# **Ethernet Repeater PTH**



# Ethernet IEEE 802.3 100BASE-TX network HUB for development & diagnostics

Particular for the development of devices which are communicating in a local Ethernet network (LAN), i.e. at the control-unit development, the Ethernet Repeater PTH is essential. There are diagnostics at the network data transmission possible, which cannot be done with an Ethernet Switch.

With the ONE -to- ALL PORT transmission of the Ethernet Repeater PTH, the total network traffic is always on all network ports and members assured. Thereby is no interaction to the data transmissions i.e. a routing decision as by an Ethernet Switch.

The Ethernet Repeater PTH is manufactured by Nickl as a 4 port- and as a 8 port- variant. The 8-port variant can be configured as one (1x) 8-Port Ethernet Repeater (HUB) or as two (2x) apart 4-Port Ethernet Repeaters (HUBs).

The power supply with 9..36VDC, i.e. directly from the vehicle, is galvnically decoupled to prevent ground loops.

OPTIONAL is a 5VDC supply via USB possible, for this a USB-connector is placed at the manufacturing instead of the D-Sub-5.

- 100% data provision for all network members
- for control-unit development and simulation
- for data traffic diagnostics
- additional Ethernet network at testing vehicles

- ONE -to- ALL PORT transmission
- Unmanaged Ethernet Repeater (HUB)
- 4 RJ45-ports or
  8 RJ45-ports configured as 1x8 or 2x4
- Aluminium strongbox with cooling fins
- 9..36VDC power input
- OPTIONAL: 5VDC power input via USB







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## **Ethernet Repeater PTH**

Data Rate Ports	100 Mbit and 10 Mbit, automatic detection variant 1EMPTH-4-100-K: 4 network ports variant 1EMPTH-8-100-K: 8 network ports (4 ports at the front + 4 ports at the back) the 8-port variant can be configured as one 1(x) 8-Port Ethernet Repeater or as two (2x) apart 4-Port Ethernet Repeaters
Status Indicators	Link/Activity LED and Receive Error LED for each port Collision LED and network Utilisation via 5 LEDs per 4-ports Power LED
Connectors	Power: 1x D-Sub-5 (socket for cable: Amphenol 177D EM5W1 S) or OPTIONAL 1x MicroUSB Typ AB (t.b.c.) Netzwerk: 4x RJ45 shielded or 8x RJ45 shielded
Power Supply	936 VDC with typ. 355mA @ 12V, galvanically decoupled, switched via pin 4 / nShutdown at D-Sub-5 or OPTIONAL 5 VDC with typ. 685mA, not galvanically decoupled
Operating Temperature	~ 0 60 °C
Storage Temperature	-40 125 °C
Dimensions	approx. (171 x 111 x 32) mm <sup>3</sup> without connectors
Mounting	4x screw nuts inside 2x rails for lateral mounting at a holdíng plate
Case	Aluminium strongbox with good HF-shielding and cooling fins
Mass	approx. 600g

### 1EZKA-2xRJ45S-x-BLU

cable, Patch-, 1, 2, 5, 7 and 10 m, blue: 2 x RJ45 plug with enhancement, cable Kat. 5

#### 1EZKA-DB5BAN2-x

Powercable, D-Sub5 receptacle, 2x banana connectors red/black, L=2m, 5m and 7m

#### 1EZPAS-DB5

ccessories

Power-connector-set, D-Sub5 receptacle, soldering terminals

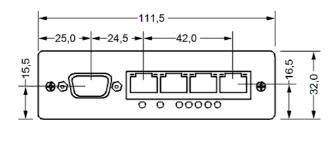
### 1EMPTH-8-100-K

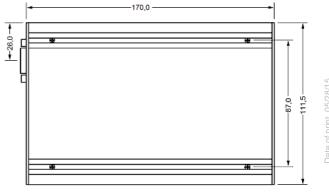
Ethernet Repeater (HUB) with 8x RJ45-ports, IEEE 802.3 100BASE-TX standard, >> ONE -to- ALL PORT

1EMPTH-4-100-K

**Order Codes** 

- Ethernet Repeater (HUB) with 4x RJ45-ports, IEEE 802.3 100BASE-TX standard, >> ONE -to- ALL PORT
- Further variants on request -





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