The NGC-SEN-## Sensor Package is available in two forms; Fixed Antennas, and tactical/Transportable antenna systems. This integration base package includes inclinometers, compass, & GPS.

Conveniently packaged in a single environmental package, except for the antenna, the NGC-SEN-## is designed to provide optimal performance in a cost effective, easy to access and mount package. The NGC-SEN-## package is tightly integrated in the NGC algorithms for seamless and highly integrated operation.

**KEY FEATURES**

- Discretely mounted, easy access
- Pre-conntectorized for Field Replaceable Units (FRU)
- Protected internal cabling
- Modular & Upgradeable Design
- Supports all available NGC Features & Options

### KVH MODEL C100

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resolution</td>
<td>0.1° or 1 mil</td>
</tr>
<tr>
<td>Accuracy</td>
<td>±0.5° or ±10 mils RMS</td>
</tr>
<tr>
<td>Repeatability</td>
<td>±0.2° or ±5 mils RMS</td>
</tr>
<tr>
<td>Tilt Angle</td>
<td>±16°; Dev = ±0.3° RMS (SE-25)</td>
</tr>
<tr>
<td>Dip Angle</td>
<td>±80°</td>
</tr>
<tr>
<td>Response Time</td>
<td>0.1 to 24 seconds</td>
</tr>
<tr>
<td>Data Output</td>
<td>0 to +5V levels</td>
</tr>
<tr>
<td>Clock Output</td>
<td>0 to +5V sq. wave @ 10 KHz rate</td>
</tr>
<tr>
<td>Data Format</td>
<td>4 digit BCD, 16 bit binary or 16 bit serial</td>
</tr>
<tr>
<td>Sine/Cosine</td>
<td>Output Voltage: +1.5V ±1.0V</td>
</tr>
<tr>
<td></td>
<td>Reference Voltage: +1.5 VDC</td>
</tr>
<tr>
<td></td>
<td>20K Ohm min load capability</td>
</tr>
<tr>
<td>Linear Voltage</td>
<td>0.1 to 1.9VDC in 20K Ohm min load</td>
</tr>
<tr>
<td>Operating Voltage</td>
<td>+8 to +18VDC @ 40mA max</td>
</tr>
<tr>
<td>Operating/Storage Temp</td>
<td>-40° to +65°C / -5°C to +71°C</td>
</tr>
</tbody>
</table>

### GPS

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordinate Datum</td>
<td>WGS 84</td>
</tr>
<tr>
<td>Performance</td>
<td>12 Satellite, L1 carrier, CA cod</td>
</tr>
<tr>
<td>Accuracy</td>
<td>Position: 5m w/o S/A</td>
</tr>
<tr>
<td></td>
<td>Velocity: 0.1m/sec w/o S/A</td>
</tr>
<tr>
<td></td>
<td>Time: ±1μ sec</td>
</tr>
<tr>
<td>Acquisition</td>
<td>Cold: 50 sec (ave)</td>
</tr>
<tr>
<td></td>
<td>Warm: 35 sec (ave)</td>
</tr>
<tr>
<td></td>
<td>Hot: 2 sec (ave)</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>Tracking: -152 dBm</td>
</tr>
<tr>
<td></td>
<td>Acquisition: -139 dBm</td>
</tr>
<tr>
<td>Dynamics</td>
<td>Altitude: 18,000m</td>
</tr>
<tr>
<td></td>
<td>Velocity: 500m/sec</td>
</tr>
<tr>
<td></td>
<td>Acceleration: Max ±4g</td>
</tr>
<tr>
<td>Operating Voltage</td>
<td>+5VDC 120mW max</td>
</tr>
<tr>
<td>Operating/Storage Temp</td>
<td>-40° to +85°C / -5°C to +100°C</td>
</tr>
</tbody>
</table>
# NGC-SENSOR PACKAGE

## PITCH & ROLL2

<table>
<thead>
<tr>
<th>Heading</th>
<th>Accuracy</th>
<th>Resolution</th>
<th>Hysteresis</th>
<th>Repeatability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honeywell (HMR3400)</td>
<td>Level</td>
<td>0° to 30°</td>
<td>3°</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>30° to 60°</td>
<td>4°</td>
<td></td>
</tr>
<tr>
<td>Resolution</td>
<td>0.1°</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hysteresis</td>
<td>0.2°</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repeatability</td>
<td>0.2°</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Roll &amp; Pitch Range</th>
<th>±60°</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accuracy</td>
<td>±30°</td>
</tr>
<tr>
<td></td>
<td>±60°</td>
</tr>
<tr>
<td>Level</td>
<td>0.4°</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pitch</th>
<th>Level</th>
<th>-20° to +70°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thermal Hysteresis</td>
<td>1°</td>
<td></td>
</tr>
<tr>
<td>-40° to +85°C</td>
<td>5°</td>
<td></td>
</tr>
<tr>
<td>Resolution</td>
<td>0.1°</td>
<td></td>
</tr>
<tr>
<td>Hysteresis</td>
<td>0.2°</td>
<td></td>
</tr>
<tr>
<td>Repeatability</td>
<td>0.2°</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Magnetic Field</th>
<th>Flux Density</th>
<th>±2 gauss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resolution</td>
<td>0.1 miligauss</td>
<td></td>
</tr>
</tbody>
</table>

| Operating Voltage | +5VDC @ 24mA max |

| Operating/Storage Temperature | -20° to +70°C / -50° to +125°C |

All designs, specifications, and availabilities of products and services presented in this bulletin are subject to change without notice. (1016A)

© 2016 CPI ASC Signal Division