The power, accuracy, and speed of a total station with the auto-scanning capabilities of a laser scanner; Topcon’s IS-3 takes material management, as-built design, and structural/environmental monitoring out of the clouds and puts it at your fingertip.

Topcon’s IS-3 combines the best of two worlds, advanced imaging and high-accuracy surveying, incorporating real-time field imagery with spatial data. The IS-3’s powerful functionality is controlled using Topcon’s exclusive ImageMaster™ software that produces “photography with dimension”, a revolutionary and cost effective alternative to laser scanning.

**Long range scanning**
Nobody can provide the combination of laser scanning and robotic surveying like Topcon with the IS-3. With the long non-prism range of up to 2,000 m, the robotic instrument can now scan long distances as well. Mining and monitoring applications can be accomplished with the IS-3.

**Remote networking**
The IS-3 has WLAN capability and can be controlled remotely. Imagine sitting in the comfort of your office or vehicle and being able to scan, measure, control, and see what the IS-3 is seeing.

**Continuous monitoring**
With a Wi-Fi connection, image-based monitoring can be done continuously and remotely. Whether done with mounted prisms or reflectorlessly, this monitoring function compliments the everyday use function of our robotic surveying. The IS-3 features Bluetooth® and Wi-Fi technology making continuous monitoring easy.

**A New Way to Scan**
- Scanning, imaging and robotic total station
- Two digital cameras – wide angle and tele-zoom
- Long range scanning
- Dual communication 2.4 GHz radio and Wi-Fi
- 2,000 m reflectorless measurement

Simply touch the screen image to drive the cross hairs where you want. For the highest degree of data accuracy, clarity of image is key. That’s why Topcon incorporates telescopic zoom with an LCD. Using the telescope, pinpoint features to be measured or monitored precisely up to 2,000 m away.
Protected compact flash card slot

Live color image display and Windows® CE touch screen

Spread spectrum wireless + Wi-Fi built-in

Powerful 2,000 m reflectorless EDM

Servo motors with auto track

Assist focus with focus knob

Digital camera wide 4X view

Through the lens camera 30X view

On-board battery

Live color image display and Windows® CE touch screen

Protected compact flash card slot

Powerful 2,000 m reflectorless EDM

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Assist focus with focus knob

Digital camera wide 4X view

Through the lens camera 30X view

On-board battery
### Angle Measurement

<table>
<thead>
<tr>
<th>Method</th>
<th>Absolute Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Reading</td>
<td>1&quot;.5&quot; (0.1 / 0.5 mgon)</td>
</tr>
<tr>
<td>Accuracy</td>
<td>1&quot;, 3&quot;, 5&quot; (0.3 mgon)</td>
</tr>
<tr>
<td>Tilt Correction</td>
<td>Dual Axis</td>
</tr>
<tr>
<td>Compensating Range</td>
<td>± 1.8 m</td>
</tr>
</tbody>
</table>

### Distance Measurement

<table>
<thead>
<tr>
<th>Prism Mode</th>
<th>1 prism</th>
<th>3,000 m</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 prism</td>
<td>4,000 m</td>
<td></td>
</tr>
<tr>
<td>9 prism</td>
<td>5,000 m</td>
<td></td>
</tr>
<tr>
<td>Accuracy (Fine)</td>
<td>± (2 mm + 2 ppm×D) m.s.e.</td>
<td></td>
</tr>
<tr>
<td>Non-Prism Mode</td>
<td>1.5 m - 250 m</td>
<td></td>
</tr>
<tr>
<td>NP Accuracy (Fine)</td>
<td>± (3 mm) m.s.e.</td>
<td></td>
</tr>
<tr>
<td>Non-Prism Long Mode</td>
<td>5.0 m - 2,000 m</td>
<td></td>
</tr>
<tr>
<td>NP Long Mode Accuracy</td>
<td>± (10 mm + 10 ppm×D) m.s.e.</td>
<td></td>
</tr>
</tbody>
</table>

### Imaging

<table>
<thead>
<tr>
<th>Cameras</th>
<th>2</th>
<th>1.3 megapixel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Image speed</td>
<td>1 - 10 fps</td>
<td></td>
</tr>
<tr>
<td>Scanning</td>
<td>Max 20 pts/sec</td>
<td></td>
</tr>
</tbody>
</table>

### User Interface

<table>
<thead>
<tr>
<th>OS</th>
<th>Microsoft Windows® CE.NET 4.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processor</td>
<td>Intel® PXA255 400 MHz</td>
</tr>
<tr>
<td>Screen</td>
<td>Full Color Touch-screen</td>
</tr>
</tbody>
</table>

### Six on-board scanning methods

- Grid Scan by Specified Plane
- Grid Scan by Square
- Grid Scan by Polygon
- Grid Scan by 1-Line
- Grid Scan by All-Around
- Feature Scan (all the above)

### How it works

The Topcon IS-3 features dual digital imaging cameras providing a color, real-time image on the touch LCD display.

To define a scan area, simply tap the image display, or for uniform measurement of an area, select the grid feature. The IS-3 “locks” these points to their exact position on the image, even when the instrument is rotated.

Once all points to be measured are chosen, the IS-3 performs a reflectorless measurement of each point.

### 2,000 m reflectorless EDM

- Long range power means unsurpassed short range performance
- Most powerful reflectorless EDM available
- Pinpoint accuracy with narrow, focused beam

### Integrated radio system

- 2.4 GHz Interference free spread spectrum radio + Wi-Fi
- Optional RC-4 long-range radio and QuickLock
- Optional WT-100 long-range Wi-Fi

### Photo fieldbook

- A 360° panoramic image from any occupation point
- Document the jobsite with photographs referenced on the horizontal and vertical angle grid