-45 pins 1, 2, 3, 6 Powered Device (PD) auto detection and classification PoE-PSE status and activity LED indicator
		Smart feature for PD on/off, class, & feeding priority	Smart feature for PD on/off, class, & feeding priority
MAC Address &	Up to 1K	8K MAC address	8K address table entries
Self-learning		4K VLAN table entries	256 VLAN table entries
			256 IP multicast table entries
Buffer Memory	96Kbyte 'onchip' frame buffer	200K 'onchip' frame buffer	Embedded 256KB packet buffers
			and 128KB control memory
Flow Control	802.3x compliant for full-duplex	As per POEFE404	As per POEFE404
	Backpressure FC for half-duplex		
Cables and	UTP/STP:	UTP/STP:	As per POEGEM12T2SFP
Ranges	10Base-T: UTP Cat. 3 or higher	10Base-T: UTP Cat. 3 or higher	
	100Base-TX: UTP Cat. 5 or higher	100Base-TX: UTP Cat. 5 or higher	
		Fibre:	
		1000Base-SX: Multimode fibre, up to 20/275/500/550m, depending on grade & quality of cable used	
		1000Base-LX: Singlemode fibre, up to10/30/50Km, depending on grade & quality of cable used	
		1000Base-LX WDM (BiDi): Singlemode/Single core, up to 20Km, depending on grade & quality of cable used	
Diagnostic	System LEDs:	System LEDs:	System LEDs:
LEDs	Power	Power, CPU	Power, CPURUN, ACT (LEDSET), FDX
	POE LEDs:	Per Port LEDs:	(LEDSET), SPD (LEDSET)
	POE Act (Port 1 to 4)	TP Port 1-12: LINK/ACT,	Per Port LEDs:
	Per Port LEDs:	PoE-PSE ACT, PoE FAIL	TP Port 1-24: LINK/ACT, FDX, SPD

	Link/Act, 10/100Mbps	SFP Fibre Port 11-12: SFP(LINK)	TP/SFP Fibre Port 25-26: LINK/ACT, FDX, SPD
Power	Voltage: 100 - 240 V AC	Voltage: 100 - 240 V AC	Voltage: 100 - 240 V AC
Requirement	Frequency: 50 - 60 Hz	Frequency: 50 - 60 Hz	Frequency: 50 - 60 Hz
	Max Consumption: 12W (with no PD devices connected) or:	Max Consumption: 15W (with no PD devices connected) or:	Max Consumption: 12W (with no PD devices connected) or:
	Max. 65W (with 4x 15.4W PoE devices connected)	Max. 185W (with 12x 15.4W PoE devices connected)	Max. 185W (PoE connections: 12x @15.4W or 24x @7.7W)
Ambient Temperature	0° to 40°C	0 to 50 degrees C	0 to 50 degrees C
Humidity	5% to 95%	5% to 90%	As per POEGEM12T2SFP
Dimensions	44(H) x 220(W) x 130.5(D) mm	44(H) x 442(W) x 209(D) mm	As per POEGEM12T2SFP
Management	N/A	* Layer 2 SNMP/RMON	As per POEGEM12T2SFP
		* HTTP or in-band SNMP/Telnet	
		* Per-port ingress/egress rate control	
		* 802.1p Class of Service with 4-level priority queuing	
		* Head of Line blocking prevention	
		* Broadcast storm filtering	
		* Port mirroring function (3 modes)	
		* 802.1Q tag-based VLAN (up to 256)	
		* Port-based VLAN	
		* 802.1d Spanning Tree Protocol	
		* 802.1w Rapid Spanning Tree Protocol	
		* 802.1x port-based access control	
		* IP Multicasting for IGMP Snooping	
		* 802.3ad Port Trunking with flexible load distribution/failover function	
		* Ingress port security mode for VLAN	
		* Tagged & Untagged frame process	
		* SNMP MIB2 & RMON sampling with sampled packet error indication	
Approvals	Complies with FCC Part 15 Class A, CE Mark Approval, C-Tick	As per POEFE404	As per POEFE404

- Fast Ethernet Copper
- Fast Ethernet POE Copper

POWER OVER ETHERNET SWITCHES
4, 12 & 24 PORT POWER OVER ETHERNET SWITCHES

480i POE Powered VoIP Phone
480i POE Powered VoIP Phone
480i POE Powered VoIP Phone
480i POE Powered VoIP Phone

