



EMI optimized and qualified 12-port (2x6) and 8 port (2x4) RJ45 magnetic jacks supporting Gigabit Ethernet connectivity in accordance with IEEE802.3ab result in lowered placement costs and improved production yields for manufacturers of high port-count switches and routers

Magnetic jacks are integrated devices that combine network magnetics and RJ45 connectors. In addition to connectivity, magnetic jacks provide signal conditioning, electromagnetic interference (EMI) compliance and electrical isolation. Ganged gigabit magnetic jacks are widely used in telecom and data networking applications.

The 85728 series, 12-port and 85727, 8-port Gigabit Magnetic Jacks with integrated gigabit magnetics are designed for use in high port-count gigabit switches and routers.

The modules are designed with through-hole pins for wave soldering. Transmission is according to the IEEE802.3ab standard. For more information please visit www.molex.com/product/magneticmodularjacks.html

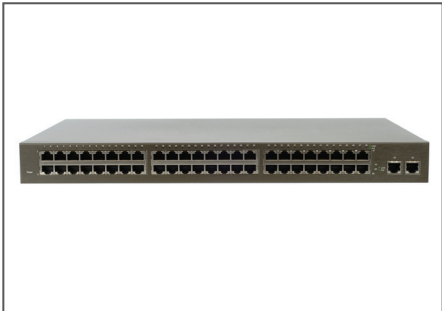
Features and Benefits

Ganged 12-port and 8-port RJ45 modules	High-density port-count Lower placement costs
Compliant with IEEE802.3ab standard	Capable of 10/100/1000Mbit transmission
Gigabit magnetics compatible with a variety of Gigabit Ethernet transceiver PHYs	Proven parametric and EMI solution for main PHY vendors
Industry-standard footprint	Drop-in replacement for competitor products; second source for customer
Two single- or bi-colour LED's per port	Supports multiple status indicators and colour requirements
Fully parametric, HiPot and DC tested modules with excellent EMI filtering	Ensures high reliability and low yield-loss in customer applications Easier IEEE and regulatory qualifications

Applications

Gigabit Ethernet Switch and router applications:

- Datacom / telecommunications
- Industrial networking
- Consumer / small office / home office



Network Switch



Network Switch

**Magnetic Jacks:
Gigabit 12-Port
(2x6) and 8-Port
(2x4) RJ45 with
LEDs**

85728 2x6, Gigabit Magnetic
RJ45 with LEDs

85727 2x4, Gigabit Magnetic
RJ45 with LEDs



Gigabit Magnetic 12-Port
(2x6) Ganged RJ45 Jack
with LEDs



Gigabit Magnetic 8-Port
(2x4) Ganged RJ45 Jack
with LEDs

Specifications

REFERENCE INFORMATION

Packaging: Tray
 UL File No.: Pending
 Mates With: Plugs according to
 IEC 60603-7 (series 95043, 44915)
 Designed In: Millimetres
 RoHS: Yes

LEDs

Connection: Single or bi-polar
 (see table below)
 Colours: Multiple options available
 Forward voltage: 2.4V max. at 20mA

PHYSICAL

Housing: E-85572-088 PBT
 30% Green
 Shield: C2680 – pre-plated brass
 Contact: Phosphor Bronze CuSn8
 (Wieland B18)
 Plating:
 Contact Area — Gold (Au)
 Solder Tail Area — Tin (Sn)
 PCB Thickness: 2.21mm
 Operating Temperature: 0 to +70°C

MECHANICAL

Connector insertion and
 removal force: 20N (4.5 lbf)
 Locking force: 50N (11 lbf) min.
 Durability: 750 cycles

Magnetic Jacks: Gigabit 12-Port (2x6) and 8-Port (2x4) RJ45 with LEDs

ELECTRICAL

HiPot isolation: 2250V DC
 OCL: 350µH at 8mA min.
 Insertion loss:
 -0.80 at 100 MHz (typical)
 Return loss:
 -15.0 at 100 MHz (typical)
 NEXT: -33 at 100 MHz (typical)
 CMR: -40 at 100 MHz (typical)

Ordering Information

Order No. 12-Port (2x6)	Order No. 8-Port (2x4)	Attribute	LED Colour* Left	LED Colour* Right
85728-1001	85727-1001	Gigabit Magnetics	Green	Green
85728-1002	85727-1002		Green - Orange	Green
85728-1003	85727-1003		Green	Yellow
85728-1004	85727-1004		Green - Orange	Green – Orange
85728-1016	85727-1016		Green	Green – Yellow

*Additional LED configurations available on request. Contact Molex for further details.