





# Your reliable connection to Automotive Ethernet networks

Kvaser Arcus 100/1000BASE-T1 H-MTD is a high-performance Automotive Ethernet media converter designed to simplify access to vehicle networks. It provides fast, stable, and secure full-duplex conversion between Automotive Ethernet 100/1000BASE-T1 and Standard Ethernet 100/1000BASE-T, making it suitable for lab testing, in-vehicle development, and system start-up workflows. Its transparent back-to-back PHY architecture enables deeper link-level insight and precise analysis of physical-layer behavior during development and validation.

Designed for simple integration into embedded computers, it can also be installed in standard computers using the Kvaser ATX Bracket for Arcus 100/1000BASE-T1 H-MTD (EAN 73-30130-01811-2).

## **Warranty**

2-year warranty. See our general conditions and policies for details.

### **Support**

Free support for all products by contacting support@kvaser.com

#### III, EAN

73-30130-01810-5



# Kvaser Arcus 100/1000BASE-T1 H-MTD

### **Major Features**

- Monitor Automotive Ethernet traffic from a data logger or test PC during vehicle development and testing
- Flash ECUs over Automotive Ethernet, IP/Ethernetbased protocols, by connecting a vehicle network to a development PC
- Access link-level information for debugging tasks using PHY-exposed parameters such as link status, speed, and signal quality
- Transmit crafted Ethernet frames for testing ECU behavior, link robustness, and protocol handling
- Evaluate secure communication behavior by observing MAC-layer characteristics and checking resilience to invalid or unexpected traffic
- Verify cable integrity using SQI (Signal Quality Index), BER (Bit Error Rate), and built-in cable diagnostics to detect shorts, opens, and pair mismatches
- Supports testing of partial networks by allowing a PC application to emulate expected link activity when an ECU is not present
- Check early-boot communication sequences between ECUs and bootloaders during initial system start-up
- Intuitive API and GUI for adjusting PHY settings and configurations via USB
- Designed to meet the requirements of the Cyber Resilience Act (CRA) as well as Open Alliance recommendations



🔊 Technical Data		
Dimensions	81 x 85 x 20 mm	
Ethernet Channel 1	100/1000BASE-T, RJ45 8p8	
Ethernet Channel 2	100/1000BASE-T1, H-MTD Key Z	
Operating Temperature	-40 to +85 °C	
Power input	PoE, USB-C, ATX, SATA	
Regulatory Compliance	CE, FCC	
Relative humidity	-40 to +85 °C	
USB IN	USB 2.0 Type-C	
USB OUT	USB 2.0 Type-C	
Weight	50 g	

Technical Data Future Features		
Bit Error Rate Analysis	Yes	
Cable Tester ( T1 PHY) <sup>1</sup>	Yes	
Packet Generator	Yes	
Signal Quality Indicator	Yes	
TC10 Compliance (T1 PHY)	Yes	

<sup>1</sup> Detects short/open conditions, mismatched pairs, and improper pinouts using the built-in cable tester.