

1GBase-T 100W 4-pair Power over Ethernet

Single, Dual and Quad Port MagJack® ICMs

The MagJack[®] brand of 1GBase-T 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 Gigabit Ethernet speeds. These parts are backward compatible to existing Ethernet networks. The 100W products are ideal for LED lighting applications at both the switch side and lighting ballast side.

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 Gigabit Ethernet signal. These products can be used as either a PSE (Power Source Equipment) or a PD (Powered Device). They are compatible with all major 1GBase-T 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 IEEE 802.3bz.

Features & Benefits

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

Applications

- 5G cellular switching applications
- High power sourcing applications (low density 1GBase-T Ethernet switches requiring up to 100W of 48V power)
- Higher bandwidth wireless access points
- High powered devices (LED lighting & Ethernet cameras that require more than 60W of power)
- Base stations
- Large screen video display units





MagJack[®] ICM

Specifications

- Meets all IEEE 802.3 10/100Base-T thru 1GBase-Telectrical 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
- Lead-free wave-solder compatible
- EMI-spring tabs on the shield for enhanced EMI and ESD performance
- UL recognized
- RoHS 6/6 compliant RoH

Part Numbers

Bel Part Number		Port Count
0826-1X1T-HS-F	1GBase-T	1x1
0826-1X2T-HS-F	1GBase-T	1x2
0826-1X4T-HS-F	1GBase-T	1x4

0826-1X1T-HS-F



0826-1X2T-HS-F



0826-1X4T-HS-F











Bel Magnetic Solutions 12700 Stowe Drive, Suite 200 Poway, CA 92064 USA







+1 858.676.9650 techhelp@belf.com belfuse.com/magnetic-solutions