

Distributed Processing Units

Remote Digital input (RDi-32xe / RDi-32Axe)



KONGSBERG



Description

This digital input module is a multi purpose flexible device that covers the most common digital input signal types. Two versions exist. The RDi-32xe has dry contacts and RDi-32Axe is used for active signals, 24VDC and AC (50 – 70Hz).

The module requires 24VDC input power and provides over redundant CAN Open 4.0 high speed field bus, sensor data processed and time stamped.

Functions

- 32 digital input channels with LED status indicators
- Alarm block
- Trend
- Time stamping
- Self checking
- Sensor excitation power overload
- CAN net status, error handling

Features

- All parameters stored in the module
- Remote configuration
- No trimmers or jumpers
- No serviceable parts inside module
- All connections are plugable
- Suitable for direct installation on the main engine
- Module includes status LED's for: Watchdog, running, general information, initialized module and power polarity



Supply voltage

- 18 - 32 VDC

Power consumption

- 16W for RDi-32xe (With all inputs active)
- 8W for RDi-32Axe (With all inputs active)

Operating temperature

- -15°C to +70°C

Storage temperature

- -25°C to +70°C

Max rel. humidity

- 96% non-condensing

IP Code

- IP20

ENV properties

- IACS E10
- IEC 60945

Vibration

- 4 G

Weight of unit

- 1.8 kg

Mounting

- Screws (4 pcs M5)

Connections, pluggable screw terminals

- I/O 2 terminals 2.5 mm²
- Power 4 terminals 2.5 mm²
- CAN bus 4 terminals 2.5 mm²

Signal types

- ON / OFF, normally open, normally closed.

Specification:

- RDi-32xe: Dry contact (switching level approx 1.5 mA)
- RDi-32Axe: Active signal 24 VDC or AC (50-70 Hz)

Sensor excitation voltage and current:

- Only for RDi-32xe, 8 mA @ 24VDC nominal.

Communication interfaces

- 2 CAN ports for communication with host.

Isolation

RDi-32xe

- Power: Isolated/floating from module chassis.
- Input: Supplied from 24 VDC module supply.
- CAN: Individually isolated

RDi-32Axe

- Power: Isolated/floating from module chassis.
- Input: Channels individually isolated (opto coupler)
- CAN: Individually isolated

BIST (Built In Self Test)

- Module temperature, power and sensor excitation overload.

Type approval

- DNV, LRS, BV, GL, RINA, NK, ABS, KR, RMR, CCS (allows direct mounting on engines, compressors, etc. in suitable cabinets)

Part number

RDi-32xe

- 333523

RDi-32Axe

- 333824

