Compact, attractive, and easy to install, the System Sensor 2012/24AUS smoke-alarm is designed to respond to a broad range of fires while providing maximum stability. This model also features low-voltage wiring making it ideal for applications such as apartment buildings and nursing homes.

**Description.**

The 2012/24AUS is an AS 3786 listed photoelectric smoke-alarm. Integrating a powerful microcontroller inside, the smoke-alarm provides many useful features to meet multiple requirements of different customers. It has a built-in silence/test push button, 9V battery backup, visible LED indicating standby and alarm modes, a delay on the Form ‘C’ relay, and a check for chamber integrity performed in standby. May be powered from a full wave rectified DC power supply, or from a 12/24VDC control panel or equivalent.

The smoke-alarm can be interconnected up to 24 units, and they can also be interconnected with 2012H when they all work at 12V supply voltage up to 12 units. Chamber can easily be accessed for cleaning by simple quarter turn of chamber cover. Supplied complete with mounting ring and 9V battery.
## General Specifications

**Size**  
55mm (H) × 135mm (diameter)

**Weight**  
220 grams

**Humidity Range**  
5%~93% RH, noncondensing

## Residential Smoke-Alarm Placement

Smoke-alarms shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms and on each additional story of the family living unit, including basements and excluding roof spaces and unfinished attics. In new construction, a smoke-alarm shall also be installed in each sleeping room.

## Electrical Ratings

**Operating Voltage**  
10VDC~30VDC

**Relay Contact Rating**  
1 Form C, 1A @ 30 V(DC or AC)

**Standby Current**  
60 μA maximum average

**Alarm Current**  
65 mA maximum average @ 10VDC~30VDC

**Temperature Range**  
0°C~50°C

**P-Horn Sound Output Level**  
85dBA @ 3m

## 2012/24AUS Wiring Diagram

### SIGRLY MODE

- **DC POWER SUPPLY**
  - Max. 30V DC, 100VA
- **RELAY**
  - NC        C        NO
- **POWER INPUT**
  - -    +
- **INTERCONNECT UP TO 12 SMOKE ALARMS**

### SIGSND MODE

- **DC POWER SUPPLY**
  - Max. 30V DC, 100VA
- **RELAY**
  - NC        C        NO
- **POWER INPUT**
  - -    +
- **INTERCONNECT UP TO 12 SMOKE ALARMS**

### Maximum power bus length

In meter given number of units (maximum per bus) and wire size (mm).

**Supply Voltage = 12VDC**

<table>
<thead>
<tr>
<th>WIRE SIZE</th>
<th>1 UNIT</th>
<th>2 UNITS</th>
<th>3 UNITS</th>
<th>4 UNITS</th>
<th>5 UNITS</th>
<th>6 UNITS</th>
<th>7 UNITS</th>
<th>8 UNITS</th>
<th>9 UNITS</th>
<th>10 UNITS</th>
<th>11 UNITS</th>
<th>12 UNITS</th>
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<tr>
<td>1.5</td>
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<td>236</td>
<td>220</td>
<td>206</td>
<td>194</td>
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<td>150</td>
<td>144</td>
<td>138</td>
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<tr>
<td>1.0</td>
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<td>68</td>
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<tr>
<td>0.75</td>
<td>63</td>
<td>59</td>
<td>55</td>
<td>51</td>
<td>48</td>
<td>46</td>
<td>43</td>
<td>41</td>
<td>39</td>
<td>37</td>
<td>36</td>
<td>34</td>
</tr>
</tbody>
</table>

For 24VDC supply voltage, the maximum power bus length is 4 times as long as 12VDC supply voltage. Maximum interconnect bus length: 2000 meters, 0.75mm or larger cable. All wiring must conform to local electrical codes.

## Ordering Information

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012/24AUS</td>
<td>Photoelectric smoke-alarm with integral temp-3 sounder. 12/24VDC, interconnectable.</td>
</tr>
</tbody>
</table>

## System Sensor Sales and Service

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### System Sensor - Italy
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