| Manufacturer | Model | | Accuracy | range (meters) | Measurement speed | | Weight |
|---|---|---|---|---|---|---|---|
| **FARO** | Range Focus3D 120 | | ±2mm at 10m and 25m, each at 90% and 10% reflectivity | 0.6m - 120m | 976,000 points/sec | | 5.0kg |
| **FARO** | Range Focus3D 20 | | ±2mm at 10m and 25m, each at 90% and 10% reflectivity | 0.6m - 20m | 976,000 points/sec | | 5.0kg |
| **Leica Geosystems** | Leica ScanStation P20 | | 3D Position Accuracy<br>3 mm at 50 m; 6 mm at 100 m | 0.1m – 120m | 1,000,000 points/sec | | 11.9 kg |
| **Leica Geosystems** | Leica ScanStation C10 | | Position: 6 mm<br>Distance: 4mm<br>At 1 m – 50 m range | 300 m @ 90%; 134 m @ 18% albedo (minimum range 0.1 m) | 50,000 points/sec | | 13 kg |
| **Leica Geosystems** | Leica ScanStation C5 | | Position: 6 mm<br>Distance: 4mm<br>At 1 m – 50 m range | Basic: 35 m @ ≥ 5% albedo<br>Upgrade: 300 m @ 90% albedo,<br>134 m @ 18% albedo | Basic: 25,000 points/sec<br>Upgrade: up to 50,000 points/sec | | |
| **Leica Geosystems** | Leica HDS6200 | | Position: 5 mm, 0.4 m to 25 m range;<br>9 mm to 50 m range<br>Distance: ≤ 2 mm at 90% albedo up to 25 m;<br>≤ 3 mm at 18% albedo up to 25 m<br>≤ 3 mm at 90% albedo up to 50 m;<br>≤ 5 mm at 18% albedo up to 50 m | 79 m ambiguity interval<br>79 m @90%; 50 m @18% albedo | 1,016,727 points/sec | | 14 kg |
| **Leica Geosystems** | HDS7000 | | Angular accur. 125 µrad / 125 µrad (horizontal / vertical)<br>Angular resol. 7 µrad / 7 µrad (horizontal / vertical) | 187 m ambiguity interval<br>0.3 m minimum range<br>0.1 mm resolution | 1,016,727 points / sec | | 9.8 kg |
| **Leica Geosystems** | HDS8800 | | Range** 10 mm to 200 m<br>20 mm to 1000 m<br>Angle +/- 0.01 °<br>Repeatability** 8 mm | 2.5 m -2000 m<br>1400 m to 80 % albedo (rock)<br>500 m to 10 % albedo (coal) | 8,800 points / sec | | 14 kg, without battery |
| **Leica Geosystems** | HDS8400 | | Range accuracy 20mm<br>Repeatability ±10mm | Minimum range** 2.5m<br>Maximum range** 700m, reflectivity >80% (white paint, limestone)<br>500m, reflectivity >40% (iron ore, concrete)<br>250m, reflectivity >10% (coal, black paint) | 8,800 points / sec | | 12.0kg, without battery |
| **Topcon** | GLS-1500 | | Single Point Accuracy Distance: 0.16 in. at 500 ft. (4mm at 150m) | Maximum Range at specified reflectivity: 1100 ft. (330m) at 90%, 500 ft. (150m) at 18% | 30,000 points/sec | | 16kg w/o on-board battery and tribrach |
| **Maptek** | I-Site 8810 | | Range accuracy‡ 8mm<br>Repeatability ±8mm | Minimum range 2.5m<br>Maximum range† >2000m Up to 1400m, reflectivity >80% Up to 1000m, reflectivity >40% Up to 500m, reflectivity >10% | 8800 points / sec | | 14kg, without battery |
| **Maptek** | I-Site 8400 | | Range accuracy‡ 20mm<br>Repeatability‡ ±10mm | Minimum range† 2.5m<br>Operating range† 700m, reflectivity > 80% (white paint, limestone)<br>500m, reflectivity > 40% (iron ore, concrete) 250m, reflectivity > 10% (coal, black paint) Maximum range >1000m off retro reflectors | 8800 points / sec | | 12kg, without battery |

| Manufacturer | Model | | Accuracy | range (meters) | Measurement speed | | Weight |
|---|---|---|---|---|---|---|---|
| **Z+F** | IMAGER 5010C | | Linearity error ≤ 1 mm<br>Resolution range 0.1 mm<br>Beam divergence < 0.3 mrad | Minimum distance: 0.3 m<br>Range: 187.3 m (unambiguity interval) | 1.016 million pixel/sec | | 9.8 kg |
