

# Rosemount<sup>®</sup> Control Cabinet

## for tank gauging systems



- Simplify control room installation
- Save installation time
- Get electrical connections and TankMaster redundancy configured and 100% pre-tested
- Protect control room equipment and computers
- Synchronize same look-and-feel with other cabinets
- Expand system in the future using spare terminals and spare cabinet space

# Protect control room equipment and computers

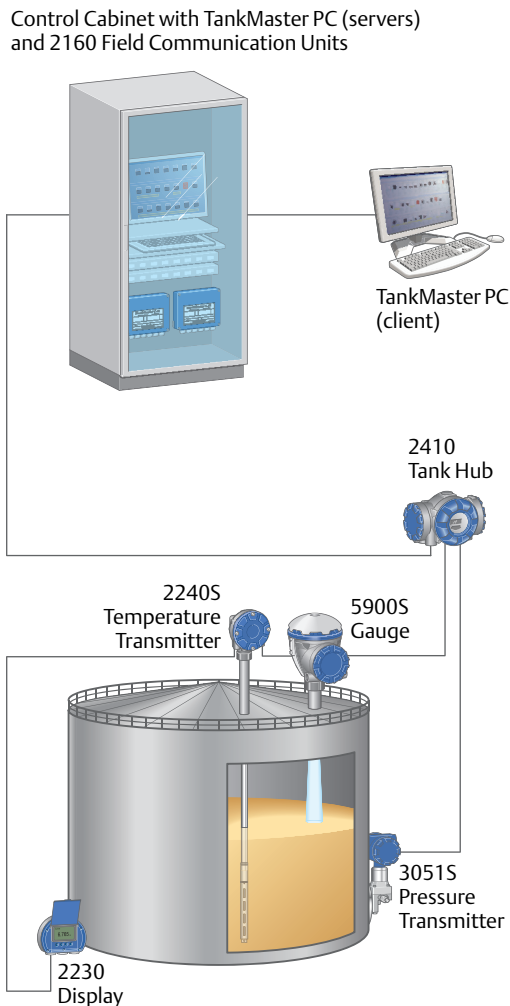
## Simplify installation in control room

With the Rosemount Control Cabinet you get an installation according to best industrial practice for control room equipment and workstations. The system cabinet can be placed in the same control room with other manufacturer's cabinets (DCS, SIS, Fire Control, Alarming etc.). It will have the same size, shape, dimensions and color as all other cabinets.

- Save installation time and reduce complexity.
- Connections between the control equipment and the workstations are installed and tested in the factory, you know they are working.
- The system can be expanded on site and extra functions can be added when needed in the future, by using spare terminals and spare cabinet space.

## Improve reliability and security

- The control room equipment and computers are protected from heat, dust and unauthorized access.
- Any maintenance can be concentrated in one single point (the cabinet) based on clear wiring diagrams and functional specifications.



## Contents

Specifications .....	3	Dimensional drawings .....	6
Photos cabinet examples .....	5		

# Specifications

In most cases the cabinet is customized for specific project requirements. It is generally recommended to use separate cabinets for field data collection (Field Communication Unit/ 2460 System Hub) and inventory software servers. The below specification is valid for a “standard scope” project.

## General

### Dimensions<sup>(1)</sup>

- Height: 2100 mm (82.7 in.), incl. plinth 100 mm (3.9 in.)
- Width: 800 mm (31.5 in.)
- Depth: 800 mm (31.5 in.)

### Fans and cooling

1 or 2 filter fans<sup>(2)</sup>

### Possible alarm outputs

- High temperature relay
- Fan failure relay
- Smoke detector relay
- Other alarms (common alarm, intrusion alarm etc)

### Cabinet finish

Exterior and interior cabinet finish is manufacturer’s standard finish (RAL 7035, light grey) where applicable.

### Door locks

All doors are provided with integral lockable door handles with the same lock and key combination.

### Cabinet temperature sensing

Each cabinet which contains system components, such as controllers, I/O or communications modules or which houses power supply modules (with the exception of server/client cabinets) includes a temperature sensing device. This device shall be connected to the Basic Process Control System (BPCS) to provide continuous analog temperature indication and temperature alarming to the operators.

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1. Typical dimensions, can be customized (all Rittal sizes).

