**Big power, small package**
Easy-to-use, highly accurate, rugged, and reliable the iM-100 manual total station is perfect for entry-level site layout and surveying. The iM-100 is built to be your hardest worker, made to withstand even the toughest conditions and providing up to 28 hours of battery life*1.

Like all of our products, you can customize it to meet your needs and create your own workflows.

- Fast, accurate, and powerful EDM
- Reflectorless up to 800 meters
- Dual-axis compensation
- Waterproof IP66 rating
- Up to 28 hours in battery life*1

**High-end performance**
Featuring a new top line EDM, the iM-100 is fast, accurate, and powerful. It has 1.5 mm / 2 ppm accuracy and is able to measure up to 5,000 meters to standard prisms, and in reflectorless mode measures up to 800 meters at an incredible 2.0 mm + 2 ppm accuracy.

**Precise positioning**
Dual-axis compensation ensures stable measurements even on rough terrain. The compensator automatically corrects both horizontal and vertical angles and allows for more accurate instrument setups and measurements.
**Ready for the field**
In addition to an IP66 certification, the iM-100 is guaranteed to protect against dust and be waterproof up to one meter. It comes in a regular model which can operate in temperatures ranging from -20°C to 60°C, and a low-temperature model that can handle -35°C to 50°C*2.

**Stay charged**
The iM-100 lets you get more done on the job without the need to recharge during the workday. Typical battery life is tested to 28 hours in Eco mode and 21 hours in regular mode.

**Get connected**
With Bluetooth® wireless communication you can deliver data instantly to your Bluetooth-equipped controller, with no external antenna needed.

---

*1 Eco Mode. *2 Region Dependent.
### Specifications

<table>
<thead>
<tr>
<th>MODEL</th>
<th>IM-101</th>
<th>IM-102</th>
<th>IM-103</th>
<th>IM-105</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telescope Magnification / Resolving power</td>
<td>30x / 2.5&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length</td>
<td>171 mm (6.7 in.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Objective aperture</td>
<td>45 mm (1.8 in.) / 40 mm (1.9 in.) for EDM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Image</td>
<td>Erect</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Field of view</td>
<td>1°30' (26 m/1,000 m)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum focus</td>
<td>1.3 m / 4.3 ft.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reticle illumination</td>
<td>5 brightness levels</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Angle Measurement</td>
<td>0.5&quot; / 1&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accuracy (ISO 17123-3:2001)</td>
<td>1&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dual-axis compensator / Collimation compensation</td>
<td>Provided</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laser output*</td>
<td>Reflectors: mode: Class 3R / Prism / sheet mode: Class 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measuring range (under average conditions)</td>
<td>0.3 to 800 m (1.0 to 2,624 ft.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mini prisms</td>
<td>One AP prism</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reflective sheet*</td>
<td>Reflectors: mode: Class 3R / Prism / sheet mode: Class 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Display Resolution</td>
<td>Fine/rapid: 0.001 m / 0.01 ft. / 0.1 in.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accuracy (ISO 17123-4:2001)</td>
<td>10 mm (3.9 in.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measuring distance in mm</td>
<td>(2 + 2 ppm x D) mm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measuring time*</td>
<td>Fine: 0.9 s (initial 1.5 s), Rapid: 0.6 s (initial 1.3 s), Tracking: 0.4 s (initial 1.3 s)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interface and data management</td>
<td>Display / Keyboard: Graphic LCD, 192 x 80 dots, backlight, contrast adjustment / Alphanumeric keyboard / 28 keys with backlight</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control panel location*</td>
<td>On both faces (second display is optional)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data storage</td>
<td>Approx. 50,000 points</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interface</td>
<td>Internal memory, Plug-in memory device, USB flash memory (max. 32GB)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bluetooth® modem (optional)</td>
<td>Bluetooth® Class 1.5, Ver.2.1 + BR, EDR, LE, BT4.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating range up to 10 m (33 ft.)*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General</td>
<td>Laser pointer: Coaxial red laser using EDM beam</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Levels</td>
<td>Graphic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Optical plummet (optional for NA, LA and EU)</td>
<td>Magnification: 3x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plate Level</td>
<td>Regional Dependent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laser plummet (optional for Oceana and Russia)</td>
<td>Red laser diode (635 nm ± 10 nm), Beam accuracy: ±1.0 mm at 1.3 m, Class 2 laser product</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dust/Water Rating</td>
<td>IP66 (IEC 60529:2001)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating Temperature*</td>
<td>20 to 60°C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size with handle</td>
<td>183 x 181 x 348 mm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight with battery and tribrach</td>
<td>Approx. 5.3 kg</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*1 IEC60825-1:Ed.2.0:2007 / FDA CDRH 21 CFR Part 1040.10 and 11.1.4: Average conditions: Sight haze, visibility about 40 km (25 miles), sunny periods, weak atmospheric conditions. *2 With Kodak Gray Card White Side (90% reflective). When brightness on measured surface is 30,000 lx or less. Reflectors: rangefinder may vary according to measuring objects, observation situations and environmental conditions. *4 When the measuring beam's incidence angle is within 30° in relation to the reflective sheet target. *5 Measuring range in temperatures of -30 to -20°C (22 to -4°F) with Low Temperature models: RS90N-K: 1.3 to 500 m (4.3 to 1,640 ft.); RS50N-K: 1.3 to 300 m (4.3 to 980 ft.); RS10N-K: 1.3 to 180 m (4.3 to 590 ft.); RS14N-K: 0.3 to 80 m (4.3 to 262 ft.); RS7N-K: 0.3 to 80 m (4.3 to 262 ft.). *6 Good Conditions: No haze, visibility about 40 km (25 miles), overcast, no scintillation. *7 Measuring range: 0.3 to 200 m *8 Typical, under good conditions. *9 Control panel location may vary depending on region or model. *10 Usage approval of Bluetooth wireless technology varies according to country. Please consult your local office or representative in advance. *11 No obstacles, few vehicles or sources of radio emissions/interference in the near vicinity of the instrument, no rain, *12 The laser pointer and the guide light do not work simultaneously. *13 Low temperature models: -30 to 10°C (-22 to 122°F) are available on built-to-order basis, region or model. Please consult your local office or representative in advance.

Superior storage
Don't worry about how or where to store all your data, the iM-100 has you covered. With 50,000 pts internal memory and up to 32GB USB flash drive support, you can easily store all data in the field that you need.

Bluetooth® is a word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Sokkia is under license. Other trademarks and trade names are those of their respective owners.