**Gapman Gen3** is the latest generation high precision, non-contact, portable electronic gap measurement gage. Features include:

- A dual capacitive sensor for position-compensated measurement
- Easy insertion into very thin gaps down to 0.0075” (0.190 mm) in a wide range of parallel and roller gap applications
- Micro-controller based and application software driven
- Gapman records and stores data points for easy transfer to support Six Sigma and other quality programs

**Applications**

- Aircraft assemblies: wings, fuselage
- Composite structures: CFRP
- PowerGen: rotor/stator, steam, gas, hydro
- Coaters/extruders: slot die, extrusion dies
- Roller gaps: photocopiers, high volume printers
- Industrial machinery: set up tools, alignment
Benefits

- Dramatic improvement over feeler gages
- Eliminates operator to operator subjectivity
- Consistently meets or exceeds stringent Gage R&R qualification
- Speeds aircraft shimming operations by up to four times
- Measures gaps between all metal and CFRP surfaces
- Spring sensor wand configurations for non-conductive targets

Applications

- Aircraft assemblies - hidden
- CFRP to metal gaps
- PowerGen - rotor to stator
- Slot die coater gaps
- Roller gaps
- Printers, high volume photocopiers

- Compact, fully portable, light weight and rugged
- 22 hour battery life at full function output or USB power option
- Records 10,000+ data points for easy transfer via USB or wireless to data reader software
- Resolution: up to 0.01% full scale, repeatability: ±0.05% full scale, accuracy: ±0.5% full scale
- Overall design focus on simplicity
### Technical Specifications

**Gapman Core Unit**
- Size: 2.2" x 8.7" x 1.1" (56mm x 220 mm x 28 mm)

**Thin sensor wand GPD-5F-A-200**
- Size: 0.55" x 7.9" x 0.017" (14 mm x 200 mm x 0.43 mm)
- Range: .017" to 0.118" (0.43mm to 3.00mm)

**Thin sensor wand GPD-4.5(.0075)-A-250**
- Size: 0.55" x 9.8" x 0.0075" (14 mm x 250 mm x 0.190 mm)
- Range: .0078" to 0.100" (0.20mm to 2.54mm)

**Spring contact wand GPD-5(.022)-A-150**
- Size: 0.55" x 7.9" x 0.017" (14 mm x 200 mm x 0.43 mm)
- Range: .025" to 0.140" (0.64mm to 3.56mm)

<table>
<thead>
<tr>
<th>Target materials</th>
<th>Measures gaps between all earth grounded metal and composite (CFRP) surfaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remote vs integral sensor wands</td>
<td>Remote sensor wand kit available</td>
</tr>
<tr>
<td><strong>Accuracy</strong></td>
<td>± 0.5% FS</td>
</tr>
<tr>
<td><strong>Repeatability</strong></td>
<td>± 0.05% FS</td>
</tr>
<tr>
<td><strong>Resolution</strong></td>
<td>micron: 0.00001&quot; (0.254 microns)</td>
</tr>
<tr>
<td></td>
<td>mm: .0001mm</td>
</tr>
<tr>
<td></td>
<td>inches: .001&quot;</td>
</tr>
<tr>
<td><strong>Calibration</strong></td>
<td>Factory preset, traceable to NIST</td>
</tr>
<tr>
<td><strong>Thin gap sensor wands</strong></td>
<td>Select from over 20 standard models, custom wands available</td>
</tr>
<tr>
<td><strong>Spring contact wand</strong></td>
<td>Select from several standard models. For applications where one or both of the target surfaces are uneven or non conductive</td>
</tr>
<tr>
<td><strong>Control buttons</strong></td>
<td>External buttons for units, set to standard, data, and delete with optional lockout</td>
</tr>
<tr>
<td><strong>Display</strong></td>
<td>Bright blue alphanumeric active matrix OLED display, 128 x 64 pixel, 1.54&quot; (39.12mm)</td>
</tr>
<tr>
<td><strong>Data output</strong></td>
<td>USB: USB Type A locking to standard USB cable</td>
</tr>
<tr>
<td></td>
<td>wireless: Blue Tooth v2.0 Class 1 10m standard, 30m optional with reciever</td>
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<tr>
<td><strong>Internal power</strong></td>
<td>3 AA batteries for battery life of 22 hours max, 1/3 less with wireless</td>
</tr>
<tr>
<td><strong>External power</strong></td>
<td>USB Type A AC universal power adapter, or laptop PC</td>
</tr>
</tbody>
</table>
A standard GapmanGEN3 gap measurement system includes the following:

- Gapman core unit for integral wands, and built in 10,000 point data logger
- GPD-5F-A-200 non-contact flexible sensor wand, 0.017” to 0.100” (0.43 mm - 2.54 mm) (Example wand)
- Grounding cable, with 90° banana plug to straight banana plug with gator clip (12 feet)
- USB power/data comm accessory kit, includes USB Type A AC universal power adapter and USB Type A locking to standard USB cable (6 feet)
- Flat metal to flat metal NIST traceable calibration w/data sheet
- Data reader software & cal data on flash drive
- Supervisor/calibration access level option
- 3-Point thin wand quick check block
- 2 sets of 3 long life “AA” batteries
- Rugged IP67 grade carrying case