

# Microsemi 2.5Gbps Ethernet PoE Multiplexer PDS-EM-8100-25



#### **Overview**

The PDS-EM-8100-25 PoE 2.5Gbps Multiplexer offers a compact and cost effective solution for 2.5Gbps devices installations such as WLAN access points, small cells and other IP terminal installations.

The PDS-EM-8100-25 converts two copper 1Gbps ports to one port of copper 2.5Gbps, in addition the multiplexer provides PoE to the end device according to IEEE 802.3at up to 30W.

The PDS-EM-8100-25 is un managed and it can be installed out of the box with zero configuration.

#### **Key Features**

- Converting 2 x 1G ports into 1 x 2.5Gbps port
- Provides PoE out up to 30Watts
- Plug and play zero configuration needed
- Ability to perform remote SW upgrade

## **Main Application**

 Enables 2.5Gbps interface on the switch side while using the existing 1Gbps switch, the MUX will convert 2 ports of the switch into one 2.5Gbps port that can be connected to the end device (Like 2.5Gbps Access point, 2.5Gbps small cell etc) while providing PoE

#### **Main Benefit**

 The Microsemi 2.5G Mux saves the cost and installation time associated with buying and installing a new and expensive 2.5Gbps switch

## **Specifications**

Feature	Feature Description		
i catalo	Description		
No. of Ports	3		
Data Rates	Port 1: 2.5Gbps		
	Port 2-3: 10/100/1000 Mbps		
Power over Ethernet	PoE 802.3at on port 1		
Output	Pin Assignment and Polarity:		
	3,6 (+), 1,2 (–)		
	Output Power Voltage: 56Vdc		
User Port Power	30 Watts (Guaranteed)		
LED Indications	SYS		
	PoE		
	Connectors		
Thermal rating	37.75 BTU		
Input Power	AC Input Voltage: 100 to 240Vac		
Requirements	AC Input Current: 0.79A @ 100Vac		
	AC Frequency: 50 to 60Hz		
Dimensions	134mm (W) x 38 mm (H) x 158 mm (L)		
Weight	1.84 lbs. (835g)		
Connectors	Shielded RJ-45, EIA 568A and 568B		
English to the second of the s	Operating Ambient Temperature:		
Environmental			
Environmental Conditions	32° to 104°F (0 to 50°C)		
	32° to 104°F (0 to 50°C) Operating Humidity:		
	32° to 104°F (0 to 50°C)  Operating Humidity:  Maximum 95%, Non-condensing		
	32° to 104°F (0 to 50°C)  Operating Humidity:  Maximum 95%, Non-condensing  Storage Temperature:		
	32° to 104°F (0 to 50°C)  Operating Humidity:  Maximum 95%, Non-condensing  Storage Temperature:  -40° to 158°F (-40° to 85°C)		
	32° to 104°F (0 to 50°C)  Operating Humidity:  Maximum 95%, Non-condensing  Storage Temperature:  -40° to 158°F (-40° to 85°C)  Storage Humidity:		
Conditions	32° to 104°F (0 to 50°C)  Operating Humidity: Maximum 95%, Non-condensing  Storage Temperature: -40° to 158°F (-40° to 85°C)  Storage Humidity: Maximum 95%, Non-condensing		
Conditions	32° to 104°F (0 to 50°C)  Operating Humidity:  Maximum 95%, Non-condensing  Storage Temperature: -40° to 158°F (-40° to 85°C)  Storage Humidity:  Maximum 95%, Non-condensing  MTBF: 200,000 hrs. @ 25°C		
Conditions  Reliability  Warranty	32° to 104°F (0 to 50°C)  Operating Humidity: Maximum 95%, Non-condensing  Storage Temperature: -40° to 158°F (-40° to 85°C)  Storage Humidity: Maximum 95%, Non-condensing  MTBF: 200,000 hrs. @ 25°C  1-year		
Reliability Warranty Regulatory	32° to 104°F (0 to 50°C)  Operating Humidity:  Maximum 95%, Non-condensing  Storage Temperature: -40° to 158°F (-40° to 85°C)  Storage Humidity:  Maximum 95%, Non-condensing  MTBF: 200,000 hrs. @ 25°C		
Reliability Warranty Regulatory Compliance	32° to 104°F (0 to 50°C)  Operating Humidity: Maximum 95%, Non-condensing  Storage Temperature: -40° to 158°F (-40° to 85°C)  Storage Humidity: Maximum 95%, Non-condensing  MTBF: 200,000 hrs. @ 25°C  1-year  RoHS Compliant, WEEE Compliant, CE		
Reliability Warranty Regulatory Compliance Electromagnetic	32° to 104°F (0 to 50°C)  Operating Humidity: Maximum 95%, Non-condensing  Storage Temperature: -40° to 158°F (-40° to 85°C)  Storage Humidity: Maximum 95%, Non-condensing  MTBF: 200,000 hrs. @ 25°C  1-year  RoHS Compliant, WEEE Compliant, CE  FCC Part 15, Class B		
Reliability Warranty Regulatory Compliance Electromagnetic Emission & Immu-	32° to 104°F (0 to 50°C)  Operating Humidity: Maximum 95%, Non-condensing  Storage Temperature: -40° to 158°F (-40° to 85°C)  Storage Humidity: Maximum 95%, Non-condensing  MTBF: 200,000 hrs. @ 25°C  1-year  RoHS Compliant, WEEE Compliant, CE  FCC Part 15, Class B EN 55022 Class B		
Reliability Warranty Regulatory Compliance Electromagnetic	32° to 104°F (0 to 50°C)  Operating Humidity: Maximum 95%, Non-condensing  Storage Temperature: -40° to 158°F (-40° to 85°C)  Storage Humidity: Maximum 95%, Non-condensing  MTBF: 200,000 hrs. @ 25°C  1-year  RoHS Compliant, WEEE Compliant, CE  FCC Part 15, Class B  EN 55022 Class B  EN 55024		
Reliability Warranty Regulatory Compliance Electromagnetic Emission & Immu-	32° to 104°F (0 to 50°C)  Operating Humidity: Maximum 95%, Non-condensing  Storage Temperature: -40° to 158°F (-40° to 85°C)  Storage Humidity: Maximum 95%, Non-condensing  MTBF: 200,000 hrs. @ 25°C  1-year  RoHS Compliant, WEEE Compliant, CE  FCC Part 15, Class B EN 55022 Class B		



