

PRODUCT DATASHEET



333168

RJ45 socket with built-in magnetics and two LEDs for 10/100 Ethernet, with every pin on a breadboard-friendly 13-pin header.

Full product documentation, files and tutorials: solde.red/333168

CORE ATTRIBUTES

SKU **333168**ORIGIN **HR**BARCODE **732388638406**

DESCRIPTION

The **RJ45 MagJack Breakout** puts an Ethernet socket on a small board, with every pin on one 2.54 mm header. MagJack means the isolation transformers (the magnetics every Ethernet port needs) sit inside the socket, so your Ethernet chip's transmit and receive pins connect straight to the header.

The socket is the **HanRun HR913550A** for **10/100 Mbit** Ethernet. It has a green and a yellow LED, and both legs of each LED are on the header, so you choose which chip signal lights them.

The header carries TD+, TD-, RD+ and RD-, the transmit and receive centre taps, chassis ground, the four LED pins and the shield. Solder it to the bottom and the board goes into a breadboard. Two **3.2 mm holes** let you screw it down.

Note:

- The LEDs have no resistors on the board. Add one in series with each LED.
- P4 and P5 are the centre taps, the middle points of the transformer windings. Connect them the way your Ethernet chip's datasheet shows.
- Connect CHS GND (P8) and SH to the ground of your circuit.
- The header pins come unsoldered.

TECHNICAL DETAILS

- **Connector:** HanRun HR913550A, RJ45 with integrated magnetics, shielded
- **Ethernet:** 10/100Base-T
- **Isolation:** 2250 V DC

- **LEDs:** green and yellow, no resistors fitted
- **Pins:** P1 TD+, P2 TD-, P3 RD+, P4 TX centre tap, P5 RX centre tap, P6 RD-, P7 NC, P8 chassis GND, G+, G-, Y+, Y-, SH
- **Header:** 13-pin, 2.54 mm pitch, unsoldered
- **Dimensions:** 38 × 22 mm
- **Mounting holes:** 2 × 3.2 mm

SPECIFICATIONS

INTERFACE	None
QWIIC COMPATIBLE	No
BREADBOARD COMPATIBLE	Yes

DOCUMENTS

Main IC Datasheet · EN	https://cms.soldered.com/products/333168/documents/ic-datasheet/333168_ic-datasheet_d48754.pdf
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LINKS

Pinout	https://cms.soldered.com/products/333168/media/333168_pinout-png_24ee24.png
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