With the standard enclosures IS1+ we offer you a variety of pre-assembled field enclosures for installation in Zone 1 with shorter delivery times. The five versions are made of stainless steel 1.4301 (V2A) and contain, among other things, all entries, BusRails, cable ducts, CPM sockets and connecting terminals for auxiliary power.

After installation of the IS1+ components, the enclosures can be used in Zone 1 and do not require any acceptance or certification since they meet the requirements of EN 61439. Modifications, extensions or fully customer specific designs are available anytime on request.

Note: The standard enclosures are delivered without IS1+ modules

<table>
<thead>
<tr>
<th>Zone</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>20</th>
<th>21</th>
<th>22</th>
</tr>
</thead>
<tbody>
<tr>
<td>For use in</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
</tbody>
</table>
## Standard enclosure for Remote I/O
### Series 8150

#### Selection Table

<table>
<thead>
<tr>
<th>Version</th>
<th>Dimensions (W x H x D)</th>
<th>Number of module slots</th>
<th>Max. number I/O signals (analog/digital)</th>
<th>Order number</th>
<th>Art. no.</th>
<th>Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard enclosure for Remote I/O, Zone 1</td>
<td>750 x 360 x 230</td>
<td>6</td>
<td>40 / 80</td>
<td>IS1 RIO Station 360x750x230_6 Slot_Z1</td>
<td>244147</td>
<td>25.000</td>
</tr>
<tr>
<td></td>
<td>600 x 600 x 230</td>
<td>8</td>
<td>56 / 112</td>
<td>IS1 RIO Station 600x600x230_8 Slot_Z1</td>
<td>244142</td>
<td>35.000</td>
</tr>
<tr>
<td></td>
<td>760 x 760 x 300</td>
<td>10</td>
<td>64 / 128</td>
<td>IS1 RIO Station 760x760x300_10 Slot_Z1</td>
<td>244144</td>
<td>55.000</td>
</tr>
<tr>
<td></td>
<td>1300 x 360 x 230</td>
<td>10</td>
<td>64 / 128</td>
<td>IS1 RIO Station 360x1300x230_10 Slot_Z1</td>
<td>244143</td>
<td>45.000</td>
</tr>
<tr>
<td></td>
<td>800 x 1000 x 300</td>
<td>16</td>
<td>112 / 224</td>
<td>IS1 RIO Station 800x1000x300_2x8 Slot_Z1</td>
<td>244146</td>
<td>70.000</td>
</tr>
</tbody>
</table>

**Note**  
Weight and delivery without modules

### Explosion Protection

**Global (IECEx)**  
Gas  
IECEx PTB 09.0049  
Ex de ib [ia Ga] IIC T4 Gb

**Europe (ATEX)**  
Gas  
PTB 09 ATEX 1109  
II 2 G Ex de ib [ia Ga] IIC T4 Gb

### Certifications and certificates

**Certificates**  
IECEx, ATEX, Brazil (INMETRO), India (PESO), Kazakhstan (TR), Russia (TR), Serbia (SRPS), Belarus (TR)

**Ship approval**  
Available for customized versions:

### Further parameters

**Installation**  
in Zone 1

**Further information**  
refer to operating instructions and certificates of enclosures and IS1+ modules.

### Technical Data

#### Electrical data

- Rated operational voltage: 24 V DC (20 ... 35 V DC)
- Rated current: Depending on installed modules (see corresponding data sheet)
- Connection: Screw connection 0.2 mm² - 10 mm² (4 x UT6, 2 x UT6-PE)
- PE-rail: 6 x 10 mm²
- PE connection: BG245, clamping range 10...25 mm²
- Cable entries: 2 x M32 x 1.5, black, polyamide, clamping range 9...21 mm² (R. STAHL type 8161/7-M32-2109)
- Breather: M25, green, polyamide (R. STAHL type 8162/1-M25-1)

#### Ambient conditions

- Ambient temperature: -20 ... +50°C
- Storage temperature: -40 ... +60 °C

Refer to the technical data in the corresponding data sheets of the IS1+ devices

#### Mechanical data

- Degree of protection: IP65
- Material: Stainless steel, brush finished 1.4301 (V2A, AISI 304)
- Seal: Silicone, foamed

#### Mounting / Installation

- Assembly: vertical or horizontal

#### Applicable IS1+ modules

**CPM**  
9440/22-01-11-C1243 (PROFIBUS DP V1 HART)  
9440/22-01-11-C1455 (PROFIBUS DP V1 HART for PNO redundancy)  
9440/22-01-11-C1202 (Modbus RTU)