2. Position and quantity depending on internal configuration.

### Access

Server/Network cabinet has both front and back end access.

### Lifting access

Cabinets have four (4) removable lifting lugs sized for safely lifting and moving cabinets during transportation and installation.

### Maintenance

Modules and components are mounted such that they can be quickly replaced in the event of failure. All redundant components can be replaced without powering down the system.

### Lighting

Cabinet lights are included.

## Electrical

### System power supply

110/230 VAC<sup>(3)</sup>

### Spare terminals

Each cabinet is supplied with 10% spare terminal blocks. Cabinet design matches the number of terminal blocks.

### Convenience power outlets

Convenience outlets are included in cabinets, unless excluded by customer. Convenience outlets are of duplex-type and rated at 10 amp as a minimum.

### Circuit breakers and fuses

For each power supply located within a cabinet, individual circuit breakers are provided for each power supply’s AC input.

Individual circuit breakers are provided for each main DC circuit, within the cabinet.

Fuses and circuit breakers are readily accessible for maintenance with sufficient clearance from obstructions.

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3. Depending on specifications.

## Example: Control cabinet with redundant 2160 Field Communication Units/2460 System Hubs

- Up to 2 pairs of redundant field data collectors
- Handles up to total 128 tanks and 512 field devices

### Outputs to host system

- Protocols: OPC, Modbus<sup>®</sup> RTU, Modbus TCP/IP
- Interface: RS232, RS485, Ethernet, Fiber Optics (via converter)

## Example: Control cabinet with redundant TankMaster system

- 2x TankMaster Servers (redundant)
- 2x Ethernet network switches (in a redundant configuration)
- 4x 2180 Field Bus Modems (redundant serial communication)

### Outputs to host system

- Protocols: OPC, Modbus RTU, Modbus TCP/IP
- Interface: RS232, RS485, Ethernet, Fiber Optics

# Photos cabinet examples



Double door version.



Glass door, single door version.



Single door version.

