Aurora® 5DOF 0.3x2.5 Sensor (P/N 10002320)
The Market’s Smallest Electromagnetic Sensor

Add real-time targeting and navigation to your OEM micro instruments—without the need for fluoroscopy—with the market’s smallest electromagnetic (EM) sensor, an innovation exclusive to NDI.

Integrate with Smaller OEM Instruments
This 5DOF EM micro sensor measures just ø0.3 x 2.5 mm, small enough for OEM integration with 3F and 5F catheters and sheaths (single and multi-lumen), 0.018” and 0.035” guidewires, and 22G (or larger) needles. This sensor is 72% smaller (in cylindrical volume) than the next size up Aurora sensor (ø0.41 x 4.9 mm).

Reduce Intraoperative Fluoroscopy
Sensorizing micro instruments can help OEMs reduce the need for fluoroscopy when localizing and navigating those devices – without sacrificing procedure efficacy. It can also extend real-time navigation to instruments so small, they typically need radiopaque coatings to even be visualized under imaging.

Access Smaller Vessels and Treatment Areas
Smaller sensorized instruments can allow for greater access and reach through smaller vessels to target smaller treatment areas with greater confidence. Track OEM intravascular devices through arteries and veins with a lumen diameter as small as 6.0 mm, while still maintaining optimal device clearance within the intravascular space.

Maintain Accuracy at Shorter Tracking Distances
Suitable for shorter tracking distances, the small sensor has a position accuracy to 1.12 mm and orientation to 0.58 mm (when used with the Aurora High-Gain Sensor Interface Unit) within a reduced Aurora Planar FG dome radius of 280 mm (cylinder diameter of 500 mm). The small sensor is also recommended for use within a reduced Aurora Window FG volume.
Enhance Sensor Performance with:

**The Aurora Commutator Board**
The Aurora Commutator Board uses propriety NDI technology to improve the tracking performance of low-signal strength sensors by suppressing coupled distortion errors. It’s available via exclusive licensing as an electronic circuit (chip) for OEM-designed boards or direct integration with OEM instruments.

**The Aurora High-Gain SIU**
For increased accuracy, use the small sensor with the Aurora High-Gain Sensor Interface Unit (SIU), which amplifies the sensor’s incoming signal to improve the signal-to-noise ratio. Together, the Aurora Commutator Board and Aurora High-Gain SIU can reduce the noise of low-signal sensors by up to 40%.

### Technical Specifications

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<thead>
<tr>
<th></th>
<th>Aurora Planar 20-20 FG</th>
<th>Aurora WFG II-32</th>
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<tbody>
<tr>
<td><strong>PART NUMBER</strong></td>
<td>10002320</td>
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<tr>
<td><strong>SENSOR TYPE</strong></td>
<td>Electromagnetic, 5DOF, Solid Core</td>
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<tr>
<td><strong>SENSOR SIZE</strong></td>
<td>ø0.3 x 2.5 mm</td>
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<tr>
<td><strong>POSITION ACCURACY (95% CI)</strong></td>
<td>1.12 mm</td>
<td>1.44 mm</td>
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<tr>
<td><strong>ORIENTATION ACCURACY (95% CI)</strong></td>
<td>0.58 mm</td>
<td>0.64 mm</td>
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<tr>
<td><strong>RECOMMENDED MEASUREMENT VOLUME</strong></td>
<td>– Dome radius: 280 mm</td>
<td>– Dome radius: 330 mm</td>
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<td>– Cylinder diameter: 500 mm</td>
<td>– Cylinder diameter: 500 mm</td>
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<tr>
<td><strong>SYSTEM REQUIREMENT</strong></td>
<td>Aurora v3.1</td>
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<tr>
<td><strong>MATERIAL COMPLIANCE</strong></td>
<td>REACH, RoHS-3</td>
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* when used with the Aurora High-Gain SIU.

For more information about Aurora electromagnetic sensors, contact us:

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