

# SureCross<sup>®</sup> GPS Module



## Monitor:

- Latitude
- Longitude
- Altitude
- GPS date and time
- Signal quality
- Number of satellites being tracked

## Applications:

- Asset management
- Pivot irrigation/precision agriculture
- Mobile equipment
- Geofencing

## Self-contained GPS Module for industrial use

Low power consumption, ability to withstand harsh environments, flexible power supply requirements and Modbus RTU communications makes this module ideal for the industrial market.

### Accurate

- Positional error of less than 2.5 meters

### Self Contained for Harsh Environments

- IP69K
- - 40 to +85 °C (-40 to +185 °F)

### Flexible Power Requirements

- 5 to 30 V dc
- Power consumption as low as 100 mW

### Standard Communication

- Modbus RTU
- RS485

[www.bannerengineering.com](http://www.bannerengineering.com)

1.888.373.6767



more sensors, more solutions

[bannerengineering.com](http://bannerengineering.com)

## Specifications

### GPS Module

Models: GPS50M

<b>Power Requirements</b>	5 to 30 V dc	<b>GPS Features</b>	<ul style="list-style-type: none"> <li>• SiRF Star IV GPS chip</li> <li>• Satellite-based augmentation systems: WAAS, EGNOS, MSAS, GAGAN</li> <li>• High sensitivity navigation engine (PVT) tracks as low as -163 dBm</li> <li>• Update Rate: 1 Hz</li> </ul>
<b>Current</b>	<p>Maximum: &lt; 0.5 W</p> <p>Power Save Mode ON Typ. Average: 4 mA at 24 V dc</p> <p>Power Save Mode OFF Tye. Average: 10 mA at 24 V dc</p>	<b>Communication</b>	<ul style="list-style-type: none"> <li>• Interface: RS-485 serial</li> <li>• Baud rates: 9.6k, 19.2k (default), or 38.4k</li> <li>• Data format: 8 data bits, no parity (default), 1 stop bit (even or odd parity available)</li> <li>• Do not use termination resistor</li> <li>• Protocol: Modbus RTU</li> </ul>
<b>Indicators</b>	<p>Green flashing: Power ON</p> <p>Amber flashing: Modbus communication active</p>	<b>Shock and Vibration</b>	<ul style="list-style-type: none"> <li>• IEC 68-2-6 and IEC 68-2-27</li> <li>• Shock: 30g, 11 millisecond half wave, 18 shocks</li> <li>• Vibration: 0.5 mm p-p, 10 to 60 Hz</li> </ul>
<b>Operating Temperature</b>	-40 to +85 °C (-40 to +185 °F)	<b>Accuracy</b>	<ul style="list-style-type: none"> <li>• Positional error of less than 2.5 m (8') with augmentation</li> <li>• Positional error of less than 10 m (33') with no augmentation</li> </ul>