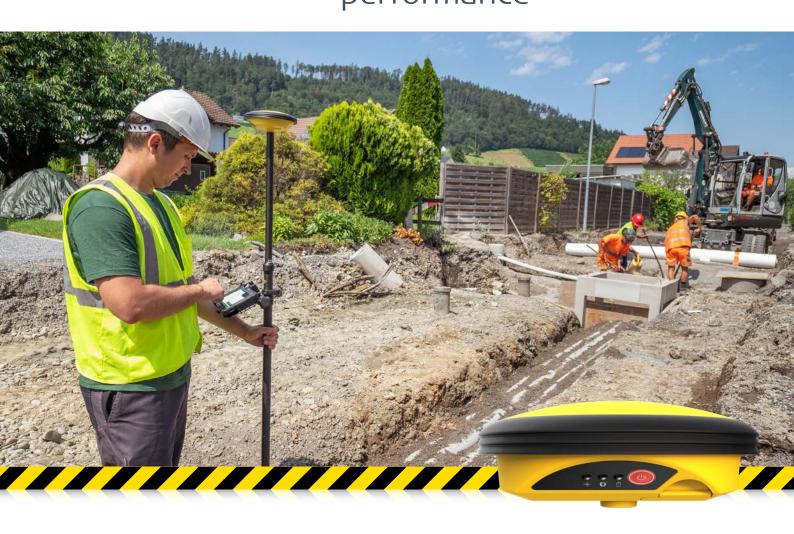# Leica iCON gps 30
Access the iCON GNSS performance

LEICA iCON gps 30 –
Compact and trustworthy GNSS RTK rover for construction

- **Entry-point into Leica iCON GNSS performance:** Easy to use and equipped with the construction tailored Leica iCON site field software, the iCON gps 30 facilitates your entry into the Leica iCON GNSS portfolio.
- **Lightest pole weight:** The light, compact and balanced design makes it comfortable to use and carry in the field.
- **Reliable and accurate measurement results:** With the highest level of position reliability in its class, the iCON gps 30 delivers accurate results and increases productivity.

Take the first step into Leica iCON construction workflows with Leica Geosystems' entry-level GNSS RTK rover. The iCON gps 30 is designed to assist construction companies move forward from traditional, to modern digital stakeout and measurement methods. Experience faster workflows, with accurate results and higher efficiency in construction projects, such as utility or road construction. Using advanced RTK technologies the rover delivers consistently accurate and reliable positions. Integrated into the well-established and construction tailored iCON site field software, the iCON gps 30 speaks the language of construction site professionals.

PART OF HEXAGON

- when it has to be **right**

Leica Geosystems

Leica iCON gps 30

GNSS PERFORMANCE

GNSS Technology	Leica RTKplus	Adaptive on-the-fly satellite selection
Leica SmartCheck	Continuous check of RTK solution	Reliability 99.95%
Signal tracking	SmartTrack	GPS (L1, L2, L2C, L5), Glonass (L1, L2, L3[1]), BeiDou (B1, B2, B3[1]), Galileo (E1, E5a, E5b, Alt-BOC, E6[1])
Number of channels		320 hardware channels

MEASUREMENT PERFORMANCE & ACCURACY[2]

Time for initialisation		Typically 6 s
Real-time kinematic (Compliant to ISO17123-8 standard)	RTK, Multifrequency	Hz 10 mm + 1 ppm / V 20 mm + 1 ppm
Code differential	DGPS / RTCM	Typically 25 cm

COMMUNICATIONS

Communication ports	Lemo Bluetooth®	USB and RS232 serial Bluetooth® 4.1 class 1 & sealed and protected 8-pin Lemo combined USB / Serial232 port
Communication protocols	RTK data protocols Network RTK	Leica, Leica4G, CMR, CMR+, RTCM 2.2, 2.3, 3.0, 3.1, 3.2 MSM VRS, FKP, iMAX, MAC (RTCM SC104)
External data links		UMTS / LTE / CDMA phone modem

GENERAL

Field software and controller	Leica iCON site	Leica iCON CC70 / CC80 field controller
User interface	Buttons and LEDs	On / Off button, 3 status LEDs
Power management	Internal power supply External power supply Operation time[3]	Exchangeable Li-Ion battery (2.6 Ah / 7.4 V) Nominal 12 V DC, range 10.5 - 28 V DC 8 h GNSS 7 h receiving RTK data with CC70 modem
Weight and dimensions	Weight Diameter x Height	0.7 kg / 2.5 kg standard RTK rover setup on pole 186 mm x 71 mm
Environmental	Temperature Drop Proof against water, sand and dust Vibration Humidity Functional shock	-40 to 65°C operating, -40 to 80°C storage Withstands topple over from a 2 m survey pole onto hard surfaces IP66/IP68 (IEC60529 / MIL STD 810G CHG-1 510.6I / MIL STD 810G CHG-1 506.6 II / MIL STD 810 G CHG-1 512.6 I) Withstands vibration (ISO9022-36-05 / MIL STD 810G 514.6 Cat.24) 95% (ISO9022-13-06 / ISO9022-12-04 / MIL STD 810G CHG-1 507.6 II) 40 g / 15 to 23 msec (MIL STD 810G 516.6 I)

LEICA iCON GPS 30 – GNSS RTK ROVER	
SUPPORTED GNSS SYSTEMS	
Multi frequency	✔
GPS / GLONASS / Galileo / BeiDou	✔ / • / • / •
RTK PERFORMANCE	
DGPS / RTCM, RTK Unlimited, Network RTK	✔
POSITION UPDATE & DATA RECORDING	
5 Hz positioning	✔
ADDITIONAL FEATURES[4]	
UMTS / CDMA phone modem	•

✔ = Standard • = optional

[1] Glonass L3, BeiDou B3 and Galileo E6 will be provided through future firmware upgrade.
[2] Measurement precision, accuracy, reliability and time for initialisation are dependent upon various factors including number of satellites, observation time, atmospheric conditions, multipath etc. Figures quoted assume normal to favourable conditions.

A full BeiDou and Galileo constellation will further increase measurement performance and accuracy.
[3] Might vary with temperature, age of battery, transmit power of data link device.
[4] Depending on the used iCON field controller.

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