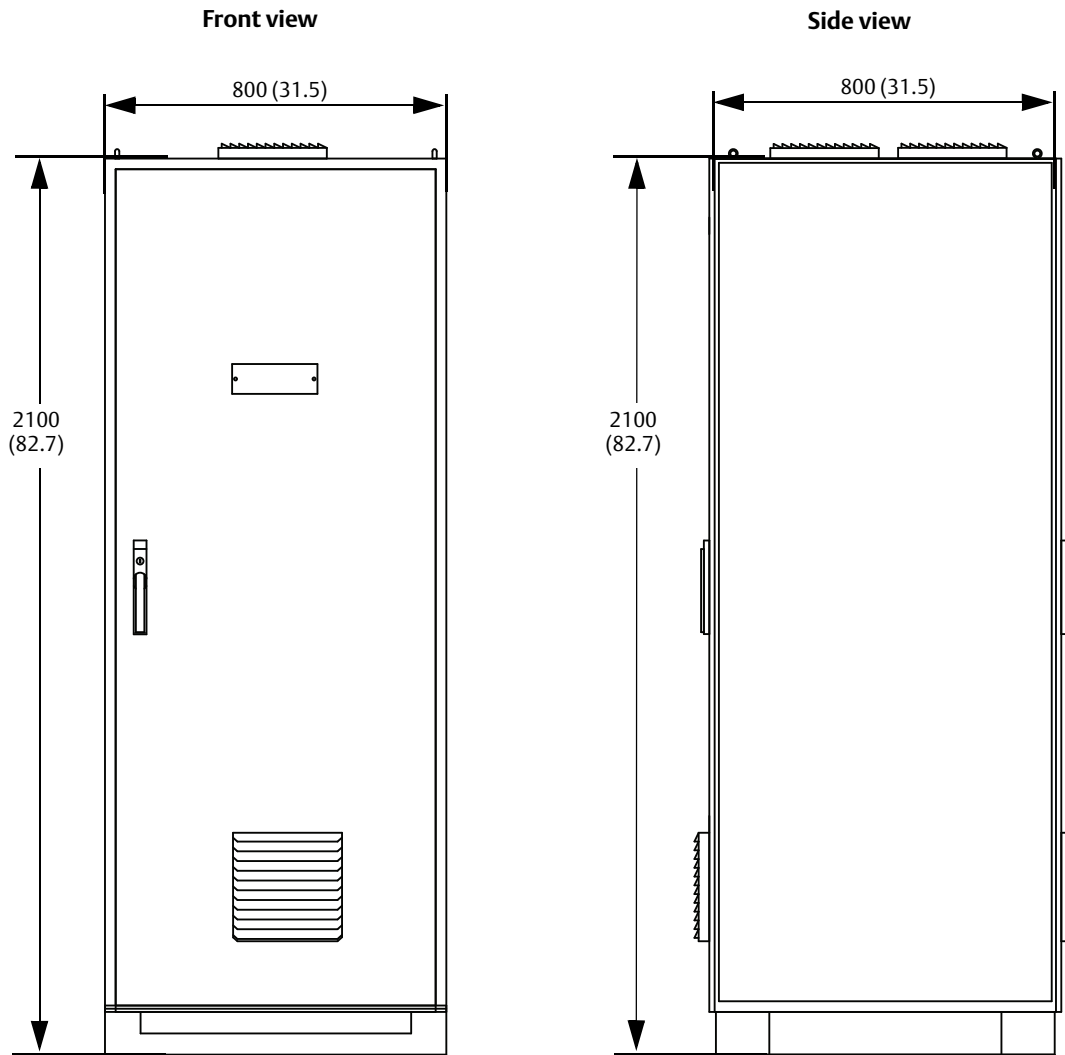


Cabinet with redundant 2160 Field Communication Units.

# Dimensional drawings

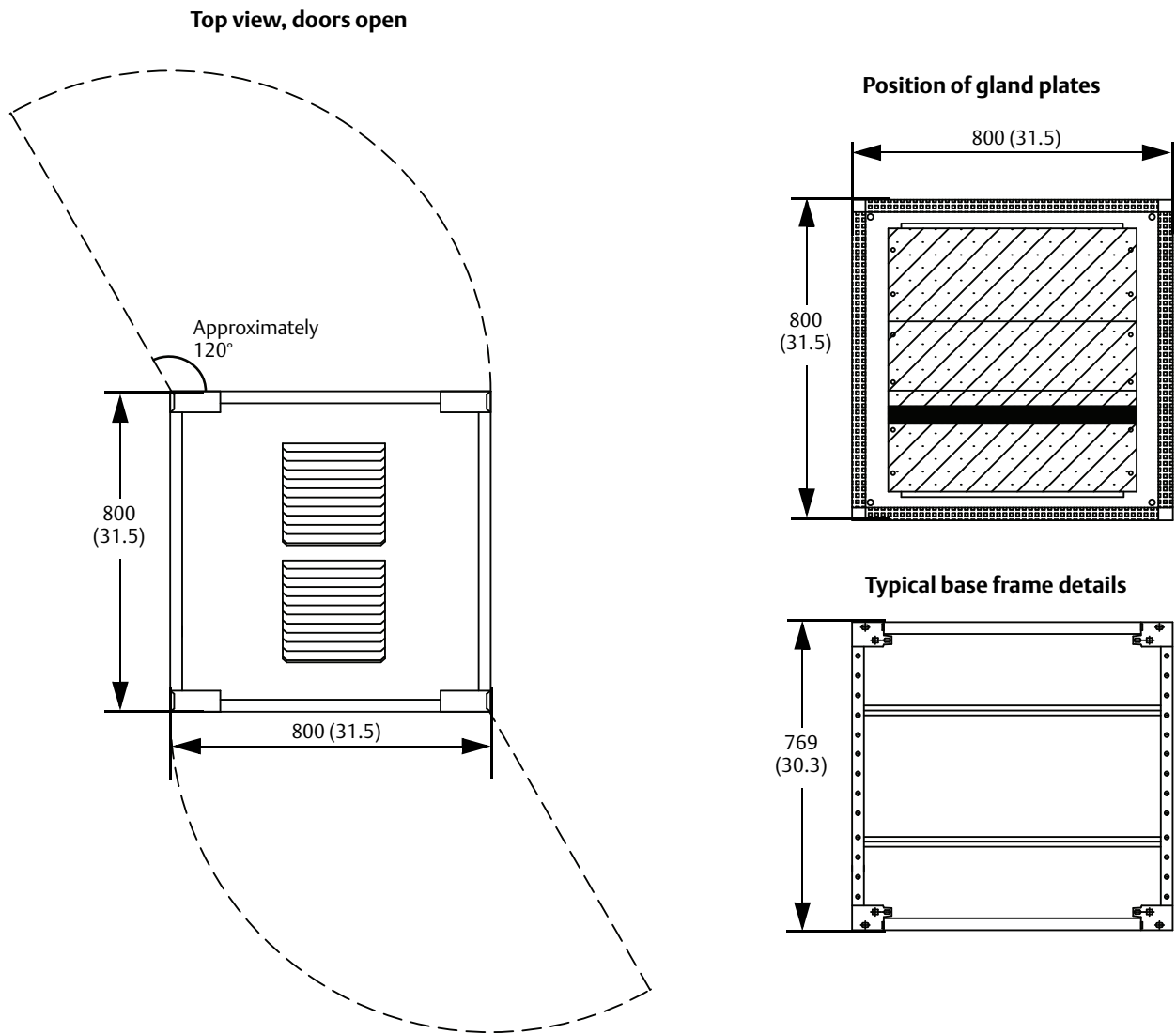
(example with smaller system using one cabinet only)

