technica
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Enhanced Ethernet Switch H-MTD

Automotive Ethernet gigabit switch with AVB features and Multi-Gigabit uplink for testing and analysing onboard vehicle networks

Enhanced Ethernet
Switch H-MTD

DESCRIPTION

With the constant need for higher bandwidth in the in-vehicle network, **Enhanced Ethernet Switch H-MTD** from Technica Engineering allows the users to connect and loop through up to 8x 100/1000BASE-T1 automotive Ethernet-based devices. It can establish virtual point-to-point connections, using single tagged VLANs (802.1q) and double-tagged VLANs (802.1q-in-q), thus enabling filter and control over data streams. Each port provides 8-levels of Quality of Services (QoS) classes and advanced traffic filtering capabilities with ingress and egress rules, which ensures the prioritization, resource reservation, and control mechanisms over the data received.

Through a configuration website, the user can easily configure the device following their use cases, for example, VLANs, port mirroring, forwarding or filtering, port segmentation, and many other features offered by Layer 2 of the OSI model (Open Systems Interconnection model).

Enhanced Ethernet Switch is **capable of Audio Video Bridging (AVB)** functions and supports the following Time Sensitive Networking (TSN) standards: 802.1AS, 802.1Qat, Qav, Qbv, Qbu, Qci. It also provides security features like Denial of Service (DOS) protection engine and it is capable to route MACSec-encrypted traffic for end-to-end encrypted communication and allow authentication between two connected devices following 802.1Aecg specification for bridge devices.

The switch also provides wake-up and sleep features. Apart from 100/1000BASE-T1 ports, the switch is equipped with **two SFP+ ports**. SFP+ ports allow the users to have two 10 Gbps ports. Enhanced Ethernet Switch is compatible with our products 100BASE-T1 SFP Module and 1000BASE-T1 SFP Module so the SFP+ ports can also be used as additional 100/1000BASE-T1 ports making it possible to have up to **ten 100/1000BASE-T1 ports on an AVB capable switch**!

FEATURES AND FACTS

- ✔ 8x 100/1000BASE-T1 ports
- ✔ 2x SFP+ Ports for Logging data output (up to 10Gps each)
- ✔ 1x 100BASE-T Fast Ethernet Port for configuration
- ✔ H-MTD Connector for 100/1000BASE-T1
- ✔ Easy configuration via webserver and data telegram
- ✔ Import and export of configuration Wake up functionality
- ✔ Possibility to reset to default settings by push button
- ✔ Dual Speed Capable 100/1000BASE-T1
- ✔ Interoperability: TC1 & TC12 Compliant
- ✔ TSN Support: 802.1AS, 802.1Qat, Qav, Qbv, Qbu, Qci
- ✔ Input voltage range: 12 to 24 volt DC
- ✔ Robust steel case
- ✔ Size 164x120x35 mm

Control system/ Logger _____ Standard Gigabit Ethernet (RJ-45) /H-MTD Connector **Enhanced Ethernet Switch H-MTD** _____ 100/1000BASE-T1 **Device 100/1000BASE-T1**