

# Rosemount IOB 51

## Input Output Box



**The Rosemount IOB 51 Input Output Box is used to connect all types of subsystems or interfaced units to the Rosemount WSU 51 Workstation Unit.**

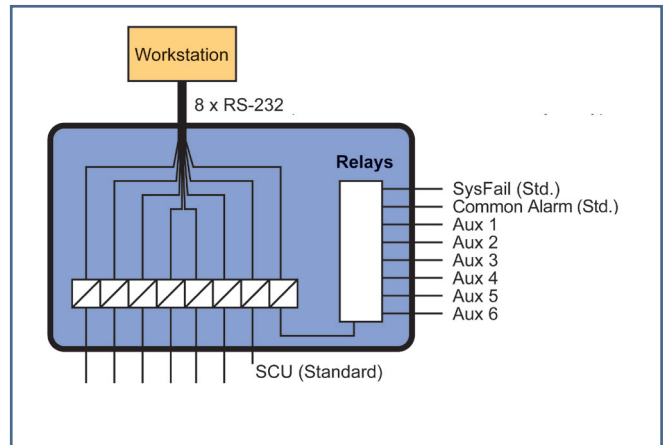
- Connect sensors and monitoring equipment to the operator workstation
- Serial interface connection to third party systems
- Relay outputs for System Failure, Common alarm and project defined alarms
- Provides conversion to multiple electrical interfaces

## Description

The Rosemount IOB 51 Input Output Box handles communication within the Rosemount CMS or Rosemount CTS system. It is also used for integration with third party systems onboard and has several relay outputs that can be configured according to project needs.

The IOB 51 is functionally linked to a Rosemount WSU 51 Workstation Unit. The WSU 51 controls the IOB 51 through a multicore cable connection and offers isolated serial outputs.

The IOB 51 is mounted to a wall or in a console near the Rosemount WSU 51 Workstation Unit.



### Standard and optional connections

IOB 51 connects different units within the Rosemount CMS or Rosemount CTS system. As standard the following units are always included:

- Rosemount WSU 51 Workstation Unit, connected using a multicore cable connection
- Rosemount SCU 51 Supply and Communication Unit

Optional equipment that may be connected:

- Rosemount IOU 51 Input Output Unit
- LevelDatic LD80S Multipoint Level Measurement Unit
- LevelDatic LD120S Multipoint Level Measurement Unit
- PDU 51 Panel Display Unit
- Third party systems such as Load calculator, Main automation system etc. (see below).

### Integration with third party systems

Interfacing third party systems is easily done through serial interfaces. The Rosemount WSU 51 supports a number of different communication protocols over serial communication lines. All communication is configured depending on project specification.

### Redundant communication

The IOB 51 can optionally be configured for increased fault tolerance by setting up redundant serial communication. Either with separate communication lines or for RS-485 multi dropped communication lines.

### Relay outputs

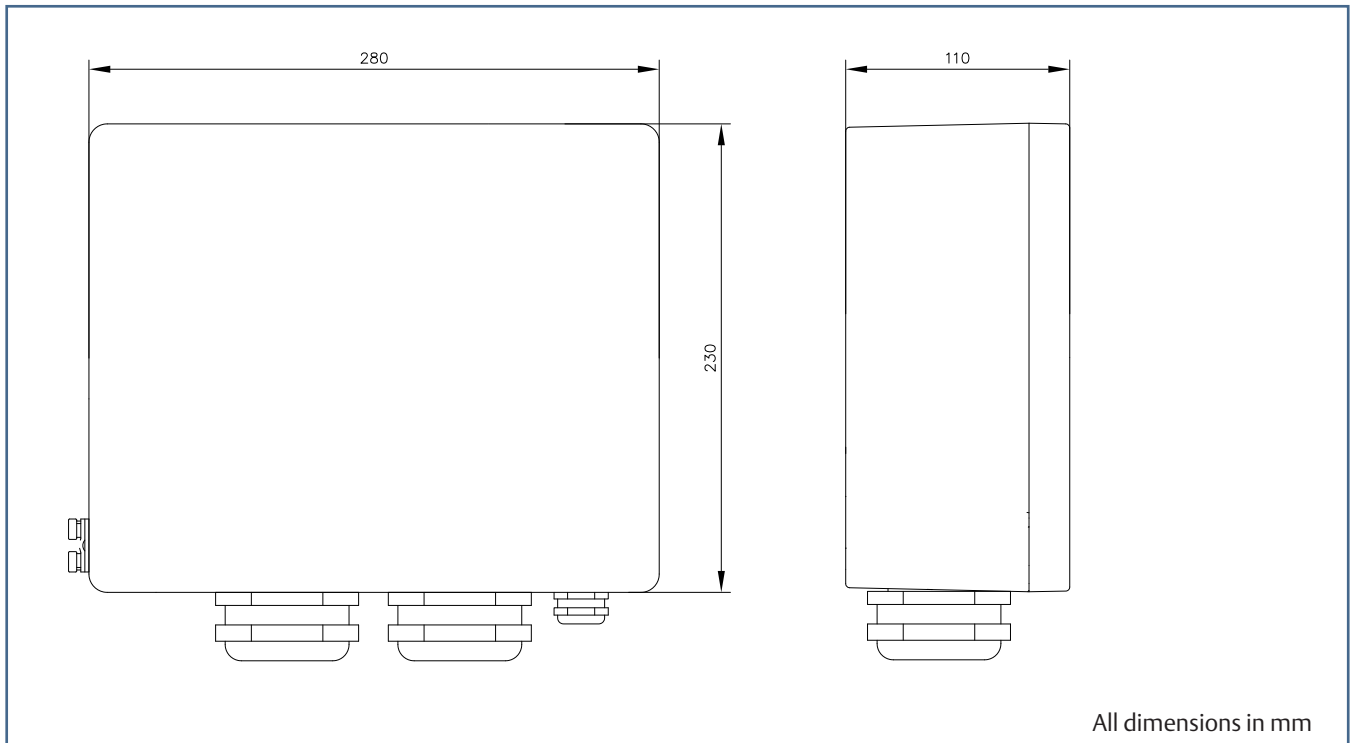
The IOB 51 has 8 relay outputs:

- System Failure – This relay is Normally Closed and is always available. It is controlled by an internal watchdog circuit and will be reacting on lost communication or power as well as by command from the WSU 51
- Common Alarm – This relay is activated when an alarm condition occurs in the WSU 51
- 6 User defined – These relays can be configured to any desired action from the WSU 51

# Technical Specification

IOB 51	
<b>General Specification</b>	
Connection to Workstation Unit	Multicore serial connection cable. Maximum length 15 m.
Number of serial ports from IOB	7
Serial connection types	RS-232, RS-422/485
Number of relay outputs	8
Type of relay outputs	Normally closed or Normally opened
Relay specification	250 VAC, 8A
Standard color	RAL 5013
<b>Electrical specifications</b>	
Power supply voltage	115 VAC or 230 VAC
Power consumption	Max 15 VA
<b>Mechanical specifications</b>	
Material	Aluminum
Weight	5 kg
<b>Environment specification</b>	
Operating temperature	0 to 45 °C
Operating humidity	20% to 80% (non-condensing)
<b>Approvals</b>	
Marine approvals	ABS, BV, CCS, DNV-GL, KR, LR, NK, RINA

## Dimensional Drawing



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