

Flyer

April 2017

Stainless Steel Wall Enclosure for SIMATIC ET 200iSP

Individual and Turnkey Ready Solutions

SIMATIC ET 200iSP is a distributed I/O system for hazardous areas. The intrinsically safe I/O can be installed directly in areas subject to gas (Zone 1, 2) and dust (Zone 21, 22) related explosion hazards. SIMATIC ET 200iSP is a combination of safety barriers and I/O – integrated in one single unit. This eliminates the wiring effort associated with traditional solutions based on linking individual I/O with safety barriers.

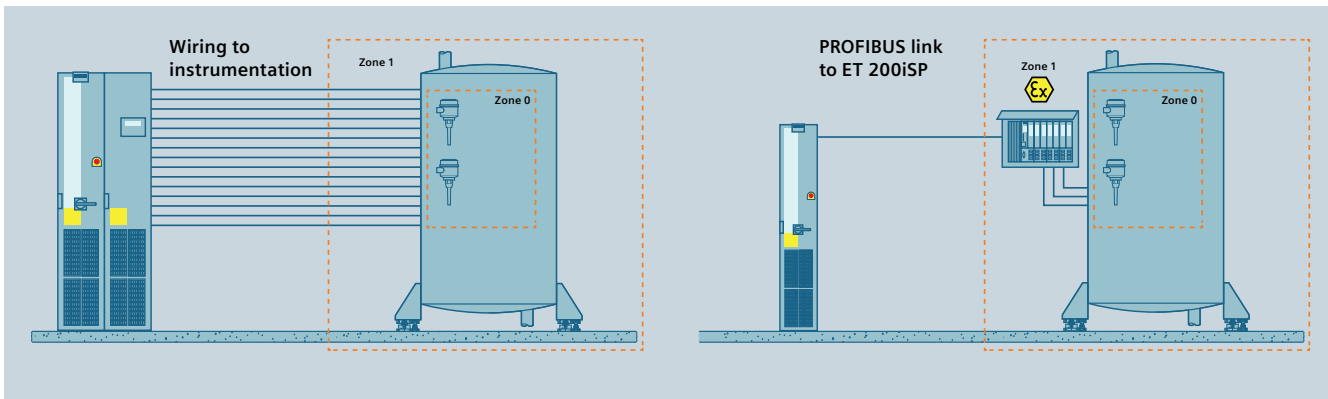
Since SIMATIC ET 200iSP can be mounted directly in the hazardous area, there is a considerable reduction of required cable runs offering significant cost savings during both engineering and operational phases of the plant.

Centralized Approach

Traditional solutions for hazardous areas are based on a centralized I/O approach whereby each and every sensor and actuator is connected to the sensors via point-to-point hardwired intrinsically safe barriers. This approach usually requires significant design and engineering effort. A large number of individual components such as safety barriers and terminals have to be combined together, resulting in a high potential for errors.

Distributed Approach

A distributed approach using I/O with inbuilt safety barriers allows the entire system to be mounted directly in the hazardous area, adjacent to the sensors and actuators. This is exactly what SIMATIC ET 200iSP offers: a fully compatible, compact, hazardous area solution based on the distributed approach. It significantly reduces the overall engineering effort by eliminating components such as external safety barriers. The distributed approach also reduces the number of required cable runs, which means less effort during commissioning, lower risk of wiring errors and simplified bus connections of distributed I/O stations.



Centralized Approach vs. Distributed Approach

Flexible Configuration

In addition to numerous configuration options enabling use in many different areas, there is also a wide choice of enclosure sizes.

Possible configurations include:

- Failsafe I/O modules (up to SIL 3)
- Integral Airline 8650 pneumatic valves from Bürkert
- Other components on request



Turnkey Ready

The associated ATEX certificate applies to the complete device produced by Siemens (i.e. including the components present in the enclosure).

Enclosure details

Degree of protection

The degree of protection depends on the enclosure size and the parts used such as cable entries, dummy plugs and climate nozzles:

- Device group I:
IP54 / IP55 (mining)
- Device group II:
IP54 to IP66 (gas: zones 1 + 2)
IP64 to IP66 (dust: zones 21 + 22)

Operating temperature

Depends on the temperature range of the parts used:

- -40 to +70 °C

Wiring

The wiring is done through the cable and wiring entries on the bottom of the device. In the cabinet, the signals are then connected to the terminal modules. This means the wiring stays in place even if electronic modules are replaced.

The ET 200iSP is mounted as standard on an equipotential busbar.

For individual solutions please contact:

E-Mail: cabinets.industry@siemens.com