Figure 1. Dimensional Drawings, Front/Side View



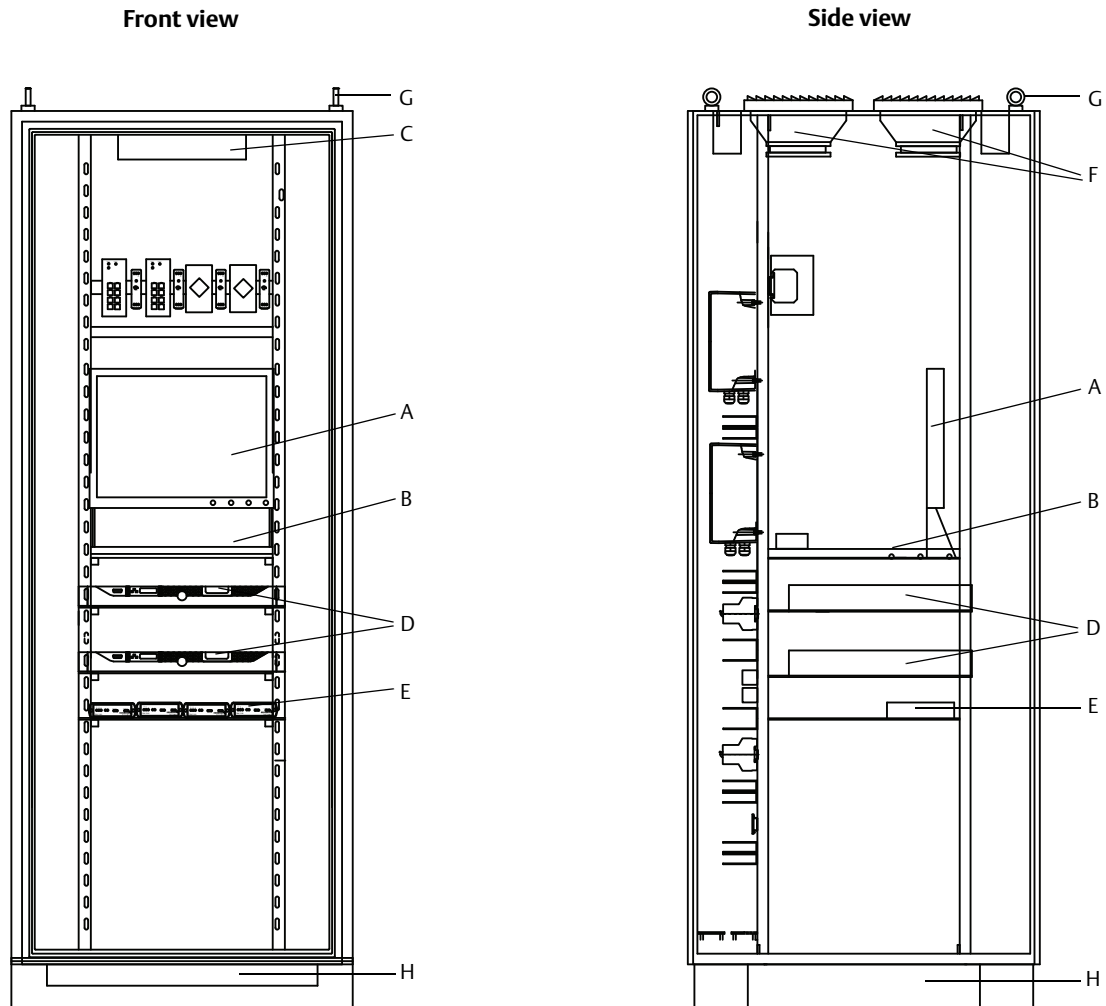
Dimensions are in millimeters (inches).