| **Z+F** | IMAGER 5010 | | Linearity error ≤ 1 mm<br>Resolution range 0.1 mm<br>Beam divergence< 0.3 mrad (fullangle) | Minimum distance 0.3 m<br>Range 187.3 m (unambiguity interval) | 1.016 million pixel/sec | | 9.8 kg |
| **Z+F** | IMAGER 5006h | | Linearity error up to 50 m ≤ 1 mm<br>Resolution range 0.1 mm<br>Beam divergence 0.22 mrad | Min. range 0.4 m<br>Range 79 m | 1,016,027 pixel / sec | | 14 kg |
| **Z+F** | IMAGER 5006EX | | Linearity error up to 50 m ≤ 1 mm<br>Resolution range 0.1 mm | Min. range 0.4 m<br>Range 79 m | 508,000 pixel / sec | | 30.6 kg |
| **Trimble** | VX Spatial Station | | Single 3D point accuracy: 10 mm @ ≤150 m<br>Angle accuracy 1" (0 3 mgon) | from 1 m up to 250 m | up to 15 points/sec, typical 5 points/sec | | 5.25 kg |
| **Trimble** | Trimble CX | | Single point accuracy position = 4.5 mm @ 30 m; 7.3 mm @ 50m<br>distance = 1.2 mm @ 30 m; 2 mm @ 50m | 80 m to 90% reflective surface<br>50 m to 18% reflective surface | 54,000 points / sec | | 11.8 kg |
| **Trimble** | Trimble TX5 | | Ranging error: ±2 mm at 10 m and 25 m, each at 90% and 10% reflectivity | Range 0.6 m–120 m<br>(indoor or outdoor with low ambient light and<br>normal incidence to a 90% reflective surface) | 976,000 points / sec | | 5.0kg |
| **Trimble** | Trimble FX 3D Scanner | | Distance accuracy (std dev.). 0.6 mm @ 11 m; 0.8 mm @ 21 m<br>Position accuracy. 0.4 mm @ 11m; 0.8 mm @21m; 2mm @ 50 m | 1-pass. up to 60 m (50% reflectivity); 35m (30% reflectivity)<br>2-pass. up to 80 m (50% reflectivity); 45m (30% reflectivity) | 216,000 points / sec | | 11 kg |
| **optech** | ILRIS-3D | | Raw range accuracy 7 mm @ 100 m<br>Raw angular accuracy 8 mm @ 100 m (80 rad) | Minimum range 3m<br>Range 80% reflectivity 1200 m<br>Range 10% reflectivity 400 m | | | 13 kg |
| **optech** | ILRIS-3D-ER | | Raw range accuracy 7 mm @ 100 m<br>Raw angular accuracy 8 mm @ 100 m (80 rad) | Minimum range 3m<br>Range 80% reflectivity 1700 m<br>Range 10% reflectivity 650 m | | | 13 kg |
| **optech** | ILRIS-HD | | Raw range accuracy 7 mm @ 100 m<br>Raw angular accuracy 8 mm @ 100 m (80 rad) | Minimum range 3m<br>Range 80% reflectivity 1250 m<br>Range 10% reflectivity 400 m | | | 14 kg |
| **optech** | ILRIS-HD-ER | | Raw range accuracy 7 mm @ 100 m<br>Raw angular accuracy 8 mm @ 100 m (80 rad) | Minimum range 3m<br>Range 80% reflectivity 1800 m<br>Range 10% reflectivity 650 m | | | 14 kg |
| **optech** | ILRIS-LR | | Raw range accuracy 7 mm @ 100 m<br>Raw angular accuracy 8 mm @ 100 m (80 rad) | Minimum range 3m<br>Range 80% reflectivity 3000 m<br>Range 10% reflectivity 1330 m | | | 14 kg |
| **RIEGL** | VZ-6000 | | Accuracy 15 mm | Minimum range 5m<br>Max. Measurement Range 6,000 m | 222,000 meas./sec | | 14.5 kg |
| **RIEGL** | VZ-4000 | | Accuracy 15 mm | Minimum range 5m<br>Max. Measurement Range 4,000 m | 222 000 meas./sec | | 14.5 kg |
| **RIEGL** | VZ-1000 | | Accuracy 8 mm | Minimum range 2,5m<br>Max. Measurement Range 1,400 m | 122 000 meas./sec | | 9.8 kg |

| Manufacturer | Model | | Accuracy | range (meters) | Measurement speed | | Weight |
|---|---|---|---|---|---|---|---|
| **RIEGL** | VZ-400 | | Accuracy 5 mm | Minimum range 1,5m<br>Max. Measurement Range 600 m | 122 000 meas./sec | | 9,6 kg |
| **RIEGL** | LPM-321 | | Accuracy 25 mm | Minimum range 10m<br>Max. Measurement Range 6000 m | 1000 points/sec | | 16kg |