**I/O modules**  
Types 9468/32, 9470/32, 9475/32, 9482/32

**Note**  
Installation of the IS1+ modules must be performed in accordance with the corresponding operating instructions of the modules. Refer to www.is1plus.de
## Standard enclosure for Remote I/O
### Series 8150

## Technical Data

| Version | IS1 RIO station 750 x 360 x 230 mm, 6 slots Zone 1 |

### Modules / signals
- **Number of modules:** 1 x CPM and 5 x I/O modules
- **Number I/O signals:** max. 40 analog or 80 digital signals
- **Max. internal power dissipation:** 38 W

### Built-in components
- **IS1+ BusRail:** for 6 slots, with 2 end pieces begin + end
- **CPM socket:** 1 x 9490/11-12
- **Cable duct:** 1 x blue (100 x 60 mm)
- **Shield bus:** 1 x equipped with 2 x KLBÜ 3-8, 2 x AK16, 30 x AK4
- **Cable entries:** 56 x M20 x 1.5, blue, polyamide, clamping range 4…13 mm (R. STAHL type 8161/8-M20-1304)
- **Front door:** 1 x opening upwards, 3 x cam locks, with cover support right

## Dimensional Drawings
(All Dimensions in mm [inches]) – Subject to Alterations

![Dimensional Drawings](image-url)
### Technical Data

<table>
<thead>
<tr>
<th>Version</th>
<th>IS1 RIO station 600 x 600 x 230 mm, 8 slots Zone 1</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Modules / signals</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of modules</td>
<td>1 x CPM and 7 x I/O modules</td>
</tr>
<tr>
<td>Number I/O signals</td>
<td>max. 56 analog or 112 digital signals</td>
</tr>
<tr>
<td>Max. internal power dissipation</td>
<td>40 W</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Built-in components</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>IS1+ BusRail</td>
<td>for 8 slots, with 2 end pieces begin + end, 1 x BusRail extension</td>
</tr>
<tr>
<td>CPM socket</td>
<td>1 x 9490/11-12</td>
</tr>
<tr>
<td>Cable duct</td>
<td>2 x blue (100 x 60 mm), 1 x grey (25 x 25 mm)</td>
</tr>
<tr>
<td>Shield bus</td>
<td>1 x equipped with 2 x KLBÜ 3-8, 2 x AK16, 30 x AK4</td>
</tr>
<tr>
<td>Cable entries</td>
<td>58 x M20 x 1.5, blue, polyamide, clamping range 4…13 mm (R. STAHL type 8161/8-M20-1304)</td>
</tr>
<tr>
<td>Front door</td>
<td>1 x opening to the left, 5 x cam locks</td>
</tr>
</tbody>
</table>

### Dimensional Drawings

(All Dimensions in mm [inches]) – Subject to Alterations

![Dimensional Drawings](image-url)
## Standard enclosure for Remote I/O
### Series 8150

### Technical Data

<table>
<thead>
<tr>
<th>Version</th>
<th>IS1 RIO station 760 x 760 x 230 mm, 10 slots Zone 1</th>
</tr>
</thead>
</table>

### Modules / signals

<table>
<thead>
<tr>
<th>Number of modules</th>
<th>1 x CPM and 8 x I/O modules</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number I/O signals</td>
<td>max. 64 analog or 128 digital signals</td>
</tr>
<tr>
<td>Max. internal power dissipation</td>
<td>59 W</td>
</tr>
</tbody>
</table>

### Built-in components

- IS1+ BusRail: for 10 slots, with 2 end pieces begin + end, 1 x BusRail extension
- CPM socket: 1 x 9490/11-12
- Cable duct: 2 x blue (100 x 100 mm), 1 x grey (60 x 25 mm)
- Shield bus: 1 x equipped with 2 x KLBÜ 3-8, 2 x AK16, 50 x AK4
- Cable entries: 98 x M20 x 1.5, blue, polyamide, clamping range 4…13 mm (R. STAHL type 8161/8-M20-1304)
- Front door: 1 x opening to the left, 5 x cam locks

### Dimensional Drawings

(All Dimensions in mm [inches]) – Subject to Alterations

![Dimensional Drawings](image_url)
Standard enclosure for Remote I/O
Series 8150

Technical Data

<table>
<thead>
<tr>
<th>Version</th>
<th>IS1 RIO station 1300 x 360 x 230 mm, 10 slots Zone 1</th>
</tr>
</thead>
</table>

