

# DATA SHEET

# High Power DC to DC Converter

#### **Features**

- Input Voltage 12VDC
- Passive POE Output voltage 24VDC
- IEEE802.3at Model Available
- High Power up to 35W
- Integrated POE Inserter
- Low self consumption power
- Short Circuit, Over Current and Reverse/Over Voltage Protection
- High Temperature Operation



- 12V Battery Systems
- Wireless Access Points and Client Devices
- IP Phone and Security Camera Systems

## **Description**

TheDWU1224POESeries of DC to DC converters offered by Tycon Power Systems are a low cost and high reliability solution for those requiring 24VDC or 56VDC Power Over Ethernet voltage from a 12V, 24V or 48V battery system. They have an integrated POE injector. Passive POE and 802.3at models are available. They have two inputs for connecting 2 power sources, like a primary and backup power source.

They accept data-in to a shielded RJ45 Jack and provide data-out and POE power on the shielded RJ45 output jack. They work by supplying power on the unused Ethernet pins 4,5(V+) and 7,8(V-). They have various protections for surge, short circuit and overload. The units have a power output of up to 35W. The input and output are isolated so the units can accept minus voltage on input and can be wired for positive voltage on the output for those systems which are negative voltage based.

If the remote device does not support power over Ethernet, splitters (POE-SPLT-S) are available to split the data and DC voltage at the remote device. If the remote device requires reverse voltage the POE-XOVER-S cable can be used.

## **Device Pinouts**

RJ-45 Input (Data Only)			RJ-45 Output (Data & Power)	
Pin	Symbol	Description	Symbol	Description
1	RX+	Data Receive(+)	RX+	Data Receive(+)
2	RX-	Data Receive(-)	RX-	Data Receive(-)
3	TX+	Data Transmit(+)	TX+	Data Transmit(+)
4	NC	No Connection	+Vdc	DC power(+)
5	NC	No Connection	+Vdc	DC power(+)
6	TX-	Data Transmit(-)	TX-	Data Transmit(-)
7	NC	No Connection	-Vdc	DC power(-)
8	NC	No Connection	-Vdc	DC power(-)



**Specifications** 

## DWU1224-POE

Input Voltage	+/ VDC to 15 VDC			
DC Input Connector	Removeable Screw Type Compression Wire Terminal (12 AWG Max)			
POE Specification	Passive			
Output Voltage (+/-2.5%)	24VDC			
Data in & Data/POE Output Connector	RJ45 (Shielded)			
Output Current (max)	1.46A			
Output Power (max)	35W			
Self Consumption Power	2W			
Efficiency (min)	75%			
Line Regulation	1%			
Load Regulation	5%			
Ripple	1%			
Noise	1%			
EMC Standards	FCC Class B NE55022 Class B			
Safety Standards	UL1950, CSA 22.2 &TUV EN60950			
Operating Temperature	-30 to +60°C (-22 to +140°F)			
Operating Humidity (RH)	5% - 90%			
Storage Temperature	-40 to +80°C (-40 to +176°F)			
Dimensions (LxWxH)	125 x 75 x 38mm (4.9 x 3 x 1.5")			
Weight	300g (10.6oz)			

#### **DC Input Connector**



## Ordering Information:

DWU1224-POE +/- 10-15VDC IN 24VDC OUT, 35W DC to DC Converter with POE Inserter

### For further information contact:

www.dantesecurity.net