

Leica iCON GNSS Comparison Chart



	Leica iCON gps 30	Leica iCON gps 160	Leica iCON gps 70 Leica iCON gps 70T	Leica iCON gps 100 Leica CR50	Leica iCON gps 80	Leica iCON aps 200
Signal tracking	Multi-frequency	Multi-frequency	Multi-frequency	Multi-frequency	Multi-frequency	Multi-frequency
GPS / GLONASS / Galileo / BeiDou	✓/✓/✓/✓	✓/✓/✓/✓	✓/✓/✓/✓	✓/✓/✓/✓	✓/✓/✓/✓	✓/✓/✓/✓
SmartLink fill	✗	✓	✓	✗	✓	✓
Tilt compensation	✗	✓*	✓**	✗	✗	✗
Single baseline RTK	Hz 10 mm + 1 ppm / V 20 mm + 1 ppm	Hz 8 mm + 1 ppm / V 15 mm + 1 ppm	Hz 8 mm + 1 ppm / V 15 mm + 1 ppm	Hz 8 mm + 1 ppm / V 15 mm + 1 ppm	Hz 8 mm + 1 ppm / V 15 mm + 1 ppm	Hz 8 mm + 1 ppm / V 15 mm + 1 ppm
Network RTK	Hz 10 mm + 0.5 ppm / V 20 mm + 0.5 ppm	Hz 8 mm + 0.5 ppm / V 15 mm + 0.5 ppm	Hz 8 mm + 0.5 ppm / V 15 mm + 0.5 ppm	Hz 8 mm + 0.5 ppm / V 15 mm + 0.5 ppm	Hz 8 mm + 0.5 ppm / V 15 mm + 0.5 ppm	Hz 8 mm + 0.5 ppm / V 15 mm + 0.5 ppm
Static (phase) with long observations	Hz 3 mm + 0.5 ppm / V 6 mm + 0.5 ppm	Hz 3 mm + 0.1 ppm / V 3.5 mm + 0.4 ppm	Hz 3 mm + 0.1 ppm / V 3.5 mm + 0.4 ppm	n/a	Hz 3 mm + 0.1 ppm / V 3.5 mm + 0.4 ppm	n/a
Static and rapid static (phase)	Hz 5 mm + 0.5 ppm / V 10 mm + 0.5 ppm	Hz 3 mm + 0.5 ppm / V 5 mm + 0.5 ppm	Hz 3 mm + 0.5 ppm / V 5 mm + 0.5 ppm	n/a	Hz 5 mm + 0.5 ppm / V 10 mm + 0.5 ppm	n/a
Reliability	99,95%	99,99%	99,99%	99,99%	99,99%	99,99%
5 Hz / 20 Hz / 100 Hz positioning	✓/✗/✗	✓/✓/✗	✓/✓/✗	✓/✓/✗	✓/✓/✗	✓/✓/✓
Raw data / RINEX data logging / NMEA out	✗/✗/✗	✓/✓/✓	✓/✓/✗	✓/✗/✓	✓/✓/✓	✓/✗/✓
RTK reference station functionality	✗	✓	✓	✗	✓	✗
Cellular / UHF Radio modem	Controller internal / ✗	4G / ✓	4G / ✓	4G / ✓	4G / ✓	4G / ✓
Storage	Controller internal	Internal 8GB	SD card	Internal 8GB	Internal 512MB	Internal 24GB
User interface (buttons / LEDs / display / Web interface)	1 / 3 / ✗ / ✗	7 / 1 / ✓ / ✓	2 / 8 / ✗ / ✗	✗ / 3 / ✗ / ✓	9 / 1 / ✓ / ✗	✗ / 3 / ✗ / ✓
Power, Bluetooth®, USB, RS232	✓	✓	✓	✓	✓	✓
Base / Rover functionality	✗ / ✓	✓ / ✓	✓ / ✓	✗ / ✓	✓ / ✓	✗ / ✓
Machine Guidance / Control	✗ / ✗	✓ / ✗	✗ / ✗	✓ / ✗	✓ / ✓	✓ / ✓
Operating temperature -40°C to 65°C	✓	✓	✓	✓	✓	✓
Weight (without battery)	0.60 kg	1.45 kg	1.20 kg	0.83 kg	2.25 kg	2.2 kg

✓ = Available ✗ = Not available

*Tilt compensation is an optional feature. Tilt compensation is limited to a maximum of 20°
**Only applies to the Leica iCON gps 70T