aselsan

TCU – A

EMBEDDED CONTROL UNIT FOR RAILWAY APPLICATIONS

IRIS Certification

Product Description

ASELSAN's TCU Series is a family of embedded control units integrating industry-leading computing power with standard railway network interfaces.

TCU is the optimized solution for demanding railway applications, real-time control and connectivity supporting train communication network interfaces MVB, CANopen, Ethernet according to the standard IEC 61375

Typical Applications

- Railway Vehicles
- Locomotives

Product Features

- Platform for Embedded Control Applications/Algorithms
- Texas Instruments DSP28346 Processor
- MVB, CANopen, Ethernet interface options
- Over voltage, over current, under voltage and short circuit protection
- 32 isolated inputs,
- 8 isolated outputs,
- 4 PWM read blocks
- Functional safety based on IEC/EN 60950-1, EN 50155
- Complies with all EMC requirements
- Fully automated self test at start-up
- Railway qualified components

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Technical Specifications

Rating

Supply Voltage	: 9-36 VDC
Current Consumption	: 1 A max.
Digital Input High Voltage	: 18-154 VDC
Digital Output Voltage	: 24 VDC (36 VDC max.)
Digital Output Current	: 2 A max.

Standards

Electrical	: EN 50155, EN 50121-3-2
Environmental Safety	: EN 50155, EN 50125, : EN 61373 IEC/EN 60950-1, : EN 50155

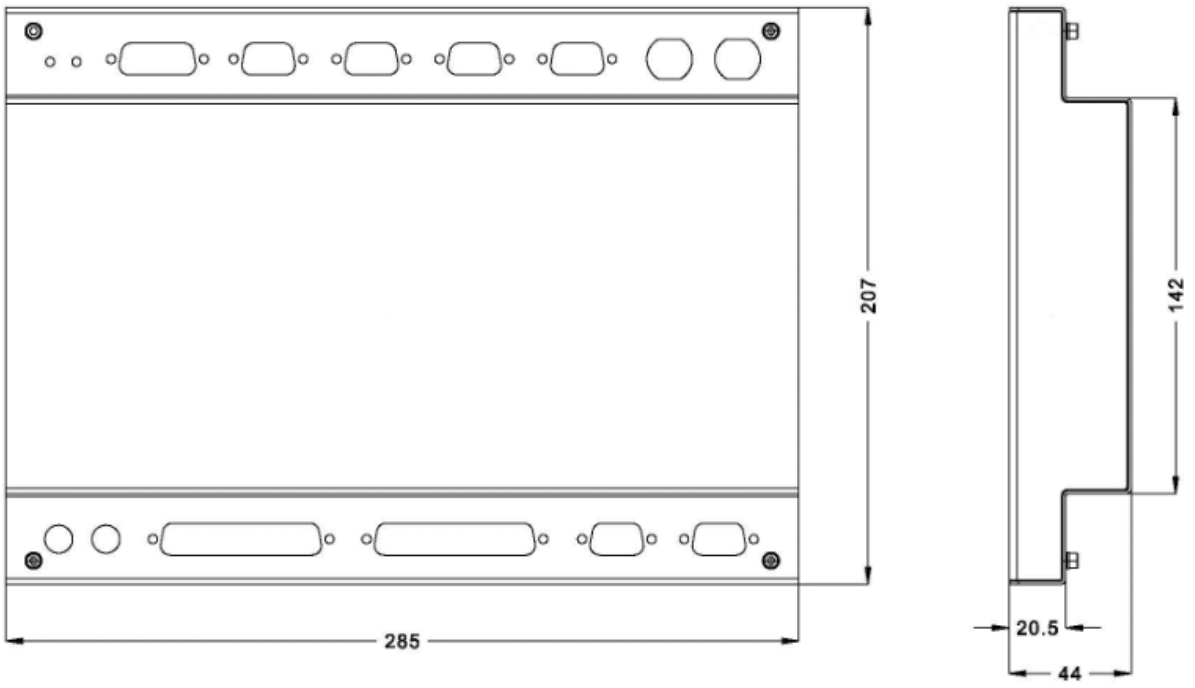
Interfaces

Digital Inputs	: 32
Digital Outputs	: 8 (4 groups of 2 isolated outputs)
MVB (EMD)	: IEC 61375-3-1 (1.5 Mbps), UL 1577, : IEC 60747-5-5
CAN Bus	: CANopen IEC 61375-3-3, : CAN 2.0 ISO 11898, IEC 60747-5-2
RS-422/RS-485	: ANSI/TIA/EIA-485-A-9, IEC 60747-5-2
Ethernet	: IEEE 802.3, IEC 61375-3-4, : 10/100 Mbps

Mechanical Data

Weight	: ~1 kg

Dimensions



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