



Main Features

- ▶ Secure Ethernet gateway with integrated firewall.
- ▶ Configurable Ethernet packet filter implemented in firewall, most settings can be managed by configuration file.
- ▶ Directly powered from the vehicle battery; supporting voltages ranges from 24V up to 110V.

Overview

The D517 is a secure Ethernet-to-Ethernet gateway. The integrated firewall implements a design-time configurable packet filter.

Most settings can be managed by a configuration file. This configuration file is stored in the internal flash memory. The packet filter configuration may be frozen for series production (i.e. the serial interface is completely disabled).

There are two Ethernet interfaces, a serial interface and a JTAG interface for software update and debugging purposes. The Ethernet interfaces comply to IEEE 802.3.

The D517 is designed for harsh rolling stock environment and complies with the EN 50155 / EN 50121 / EN 61373 standards, e.g. by:

- -40 to +70°C operating temperature
- coating against humidity
- enhanced EMI and vibration robustness

The gateway is integrated in a stainless-steel housing that is mounted on a DIN rail. The device is powered directly from the vehicle battery supporting voltages ranges from 24 V up to 110 V.

Technical Specification

PHYSICAL DATA

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|------------------------------------|--|
| Fast Ethernet connectors | M12, female, D-coded |
| Service interfaces | Serial, JTAG |
| Visual indicators (LEDs) | Ethernet: link, activity |
| Power supply voltage range | Single power supply 24 – 110 V DC |
| Power consumption | Approx. 2.8 W, powered directly from battery |
| Interruption voltage supply | Class S2 |
| Overall dimensions | 120.0 × 106.0 × 32.0 mm |
| Weight | Approx. 415 g |

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| Ingress protection | IP30 |
| Operating temperature | -40 to +70°C, according to EN 50155; Class OT4 |
| Storage temperature | -40 °C to +85 °C |
| Relative humidity | yearly average <75%, 95% for 30 consecutive days max. (EN 50155) |
| Useful life | 20 years, according to EN 50155 Class L4 |

COMPLIANCE

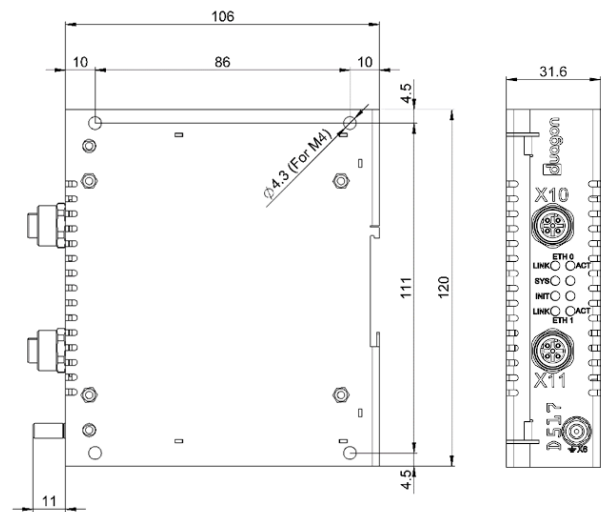
| | |
|---------------------|--|
| EN 50155 | Railway Applications (Electronic equipment used on rolling stock) |
| EN 50121-3-2 | Electromagnetic compatibility rolling stock apparatus |
| EN 61373 | Shock & Vibration |
| EN 45545-2 | Fire protection, HL3 |
| RoHS | Restriction of the Use of Certain Hazardous Substances |
| REACH | Registration, Evaluation, Authorisation and Restriction of Chemicals |

IEEE STANDARDS

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|--------------------|--------------------|
| IEEE 802.3u | Fast Ethernet (FE) |
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Dimensions

Dimensions only for reference



Side and front view

Ordering Information

Product: **D517** - **HV** - **N**

Power Supply

Nominal battery voltage: 48, 72, 96, 110 V

Nominal battery voltage: 24, 36 V*

Power over Ethernet (PoE)*

Grounding Bolt

No grounding bolt

M5 grounding bolt*

Example:

D517-HV-N¹

¹ Default ordering options

* Contact duagon for availability and lead times