POEGEM12T2SFP

SIP Server

POEFEM24T2SFP

9133i POE Powered VoIP Phone
9133i POE Powered VoIP Phone
9133i POE Powered VoIP Phone
9133i POE Powered VoIP Phone
9133i POE Powered VoIP Phone

— Fast Ethernet Copper
— Gigabit Copper
— Fast Ethernet POE Copper
— Gigabit Fibre

Workstation   Workstation   WWW

POEFE404 POE Switch

Quadro2X Voip/PSTN PBX

480i POE Powered VoIP Phone

9133i POE Powered VoIP Phone
9133i POE Powered VoIP Phone
9133i POE Powered VoIP Phone

— Fast Ethernet Copper
— Fast Ethernet POE Copper

Flexible PoE Applications

Whether you need to power multiple VoIP phones or groups of Security Cameras, our PoE switches offer a neat solution that will cut the costs and complexity of providing extra power points. Individual models offer 4, 12 or 24 PoE network ports, and support Fast or Gigabit Ethernet.

Standards-based PoE Switch Solutions

Alloy PoE switches are designed to be fully compliant with the IEEE 802.3af PoE standard, ensuring interoperability with all equipment designed to that specification.

Latest Generation Switching Technology

Alloy's PoE Switch family provides excellent solutions for the core function of powering peripheral devices. We understand that you also expect the latest switching technology. Our PoE switches offer the latest in non-blocking, store-and-forward, shared-memory switching technology

Fully Featured Management

POEFEM24T2SFP and POEGEM12T2SFP models feature full Layer 2 SNMP/RMON management, accessible via web browser or SNMP/Telnet in-band interface
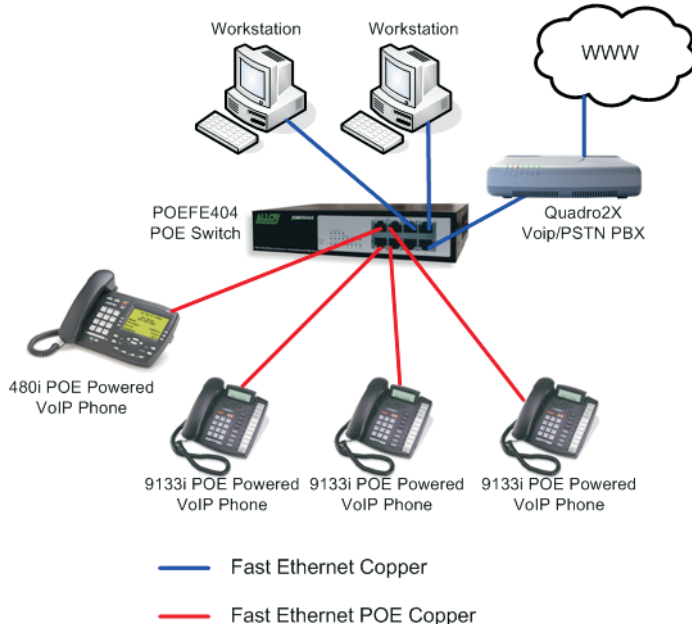
Ordering Codes

PoE Switches

POEFE404:	4 PoE/ 4 data Ports Fast Ethernet Switch including
POEGEM12T2SFP:	12 Port L2 Gigabit Ethernet POE Managed Switch with 2 Gigabit Uplinks
POEFEM24T2SFP:	24 Port L2 Fast Ethernet POE Managed Switch with 2 Gigabit Uplinks

Mini-GBIC Modules for SFP Ports

MGBIC-T	mini-GBIC, Copper, 100metres
MGBIC-MLC	mini-GBIC, Multimode Fibre (LC), 850nm. 500metres (SX)
MGBIC-SLC10	mini-GBIC, Single Mode Fibre (LC), 1310nm. 10km (LX)
MGBIC-SLC4013	mini-GBIC, Single Mode Fibre (LC), 1310nm. 40km (LHX)
MGBIC-SLC4015	mini-GBIC, Single Mode Fibre (LC), 1550nm. 40km (LHX)
MGBIC-SLC70	mini-GBIC, Single Mode Fibre (LC), 1550nm. 70km (ZX)
MGBIC-SLC100	mini-GBIC, Single Mode Fibre (LC), 1550nm. 100km (EZX)
MGBIC-WDMS3.20	mini-GBIC, Single Mode Fibre WDM, 1310nm, 20km
MGBIC-WDMS5.20	mini-GBIC, Single Mode Fibre WDM, 1550nm, 20km