

# Leica iCON GNSS Comparison Chart



|   | Leica iCON gps 30                      | Leica iCON gps 160                     | Leica iCON gps 70<br>Leica iCON gps 70T | Leica iCON gps 100<br>Leica CR50      | Leica iCON aps 200                    | Leica iCON gps 120<br>Leica CR50      |
|---|--|--|---|---------------------------------------|---------------------------------------|---------------------------------------|
| 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                                   | n/a                                   | 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    |                                       |                                       |                                       |
| 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 24GB                         | Internal 8GB                          |
| User interface (buttons / LEDs / display / Web interface) | 1 / 3 / ✗ / ✗                          | 7 / 1 / ✓ / ✓                          | 2 / 8 / ✗ / ✗                           | ✗ / 3 / ✗ / ✓                         | ✗ / 3 / ✗ / ✓                         | ✗ / 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                               | 2.2 kg                                | 1.25 kg                               |

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

✓ = Available ✗ = Not available



- when it has to be right



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leica-geosystems.com



A TRADITION IN PRECISION

Seattle 425-771-7776

Tacoma 253-922-6087 | Portland 503-641-3388

Salt Lake City 801-878-9763 | Boise 208-369-4388

[www.KukerRanken.com](http://www.KukerRanken.com)



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