SUN SENSOR ISS-AX (ANALOG)

Solar MEMS ISS-AX Sun Sensor provides the measurement of the sun ray incident vector.

It has been designed with an unique and novel own technology based on MEMS fabrication processes to achieve high integrated sensing structures at low cost.

ISS-AX device allows the measurement of the incident angle of a sun ray by providing 4 analog outputs and by means of a simple calculation procedure. The high sensitivity reached is based on the geometrical dimensions of the design.

Its characteristics make it a suitable tool for high accurate sun-tracking and positioning systems, with low power consumption and high reliability.

Versions of the ISS-AX Sun Sensor

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>ISS-A60</th>
<th>ISS-A25</th>
<th>ISS-A15</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field of view (FOV)</td>
<td>120 x 120</td>
<td>50 x 50</td>
<td>30 x 30</td>
<td>°</td>
</tr>
<tr>
<td>Accuracy without calibration</td>
<td>&lt; 3</td>
<td>&lt; 2</td>
<td>&lt; 1</td>
<td>°</td>
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<tr>
<td>Accuracy in calibrated zero degrees</td>
<td>&lt; 0,06</td>
<td>&lt; 0,04</td>
<td>&lt; 0,02</td>
<td>°</td>
</tr>
</tbody>
</table>

Technical Specifications

- Sensor type: two axes
- Power supply: 5±12 V
- Consumption: 11 mA (average)
- Analog Outputs: 4 signals 0-4.5 V Voltage of each quadrant
- 4-quadrant microsensor
- Temperature: -40º to 85ºC
- Protection: Reverse polarity
- IP65

Cable of 2 meters without connector. Accuracy can be increased in more than one order of magnitude by calibrating a zero position (zero degrees) after the installation, according, for example, to the maximum generation of a solar panel.