

1 GBT, 2.5GBT, 5GBT 60W & 100W 4-pair Power over Ethernet

Single Port MagJack® ICMs

The MagJack® brand of 1GBT, 2.5GBT, 5GBT 60W and 100W 4-pair Power over Ethernet ICMs are aimed at customers looking to upgrade their product performance for maximum power – 100W or 1A over standard Ethernet cable. Customers can implement 100W PoE to basically double the amount of power their product can handle over any existing application, while still operating at standard Ethernet speeds. These parts are backward compatible to existing Ethernet networks. The 100W products are ideal for next generation access points and IP-camera applications.



This product family can transmit or receive 0 to 100W of power per port over all 4 pairs within the Ethernet cable while maintaining the bandwidth of the NBASE-T compliant 1GBT, 2.5GBT or 5GBT Ethernet signals. These products can be used as either a PSE (Power Source Equipment) or a PD (Powered Device). They are compatible with all major Multi-rate PHYs, including the latest current-mode and voltage-mode PHYs. The products are backward compatible to slower speeds and lower powers as needed and use industry standard footprints and pin-outs. These parts comply with the requirements of NBASE-T and IEEE 802.3bz.

Features & Benefits

- 1GBT, 2.5GBT, 5GBT capable designs
- 60W and 100W PoE
- Industry standard footprint & pinout
- Compatible with all known 1GBT, 2.5GBT, 5GBT current-mode and voltage-mode PHYs on the market today
- Can be used on PoE products where 60W of power is not enough
- 1GBT, 2.5GBT, 5GBT products are footprint compatible to each other

Applications

- High power sourcing applications (low density Ethernet switches requiring up to 100W of 48V power)
- High powered devices (LED lighting & Ethernet cameras that require up to 100W of power)
- Higher bandwidth wireless access points
- NBASE-T compliant products
- Base stations

Specifications

- Meets all IEEE 802.3 10/100Base-T thru 1GBT, 2.5GBT, 5GBT electrical requirements including RL, IL, Hi-pot and Common Mode parameters
 - Can carry 1000mA of current at 57 VDC continuous
 - Operates from -40°C to 85°C
 - 100% Hi-pot tested in production
 - Comes with many different LED color combinations and options
 - RJ45 plug-tab up for ease of use
 - 30 or 50 micro-inches of gold plated contacts, required by the TIA 1096/FCC 47, Part 68
 - RJ45 plug-tab up for ease of use
 - Lead-free wave-solder compatible
 - EMI-spring tabs on the shield for enhanced EMI and ESD performance
 - UL recognized
 - RoHS 6/6 compliant
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- A logo for RoHS compliance, featuring the text "RoHS Compliant" in green, with a stylized green leaf graphic to the right.

Part Numbers

Bel Part Number	TRP Part Number	Speed	Power
0826-1X1T-GH-F	n/a	1GBase-T	60W
0826-1X1T-HS-F	2250506-1	1GBase-T	100W
0826-1X1T-HT-F	2250331-1	2.5GBase-T	60W
0826-1X1T-KH-F	2250504-1	2.5GBase-T	100W
0826-1X1T-JK-F	2250477-1	5GBase-T	60W
0826-1X1T-KL-F	2250507-1	5GBase-T	100W

