

## Power Over Ethernet PD Controller 0V 57V 26W 8-Pin HSOIC

EP



Images are for reference only

[Inquiry](#)

**Manufacturer:** [Texas Instruments, Inc](#)

**Package/Case:** SOP-8

**Product Type:** Power Management ICs

**RoHS:** RoHS Compliant/Lead free 

**Lifecycle:** Active

### General Description

These easy-to-use 8-pin integrated circuits contain all of the features needed to develop an IEEE 802.3af compliant powered device (PD). The TPS2375 family is a second generation PDC (PD Controller) featuring 100-V ratings and a true open-drain, power-good function.

In addition to the basic functions of detection, classification and undervoltage lockout (UVLO), these controllers include an adjustable inrush limiting feature.

The TPS2375 has 802.3af compliant UVLO limits, the TPS2377 has legacy UVLO limits, and the TPS2376 has a programmable UVLO with a dedicated input pin.

The TPS2375 family specifications incorporate a voltage offset of 1.5 V between its limits and the IEEE 802.3af specifications to accommodate the required input diode bridges used to make the PD polarity insensitive.

Additional resources can be found on the TI Web site [www.ti.com](http://www.ti.com).

### Key Features

Adjustable Turn-on Thresholds

Permits High-power 26 W Designs

Integrated 0.58- $\mu$ s, 100-V, Low-Side Switch

15-kV System Level ESD Capable

Industrial Temperature Range: -40°C to 85°C

8-Pin PowerPad<sup>®</sup> SOIC Package

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#### Description

The 8-pin integrated circuit contains all of the features needed to develop a high power IEEE 802.3af style powered device (PD). The TPS2376-H offers a higher current limit and increased thermal dissipation capability over the TPS237X family of devices. The TPS2376-H implements a fully compliant PoE interface while permitting non-standard implementations that draw more power. A 26 WPD may be constructed when working from a 52-V minimum PSE over 100 m of CAT-5 cable. The TPS2376-H features a 100-V rating, 600-mA capability, adjustable inrush limiting, fault protection with auto-retry, and true open-drain power-good functionality.

### Recommended For You

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**TPD3S014DBVR**

Texas Instruments, Inc  
SOT23-6

**TPS2065CDBVR**

Texas Instruments, Inc  
SOT23-5

**TPS2557DRBT**

Texas Instruments, Inc  
SON8

**TPS2042BDR**

Texas Instruments, Inc  
SOP8

**TPS2051BDR**

Texas Instruments, Inc  
SOP8

**TPL7407LPWR**

Texas Instruments, Inc  
TSSOP16

**TPS23753APWR**

Texas Instruments, Inc  
TSSOP14

**TPS2116DRLR**

Texas Instruments, Inc  
SOT5X3-8

**TPS259460ARPWR**

Texas Instruments, Inc  
VQFN-10

**TPS23751PWPR**

Texas Instruments, Inc  
HTSSOP16

**TPS65150QPWPRQ1**

Texas Instruments, Inc  
HTSSOP-24

**TPS2410PWR**

Texas Instruments, Inc  
TSSOP-14

**TPS22914BYFPR**

Texas Instruments, Inc  
DSBGA4

**TPS2115ADRBR**

Texas Instruments, Inc  
VSON8

**TPS2113ADRBR**

Texas Instruments, Inc  
SON8