

# Single Port Magnetic Jacks



Single-port magnetic modular jacks simplify customer board layouts by reducing the number of components required and support a wide variety of applications including computer, network and telecommunications equipment

## Features and Advantages

### Complete, Plug-and-Play Solution

All necessary PoE, PD, and PSE componentry is contained within the Jack. No external PoE or PoE Plus circuitry is required for the PCB

### Compliant To All Relevant Standards

Fully integrated PoE Plus PSE capability in accordance with IEEE802.3at

### Optimized Thermal Design

Suitable for wide operating temperature range and passive airflow environments

Single-port Magnetic Jack - PDJack

### Robust ESD and EMI (electro-magnetic interference) design

Fully shielded connector with integrated electro-static discharge (ESD) protection

### Up to 30W of Power

Able to power more devices used in various applications

### Multiple LED Status Indicators

Provides a quick visualization of system status and functionality

Single-port Magnetic Jack - PDJack

## Applications

### Telecommunications/Networking

- IP phones/telephony
- IP cameras
- Wireless access points
- Broadband/microwave antenna

### Consumer

- Point of sale (POS) devices
- Home automation interface panels

### Industrial

- Control panels (climate control, door access)
- Human Machine Interface (HMI)
- Vision systems
- Sensors



Industrial Control Panels



IP Telephone Systems



Point of Sale Devices

# Single Port Magnetic Jacks



Components for 12V PoE PD power supply			
	Discrete	PoE Enabled	PoE Integrated PDJack
RJ45 Jack	X		
PD Chip	X	X	
PD ref components	X	X	
Bridge rectifiers	X	X	
54VDC - 12VDC circuit	X	X	X
Isolation components	X	X	X
PoE transformer	X		
PHY and BST comp's	X		

## Specifications

### REFERENCE INFORMATION

Packaging: Tray  
 UL File No.: E17747 Vol X2  
 Mates With: Standard RJ45 Plug  
 Use With: Series 44915  
 Terminal Used: 8 terminals  
 RoHS: Yes  
 Halogen Free: No

### ELECTRICAL

Voltage (max.): 60V  
 Current (max.): 1.0A  
 Contact Resistance: 20 mΩ  
 Dielectric Withstanding Voltage: 2250V DC  
 Insulation Resistance: 500 MΩ min

### MECHANICAL

Insertion Force: Max of 30N  
 Durability (min.): 750 cycles

### PHYSICAL

Housing: PBT, black  
 Contact: Copper Alloy  
 Plating: Gold plating  
 Underplating — Nickel underplate  
 PCB Thickness: 1.6mm  
 Operating Temperature: 0C to +70°C

*Full specifications can be found at the part number level on [molex.com](http://molex.com)*

## Ordering Information

Series Number	Description	LEDs
<a href="#">85759</a>	PSE (Power Supply Equipment) Integrated Single Port (30W)	Yes
<a href="#">85789</a>	PoE Enabled Single Port (15-30W)	Yes
<a href="#">85791</a>	PDJack (Powered Device, 30W)	No
<a href="#">85792</a>	PDJack2 (Powered Device, 60W)	No
<a href="#">85793</a>	Non-PoE Single Port	Yes

[www.molex.com/product/magneticmodularjacks.html](http://www.molex.com/product/magneticmodularjacks.html)

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