Why choose Array Box?

True bankability
- Warranty from a trusted partner with 178 years of experience
- World leader in industrial power drives, UPS and electrical distribution
- Strong service infrastructure worldwide to support your global needs

Higher return on investment
- Reduced CAPEX: Highly cost competitive range, offers capability to connect weather sensors
- Reduced OPEX: precise power production tracking, detection of PV modules failure and aging

Designed for reliability
- Resistant to corrosion and pollution thanks to the use of an isolating polyester enclosure reinforced with fiberglass
- Optimal cooling of the switch-disconnector and PV fuses to increase their useful life
- Undergone extensive safety, quality and reliability testing
- Robust design through rigorous Custom Reliability Testing

Flexible
- Fits every PV plant design and module technology with a range of 8/16/24 input channels and 160/300 A STC output currents
- Range available with and without monitoring of string currents
- On-field weather sensors easily connected inside the Array Box to avoid any additional equipment

Easy to service
- Conext Control™ identifies the service needs of the Array Box
- Motorized switch controlled remotely by Conext Control accelerates lock-out / tag-out procedure and allows an easy return to operation

Easy to install
- Mounting on a support bracket or on a plinth for independence to the racking system, or attached to the racking system for less civil work
- Capabilities to directly connect up to 2 PV string cables and 2 DC output cables per polarity

Product applications

PV power plants centralised
Commercial grid-tie centralised

solar.schneider-electric.com
**Array Box**

**Device short name**
- AB08-160
- AB16-160
- AB16-300
- AB24-300

**Electrical specifications**

<table>
<thead>
<tr>
<th>DC inputs</th>
<th>AB08-160</th>
<th>AB16-160</th>
<th>AB16-300</th>
<th>AB24-300</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of inputs</td>
<td>8</td>
<td>16</td>
<td>16</td>
<td>24</td>
</tr>
<tr>
<td>Max. voltage in open circuit</td>
<td>1000 Vdc</td>
<td>1000 Vdc</td>
<td>1000 Vdc</td>
<td>1000 Vdc</td>
</tr>
<tr>
<td>Max. input current in short circuit</td>
<td>25 A</td>
<td>25 A</td>
<td>25 A</td>
<td>25 A</td>
</tr>
<tr>
<td>Max. input current in short circuit at STC</td>
<td>20 A</td>
<td>20 A</td>
<td>20 A</td>
<td>20 A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DC output</th>
<th>AB08-160</th>
<th>AB16-160</th>
<th>AB16-300</th>
<th>AB24-300</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. output current in short circuit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>at ambient temperature ≤ 40°C</td>
<td>200 A</td>
<td>200 A</td>
<td>200 A</td>
<td>200 A</td>
</tr>
<tr>
<td>at ambient temperature ≤ 50°C</td>
<td>180 A</td>
<td>180 A</td>
<td>180 A</td>
<td>180 A</td>
</tr>
<tr>
<td>Max. output current in short circuit at STC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>at ambient temperature ≤ 40°C</td>
<td>160 A</td>
<td>160 A</td>
<td>160 A</td>
<td>160 A</td>
</tr>
<tr>
<td>at ambient temperature ≤ 45°C</td>
<td>145 A</td>
<td>145 A</td>
<td>145 A</td>
<td>145 A</td>
</tr>
</tbody>
</table>

**AC supply**
- Voltage at 50/60 Hz: 230 V + 10 / -15% for all models.

**Environmental specifications (in operation)**
- Ambient temperature: -25°C to +50°C (above) for all models.
- Relative humidity: 0 to 100% condensing for all models.
- Altitude: 0 to 2000 m without derating for all models.

**Mechanical specifications**
- Enclosure: Outdoor use, full insulating cabinet (polyester reinforced with fiberglass).
- Fire withstand: Self-extinguishing (does not propagate fire during the glow-wire test at 960 °C), halogen-free.
- Color: RAL 7032, grey for all models.

<table>
<thead>
<tr>
<th>Product</th>
<th>AB08-160</th>
<th>AB16-160</th>
<th>AB16-300</th>
<th>AB24-300</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions (H x W x D)</td>
<td>84.7 x 63.6 x 30.0 cm (33.3 x 25.0 x 11.8 in)</td>
<td>105.6 x 85.2 x 35.0 cm (41.6 x 33.5 x 13.8 in)</td>
<td>105.6 x 85.2 x 35.0 cm (41.6 x 33.5 x 13.8 in)</td>
<td>105.6 x 85.2 x 35.0 cm (41.6 x 33.5 x 13.8 in)</td>
</tr>
<tr>
<td>Weight (protect / monitored / controlled)</td>
<td>33.0 / 37.0 / 40.0 kg (72.8 / 81.6 / 88.1 lb)</td>
<td>58.0 / 62.0 / 65.0 kg (127.9 / 136.7 / 143.3 lb)</td>
<td>63.0 / 67.0 / 71.0 kg (147.7 / 156.5 / 165.3 lb)</td>
<td>76.0 / 80.0 / 84.0 kg (167.9 / 177.7 / 192.3 lb)</td>
</tr>
</tbody>
</table>

**Features**
- Protection:
  - DC inputs overcurrent protection: Protection on both polarities, gPV fuses, size 10 x 38 (fuses not provided with product).
  - DC overvoltage protection: Surge arrester, 1000 Vdc, type 2, Imax 40 KA.
  - AC supply overvoltage protection: Surge arrester, 230 Vac, type 2, Imax 40 KA.
- Monitoring and control:
  - DC input currents: 0 to 30 A, accuracy +/- 0.5% full scale (one measurement per input).
  - DC voltage: 0 to 1000 V, accuracy +/- 0.5%.
  - Internal temperature: -30 to +120°C, accuracy +/- 1°C.
  - Temperature sensor input: -30 to +120°C, accuracy +/- 1°C, for external PT1000 2 wires temperature sensor.
  - 2 x irradiance sensor inputs: 0 to 1600 W/m², accuracy +/- 0.5% full scale, for external 4-20 mA irradiance sensor.
- Communication: Profibus DP / RS485 and Modbus RTU / RS485 link.
- Switch disconnector remote control: Motor pack and MX shunt release.

**Compliance**
- CE marking: According LV directive 2006 / 95 / CE and EMC directive 2004 / 108 / CE.

**Available models**

<table>
<thead>
<tr>
<th>Protect: protection only</th>
<th>PVSA31101</th>
<th>PVSA31201</th>
<th>PVSA31301</th>
<th>PVSA31401</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitored: protection and monitoring</td>
<td>PVSA31111</td>
<td>PVSA31211</td>
<td>PVSA31311</td>
<td>PVSA31411</td>
</tr>
<tr>
<td>Controlled: Protection, monitoring and switch control</td>
<td>PVSA31121</td>
<td>PVSA31221</td>
<td>PVSA31321</td>
<td>PVSA31421</td>
</tr>
<tr>
<td>Optional weather module*</td>
<td>PVSA31021</td>
<td>PVSA31021</td>
<td>PVSA31021</td>
<td>PVSA31021</td>
</tr>
</tbody>
</table>

Specifications are subject to change without notice. *Contact Schneider Electric. **For monitored and controlled models. ***With optional weather sensors connection module. ****For controlled models.

Array Box works with the following Schneider Electric products:

- **Support bracket for roof-mounting**
  - Product no. NSYCOCNS1400
- **Plinth for ground-mounting**
  - Product no. NSYCAP125LZF
- **Support bracket for ground-mounting**
  - Contact Schneider Electric
- **Set of 4 x feet for ground-mounting with plinths**
  - Product no. NSYAEBFZ

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