



# 20W Power Delivery 3.0 POE-to-USB C Converter



## **Features**

- Power Delivery 3.0
- USB-C Receptacle
- Works with IEEE802.3at and IEEE802.3bt Compliant Power Sourcing Equipment
- 10/100/1000 Mbps Data Input Speed
- Short Circuit, Over-Current & Over-Voltage Protection

## **Applications**

- Mobile Phone
- Tablet
- Networking Device



# POEUSB20-1AT Specifications<sup>1</sup>

Model		POEUSB20-1AT-R
Output	DC Output Voltage	5.0V/9.0V/12V/15.0V/20.0V
	Max Current	2.5A/2A/1.67A/1.33A/1.0A
	Output Power	20W
	Regulation	± 2% Line / ± 2% Load
	Ripple & Noise P-P(max) <sup>2</sup>	200mV
Input	DC Input Voltage Range	44V to 57V
	Input Current	0.6A max.
	Efficiency	5V: 73%; 9V: 81%; 12V: 83%; 15V: 84%; 20V: 85%
Protection	Over-Voltage	24VDC max. Non-latching
	Short Circuit	Hiccup mode. Output can be shorted permanently without damage.
	Over-Current	Hiccup mode
Environmental	Operating Temperature	-20°C to +55°C -20°C to +45°C Rating: 5V/2.5A, 9V/2A, 12V/1.67A, 15V/1.33A, 20V/1A +55°C Rating: 5V/2A, 9V/1.25A, 12V/1A, 15V/0.75A, 20V/0.5A
	Non-Operating Temperature	-20°C to +65°C
	Operating Humidity	5% to 90% RH max
Emissions & Immunities	EMC and Immunities	EN55032 Class B IEC 61000-4-2 (10KV contact discharge/12KV air discharge), IEC 61000-4-3 (3V/M), IEC 61000-4-4 (±2kV 5/50nS 5Khz), IEC 61000-4-5 (Unshielded Sym. Data Lines: 0.5KV, Shielded Sym. Data Lines: 1KV)
Mechanical	Dimensions (L x W x H)	112.5mm (4.43in) x 50.6mm (1.99in) x 30mm (1.18in)
	Weight	100g
	DC Output Connector	USB-C
	Input Connector	RJ45 Jack
Indicator Lights	LED	LED #1: Blue – Indicator for output power “on” LED #2 (RJ45): Orange – Indicator for data activity LED #3 (RJ45): Green – Indicator for link speed
Notes	<ol style="list-style-type: none"> <li>The specifications defined are at ambient temperature of 25°C, unless otherwise specified.</li> <li>Using 20MHz bandwidth frequency oscilloscope and measured using socket probe across 100uF electrolytic and 0.1uF ceramic capacitors at the barrel connector output (nominal line voltage, full load).</li> </ol>	



# POEUSB20-1AT Outline Drawing

