POE-CONV-xx

DATA SHEET

Gigabit PoE Converter

Features

- **Very Compact Size**
- **Converts two 802.3af 16W ports to one 802.3at 30W port**
- **Convert two 802.3at 35W ports to one 4 Pair PoE 60W port**
- **Allows use of standard PoE switches to power higher power devices**

POE-CONV-2AF-AT
AF to AT PoE Converter

Description

The POE-CONV-2AF-AT are unique Gigabit PoE converters which allow a customer to use existing PoE switches to provide PoE+ functionality. They work by turning two 802.3af ports into one 802.3at port.

The POE-CONV-2AT-60 provide Gigabit PoE conversion, accepting two 802.3at inputs and providing a single 4 Pair 60W Passive PoE output which is compatible with High PoE devices like Ubiquiti airFiber™

There are two RJ45 socket for input and one RJ45 socket for the output. One input accepts Data and Power, the second input accepts only Power. The design is isolated so input and output are isolated. The devices include protections for short circuit and overload.

Note: If the inputs come from the same PoE switch then the output power is full power. If the inputs come from different PoE sources, then the output power may be ½.

Specifications

	POE-CONV-2AF-AT	POE-CONV-2AT-60
Input	Qty 2 802.3af Mode A or 48V Passive PoE	Qty 2 802.3at Mode A or 48V Passive PoE
Output	802.3at Mode A 48V 30W, 2 Pair PoE	60W Passive PoE, 4 Pair High PoE
Input Connector	Shielded RJ45 Socket x 2	Shielded RJ45 Socket x 2
Output Connector	Shielded RJ45 Socket	Shielded RJ45 Socket
Load Regulation	5%	
Line Reg, Ripple, Noise	1%	
Ethernet Speed	10/100/1000MB, GigE, Gigabit	
LED	Blinking Red: Only 1 input powering; Solid Red: Two Inputs Powering Solid Green: Output is active with device plugged in	
Efficiency	90% Min	
EMC Standards	FCC Class B NE55022 Class B	
Isolation Voltage	1500VDC	
Isolation Resistance	100M Ohms Minimum	
Operating Temperature	-30 to +60°C (-22 to +140°F)	
Operating Humidity	5% - 90% non-condensing	
Storage Temperature	-40 to +85°C (-40 to +176°F)	
Dimensions (LxWxH)	65 x 45 x 26mm (2.6 x 1.8 x 1”)	85 x 75 x 36mm (3.3 x 3 x 1.4”)
Weight	62g (2.2oz)	80g (2.8oz)
Warranty	1 Year	

Device Pinouts – 10/100/1000MB

POE-CONV-2AF-AT Connector Pinouts:

Input 1 (IN-8P)			Input 2 (IN-4P)	
Pin	Symbol	Description	Symbol	Description
1	(Vdc)_return +/-	Data Pair A+, Feeding power A+/-	(dc)_return +/-	Feeding power(+/-)
2	(Vdc)_return +/-	Data Pair A-, Feeding power A+/-	(dc)_return +/-	Feeding power(+/-)
3	(Vdc)_return +/-	Data Pair B+, Feeding power A+/-	(dc)_return -/+	Feeding power(-/+)
4	TX1+,	Data Pair C+	NC	
5	TX1-	Data Pair C-	NC	
6	(Vdc)_return +/-	Data Pair B-, Feeding power A+/-	(dc)_return -/+	Feeding power(-/+)
7	RX1+	Data Pair D+	NC	
8	RX1-	Data Pair D-	NC	

RJ-45 (OUT)		
Pin	Symbol	Description
1	(-Vdc)_return +	Data Pair A+, Feeding power A+
2	(-Vdc)_return +	Data Pair A-, Feeding power A+
3	-Vdc	Data Pair B+, Feeding power A-
4	TX1+,	Data Pair C+
5	TX1+-	Data Pair C-
6	-Vdc	Data Pair B-, Feeding power A-
7	RX1+	Data Pair D+
8	RX1-	Data Pair D-

POE-CONV-2AT-60 Connector Pinouts:

RJ-45 Input 1 (Data & Power)			RJ-45 Input 2 (Power)	
Pin	Symbol	Description	Symbol	Description
1	RX+, VAin +/-	Data Pair A+, Feeding powerA+/-	VAin +/-	Feeding power A+/-
2	RX-, VAin +/-	Data Pair A-, Feeding powerA+/	VAin +/-	Feeding power A+/-
3	TX+, VAin +/-	Data Pair B+, Feeding powerA+/	VAin +/-	Feeding power A+/-
4	Data , VBin +/-	Data Pair C+ Feeding powerB+/-	VBin +/-	Feeding power B+/-
5	Data ,VBin +/-	Data Pair C- Feeding powerB+/-	VBin +/-	Feeding power B+/-
6	TX-, VAin +/-	Data Pair B-, Feeding powerA+/	VAin +/-	Feeding power A+/-
7	Data ,VBin +/-	Data Pair D+ Feeding powerB+/-	VBin +/-	Feeding power B+/-
8	Data ,VBin +/-	Data Pair D- Feeding powerB+/-	VBin +/-	Feeding power B+/-

RJ-45 (OUT)		
Pin	Symbol	Description
1	(-Vdc)_return +	Data Pair A+, Feeding power A+
2	(-Vdc)_return +	Data Pair A-, Feeding power A+
3	-Vdc	Data Pair B+, Feeding power A-
4	TX1+,	Data Pair C+
5	TX1+-	Data Pair C-
6	-Vdc	Data Pair B-, Feeding power A-
7	RX1+	Data Pair D+
8	RX1-	Data Pair D-

POE-CONV-2AT-60
PoE+ to 4 Pair 60W Converter

System Ordering:

POE-CONV-2AF-AT PoE Converter two 802.3af PoE Input to 48VDC 30W 802.3at output
POE-CONV-2AT-60 PoE Converter two 802.3at PoE Input to 48VDC 60W output

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