**Modules / signals**

<table>
<thead>
<tr>
<th>Number of modules</th>
<th>1 x CPM and 8 x I/O modules</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number I/O signals</td>
<td>max. 64 analog or 128 digital signals</td>
</tr>
<tr>
<td>Max. internal power dissipation</td>
<td>58 W</td>
</tr>
</tbody>
</table>

**Built-in components**

<table>
<thead>
<tr>
<th>IS1+ BusRail</th>
<th>for 10 slots, with 2 end pieces begin + end</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPM socket</td>
<td>1 x 9490/11-12</td>
</tr>
<tr>
<td>Cable duct</td>
<td>1 x blue (100 x 60 mm)</td>
</tr>
<tr>
<td>Shield bus</td>
<td>1 x equipped with 2 x KLBÜ 3-8, 2 x AK16, 50 x AK4</td>
</tr>
<tr>
<td>Cable entries</td>
<td></td>
</tr>
<tr>
<td>For bus/signals</td>
<td>82 x M20 x 1.5, blue, polyamide, clamping range 4…13 mm (R. STAHL type 8161/8-M20-1304)</td>
</tr>
<tr>
<td>Front door</td>
<td>1 x opening upwards, 4 x cam locks, 2 x cover support</td>
</tr>
</tbody>
</table>

**Dimensional Drawings** (All Dimensions in mm [inches]) – Subject to Alterations
Standard enclosure for Remote I/O
Series 8150

Technical Data

Version
IS1 RIO Station 800 x 1000 x 230 mm, 2x 8 Slots Zone 1

Modules / signals
- Number of modules: 2 x (1 x CPM and 7 x I/O modules)
- Number I/O signals: max. 112 analog or 224 digital signals
- Max. internal power dissipation: 62 W

Built-in components
- IS1+ BusRail: for 16 slots, with 4 end pieces begin + end
- CPM socket: 2 x 9490/11-12
- Cable duct: 2 x blue (100 x 100 mm), 2 x grey (60 x 25 mm)
- Shield bus: 1 x equipped with 2 x KLBÜ 3-8, 2 x AK16, 50 x AK4
- Cable entries: 130 x M20 x 1.5, blue, polyamide, clamping range 4…13 mm (R. STAHL type 8161/8-M20-1304)
- Front door: 1 x opening to the left, 6 x cam locks

Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations
Standard enclosure for Remote I/O
Series 8150

Special versions and options (longer delivery times)

<table>
<thead>
<tr>
<th>Version</th>
<th>Available options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installation</td>
<td>Zone 2 / 21 / 22 / Non-Ex</td>
</tr>
<tr>
<td>Enclosure</td>
<td>1.4404 (V4A, AISI 316L) / paint</td>
</tr>
<tr>
<td>Door / cover</td>
<td>Right door stop/wihtout door holder/wihtout cover support/glass in door</td>
</tr>
<tr>
<td>Heater</td>
<td>against condensation / for ambient temperature &lt; -20 °C</td>
</tr>
<tr>
<td>Cable entries</td>
<td>Series EMSKE brass nickel-plated / Series 8163 in brass, brass nickel-plated or stainless steel for armoured cables</td>
</tr>
<tr>
<td>Stopping plugs</td>
<td>Series 8290 (polyamide); Series 8292 (brass, brass nickel-plated or stainless steel)</td>
</tr>
<tr>
<td>Flanges</td>
<td>3 mm / 5 mm</td>
</tr>
<tr>
<td>Tag label</td>
<td>Resopal / stainless steel - glued / screwed (+text field)</td>
</tr>
<tr>
<td>Internal wiring</td>
<td>Halogen-free / single core marking</td>
</tr>
<tr>
<td>Auxiliary power</td>
<td>115 … 230 V AC</td>
</tr>
<tr>
<td>Redundancy</td>
<td>System redundancy (2 x CPM)</td>
</tr>
<tr>
<td>Fieldbus</td>
<td>Optical fibre</td>
</tr>
</tbody>
</table>

Customer-specific solutions - Examples (delivery times on request)

Zone 1 cabinet with double door and 3 Remote I/O systems
Zone 1 field station with Ethernet-Remote I/O and integrated valve terminal (DOMV Series 9478)
Zone 1 field station with PROFIBUS DP Remote I/O and FF H1 fieldbus coupler
Zone 2 field station with front components and protective screen

We reserve the right to make alterations to the technical data, dimensions, weights, designs and products available without notice. The illustrations cannot be considered binding.