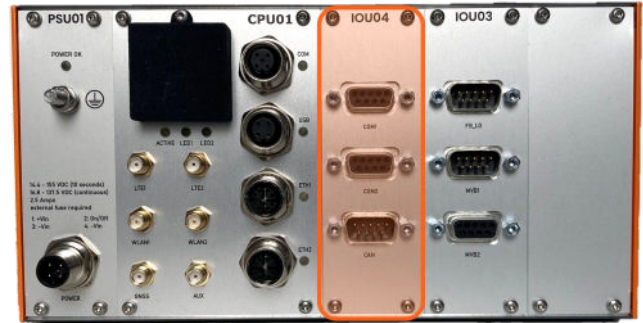


Serial interface extension unit (ModuCop) for edge applications in rail & busses

Features

- 1 slot (7 HP) extension unit for ModuCop Edge Computer
- 2x Serial Interface RS232/422/485; up to 256 kBaud
- 1x CAN Interface, up to 1 MBit/s
- SW configurable listen only mode (CAN) grants non-reactivity
- Local Micro Controller for SW abstraction
- Configurable operational mode
- EN 50155 compliant (integrated in ModuCop)



Introduction

The serial interface unit *IOU04* extends the functionality of the modular and flexibly expandable Edge Computer ModuCop MEC. Fully integrated in ModuCop, IOU04 provides cost sensitive serial and CAN interfaces in addition to the various interface offerings of the base computer MEC.

IOU04 enables ModuCop to connect to even more vehicle interfaces and is intended to be used in applications with the need to connect to sub-systems with CAN or Serial interface. The CAN interface can be configured to “listen only” mode, providing non-reactivity when connecting to the Train Communication Network (TCN).

Both serial and CAN interfaces can be use in “data acquisition mode” or as communication interface.

IOU04 is powered by ModuCop integrated power supply and controlled by ModuCop CPU unit.

IOU04 is fully supported by Ci4Rail’s Linux Microservices Platform, running on ModuCop.

Applications

- Condition-based / predictive maintenance
- Board Computer
- Fleet Management
- Advanced driver assistance system
- Ticketing System
- Security Gateway

Software

Fully supported in and integrated in Linux Microservices Platform (LMP)

Secure SW update for IOU04 integrated Micro Controller.

Specifications

Input/Output	S101-IOU04-
Serial Interfaces	2x RS232/422/485* via DSUB-9p socket
Serial IF Baudrate	Standard baudrates up to 256 kBaud
CAN Interface	1x CAN via DSUB-9p plug
CAN IF Baudrate	Up to 1 MBit/s
CAN listen-only mode	SW configurable "listen-only" mode
Power Input	Via ModuCop System
Mechanics	
Dimensions	1 Slot (ModuCop System) Width: 35.3 mm Depth: 61,2 mm Height: 111,5 mm
Installation	ModuCop Extension Slot
Environmental**	
Operating Temperature	-40...+70°C / 85°C (10min) (EN 50155:2021 - OT4 + ST1)
Storage Temperature	-40...+85°C (EN 50155:2021)
Humidity	95% (EN 50125-1:2014)
Altitude	3000 m max. above sea level (EN 50125-1:2014, class AX)
Shock / Vibration	EN 61373:2010; Cat. 1; Class B
EMC Emission / Immunity	Rail Applications: EN 50121-3-2:2016; EMV 06 (2.0) Class S1; EN 301 489-1 (V2.2.3) Automotive Applications ECE R10 Rev.5
Safety	EN 50155:2017; EN 50153:2014+A1:2017; EN 50124-1:2017; EN ISO 13732-1:2008
Fire&Smoke	EN 45545-2:2013 + A1:2015; HL3
Useful Life	20 years (EN 50155:2021, class L4)
Pollution Degree	PD2 (EN 50124-1:2017)

* For proper use of RS485 half duplex mode external connection of RX+/- and TX+/- lines is required. For more details, see user documentation.

** All environmental data apply for proper installation in ModuCop Edge Computer.

Order Information

The product can only be ordered as integrated I/O extension unit in ModuCop Edge Computer.

Accessories

N/A

