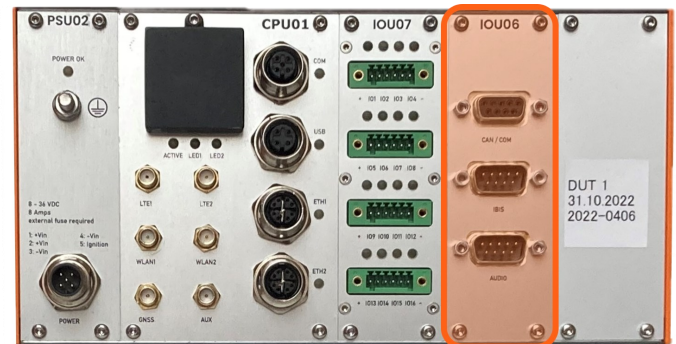


Public transport communication extension unit (ModuCop) for edge applications in trams & buses

Features

- Single slot (7 HP) extension unit for ModuCop Edge Computer
- 1x IBIS Master (24V, 100mA)
- 1x CAN Interface, up to 1 Mbit/s
- 1x RS422/485, shared DSub with CAN
- 1x Audio Interface (2x Line Out (mono); 1x Line In (mono))
- 2x Bin Out, shared DSub with Audio
- Galvanic isolation of interfaces
- EN 50155 compliant; UN-ECE R10 (E-Mark) (integrated in ModuCop)



Introduction

The *IOU06* extension unit upgrades ModuCop Edge Computer to a full featured OBU (onboard unit) by adding often desired interfaces in bus and tram applications.

The IOU06 offers an IBIS master interface, which allows management of and communication to onboard equipment like displays or ticketing systems, connected to IBIS.

Via the mono audio interface, IOU06 allows connection of 2 independent mono audio sinks and 1 audio source. IOU06 offers in addition one CAN interface to connect to vehicle networks or directly to existing CAN participants. The CAN interface shares its connector with an additional serial interface of RS422/485 type full and half duplex.

IOU06 is powered by ModuCop integrated power supply and controlled by ModuCop CPU unit.

IOU06 is fully supported by Ci4Rail's Linux Microservices Platform, running on ModuCop.

Applications

- Board computer (OBU)
- Ticketing System
- CCTV
- Condition-based monitoring
- Predictive maintenance
- Fleet optimization

Software

Fully supported by and integrated in Linux Microservices Platform

SW configurable modes to select usage as direct I/O or as data logger with multiple time stamped data streams

Secure firmware update for IOU06 integrated Micro Controller.

Specifications

Input/Output	S101-IOU06-
IBIS Master	1x IBIS Master via DSUB-9p; 24V, 100mA
CAN Interface	1x CAN via DSUB-9p* plug; up to 1 Mbit/s
Serial Interface	2x RS422/485* via DSUB-9p* plug up to 230 kBaud
Audio Interface	2x Line Out (0dB on 600 Ohm); 1x Line In: Mono
Bin Output	2x binary outputs**
Binary Output Characteristics	0..24V DC, 150mA per output; Load on GND; switch to supply
Galvanic isolation	All interfaces (except Audio out) galvanically isolated; 750V (DC)
Power Input	Via ModuCop System
Mechanics	
Dimensions	1 Slot (ModuCop System); 7 HP
Installation	ModuCop Extension Slot
Environmental***	
Operating Temperature	-40...+70°C / 85°C (10min) (EN 50155:2017 - OT4 + ST1)
Storage Temperature	-40...+85°C (EN 50155:2017)
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 SI; 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 62368-1:2016; EN ISO 13732-1:2008
Fire&Smoke	Rail Applications: EN 45545-2:2013 + A1:2015; HL3 Automotive Applications: ECE R118
Useful Life	20 years (EN 50155:2017, class L4)
Pollution Degree	PD2 (EN 50124-1:2017)

* CAN and serial interface share one DSub 9p connector. Interfaces can be used simultaneously.

** Audio and Bin Out share one DSub 9p connector. Interfaces can be used simultaneously

*** 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.

Please [contact](#) us for your specific configuration.

Accessories

N/A

preliminary