# Microsemi 2.5Gbps Ethernet PoE Mux

## **Ordering Information**

Microsemi p/n	Name	Description
PDS-EM-8100-25/AC	Microsemi 2.5Gbps Ethernet PoE Mux	Converting 2 ports of 1Gbps into 1 port of 2.5G interface with 30W PoE



Microsemi makes no warranty, representation, or guarantee regarding the information contained herein or the suitability of its products and services for any particular purpose, nor does Microsemi assume any liability whatsoever arising out of the application or use of any product or circuit. The products sold hereunder and any other products sold by Microsemi have been subject to limited testing and should not be used in conjunction with mission-critical equipment or applications. Any performance specifications are believed to be reliable but are not verified, and Buyer must conduct and complete all performance and other testing of the products, alone and together with, or installed in, any end-products. Buyer shall not rely on any data and performance specifications or parameters provided by Microsemi. It is the Buyer's responsibility to independently determine suitability of any products and to test and verify the same. The information provided by Microsemi hereunder is provided "as is, where is" and with all faults, and the entire risk associated with such information is entirely with the Buyer. Microsemi does not grant, explicitly or implicitly, to any party any patent rights, licenses, or any other IP rights, whether with regard to such information itself or anything described by such information. Information provided in this document is proprietary to Microsemi, and Microsemi reserves the right to make any changes to the information in this document or to any products and services at any time without notice.



Microsemi Corporation (MSCC) offers a comprehensive portfolio of semiconductor and system solutions for communications, defense & security, aerospace and industrial markets. Products include high-performance and radiation-hardened analog mixed-signal integrated circuits, FPGAs, SoCs and ASICs; power management products; timing and synchronization devices and precise time solutions, setting the world's standard for time; voice processing devices; RF solutions; discrete components; security technologies and scalable anti-tamper products; Ethernet solutions; Power-over-Ethernet ICs and midspans; as well as custom design capabilities and services. Microsemi is headquartered in Aliso Viejo, Calif., and has approximately 3,600 employees globally. Learn more at <a href="https://www.microsemi.com">www.microsemi.com</a>.

# **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## Microchip:

<u>PDS-EM-8100-25G/AC PDS-EM-8100-25G-AU PDS-EM-8100-25G-EU PDS-EM-8100-25G-JP PDS-EM-8100-25G-US PDS-EM-8100-</u>