Figure 2. Dimensional Drawings, Top View



Dimensions are in millimeters (inches).

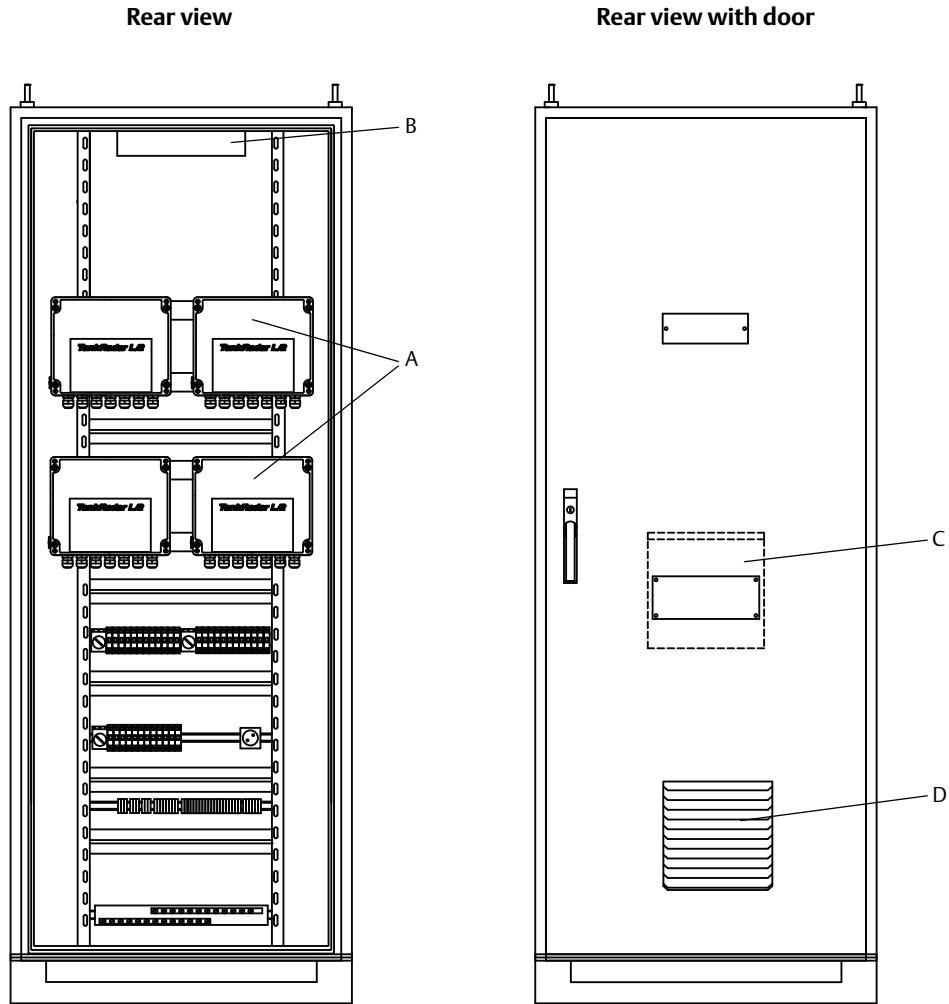
Figure 3. General arrangement Drawing, Front/Side View



- A. Flip monitor
- B. Keyboard/mouse tray
- C. Tube light with door switch
- D. Redundant server pair
- E. Redundant Field Bus Modems set
- F. Fan
- G. Lifting lug
- H. Plinth



Figure 4. General Arrangement Drawing, Rear View



- A. Field Communication Unit
- B. Tube light with door switch
- C. Drawing pocket
- D. Filter/louver

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