

HX1188NL - FOLLOW THE LEGEND

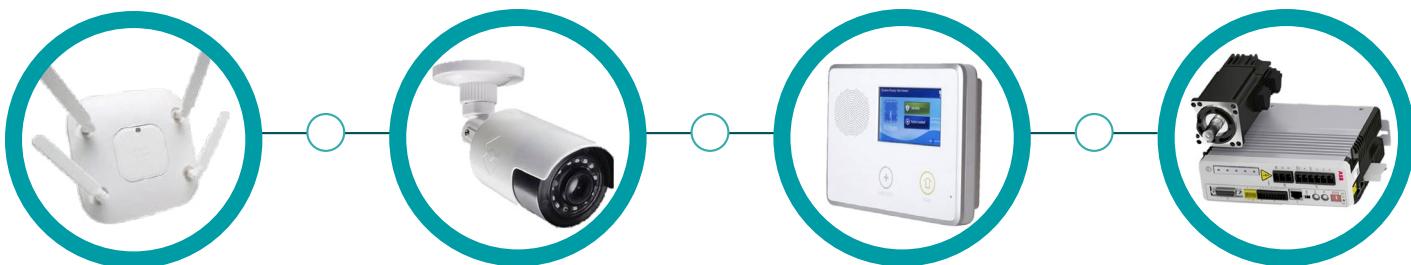
VERSATILE AND COMPACT 4 DESIGNS FOR MANY ETHERNET APPLICATIONS

Pulse Electronics has been supporting ethernet communications for over 50 years and has released some of the most iconic transformer module designs in the market.

The HX1188NL, with its symmetrical design is one of them. It offers compatibility to all leading 1:1, 100Base-TX PHYs and dedicated silicon for industrial ethernet protocols like EtherCAT, Powerlink or Profi-net. It's especially useful at supporting autoMDIX functionality which means TX and RX can be swapped leading to easier PCB routing.

While HX1188NL can also support low levels of PoE, up to 10W, we would still recommend switching over to HX2019NL, which has full PoE compliance for 15W over 2pair to IEEE802.3af, and for those designers seeking higher power ratings of 35W or more! Dropping the HX2326NL on the same PCB layout, will upgrade the magnetics to a PoE+ circuit without layout changes and meet IEEE802.3at across the -40°C to +85°C temperature range.

However, these modules are not only limited to standard ethernet, but can support other low voltage signals, such as SPI, IsoSPI and AVB. These are often used in automotive networked applications like ADAS, BMS or Infotainment circuits. Here HX1188NL could be designed in, but the HM1188NL, with its wider operational automotive grade temperature range should be utilized instead. The HM1188NL also benefits from meeting AEC-Q200 - an extended set of stress tests for life-time resilience confirming its high temperature and reliability performance required by OEM vehicle manufacturers around the globe.



KEY APPLICATIONS

Industrial control and measurement, Remote Sensing, Digital Video Cameras, Wireless Access Points, Data logging, Building Control, HVAC and lighting, Automotive networks, ADAS, BMS and AVB Infotainment systems

FEATURES & BENEFITS

- Designed to exceed IEEE802.3u
- Full IEEE802.3af/at compliance for PoE/PoE+
- Compatible with all Major PHYs
- Superior Temperature Performance.
- Up to 45W PoE over 100m of cable
- Wide Operating Temperature
- High volume, High reliability production
- AEC-Q200 options

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VERSATILE AND COMPACT

4 DESIGNS FOR MANY ETHERNET APPLICATIONS

Pulse Part	Size (L x W x H)	No. Ports	PoE/PoE+ (2 pair supply)	Operating Temp.
HX1188NL	12.7 x9.40 x 5.97	Single	~10W	-40°C to +85°C
HX2019NL	12.7 x9.40 x 5.97	Single	15W	-40°C to +85°C
HX2326NL	12.7 x9.40 x 5.97	Single	45W	-40°C to +85°C
HM1188NL**	12.7 x9.40 x 5.97	Single	~5W	-40°C to +105°C

(**Automotive Grade)

Other Great Products from Pulse Electronics



Signal Transformers

Ethernet Transformers, BMS Transformers, Ethernet Connector Modules, HDBaseT Transformers, RF Transformers, G.Fast Transformer, Telecom Transformers, xDSL Transformers



Connectors

Ethernet Connector Modules, RJ45 Connectors, RJ11 Connectors, Fiber Optic Connectors, USB Connectors, SFP/SFP+ Transceivers



CM Chokes

Ethernet Chokes, Automotive Chokes, PoE Chokes, Telecom Chokes



Inductors

Chip Inductors, Ferrite Bead Inductors



RF Filters

RF Diplexers, RF Triplexers, RF Coupler and Splitters



DSL Filters

MSAN Filters, Broadband Filters

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