

**CHCN**AV

**LT60H**

**RUGGED GNSS  
RTK SMARTPHONE**



**SURVEYING  
& ENGINEERING**

# RUGGED SMARTPHONE FOR ACCURATE DATA COLLECTION

The LT60H is a rugged GNSS RTK smartphone, a reliable and effective tool for a variety of industries and applications that require centimeter or decimeter positioning accuracy. Its portability, durability and versatility make it an excellent choice for precision GIS data collection, pipeline inspection, urban construction, utility inspection, agriculture and more.

With its 6.3" sunlight viewable display, the LT60H is an optimal data controller for field professionals who need to position or locate assets and capture associated photos or video. Unlike consumer smartphones, the LT60H has an industrial IP67 design that can withstand daily use in harsh environments and conditions.

Customized low-level system processing allows almost any third-party Android-based mapping application to directly obtain highly accurate location information, significantly reducing software development efforts.

## BRING ACCURACY AT YOUR FINGERTIPS

### Survey-grade GNSS positioning

The LT60H features a high performance 1408 channel positioning module supporting GPS, GLONASS, Galileo and BeiDou, and a high performance quadrifilar helix GNSS antenna. This advanced technology delivers industry-leading centimeter- and decimeter-level accuracy, even in challenging environments.

## PORTABILITY AND PERFORMANCE

### GMS and AER certified for extended compatibility

The LT60H is GMS (Google Mobile Service) and AER (Android Enterprise Recommended) certified to ensure full compatibility with the most popular data collection applications in the Google Play Store. In addition, the LT60H integrates 4G and WiFi modems for seamless field-to-office communications and robust connectivity to RTK GNSS network corrections.

Powered by a 2 GHz Qualcomm Snapdragon octa-core processor, DDR3 memory and UFS flash memory, the LT60H is designed to seamlessly meet the needs of the mobile workforce. Whether working with large datasets, processing multiple images or accessing complex databases, the LT60H is always up to the task.

## IPS DISPLAY FOR EXTRA COMFORT OF USE

### Sunlight-viewable touch screen

The LT60H has a stunning high-resolution screen with over 400 PPI for exceptional clarity and detail. With a Corning Gorilla Glass 3 IPS display, it also offers increased durability in all weather conditions, ensuring your device is protected in even the harshest environments. Its 5-point capacitive touch screen allows data capture with a stylus, gloves, or even wet hands to accommodate different operating conditions.

## KEEP YOUR DATA SECURE

### Industrial IP67 design with 6,000 mAh Li-ion battery

The LT60H's IP67-rated industrial design and 6000 mAh Li-ion battery make it one of the most rugged and reliable devices on the market, ensuring your data is safe even in harsh environments and adverse weather conditions. With up to 8 hours of battery life, the LT60H provides uninterrupted data collection for field operations and extended work days.



**CENTIMETER  
ACCURACY  
SMARTPHONE**



**BRING ACCURACY AT YOUR  
FINGERTIPS**

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# SPECIFICATIONS

| System           |                                |
|------------------|--------------------------------|
| Operating system | Android 12.0 GMS certified     |
| CPU              | Advanced octa-core CPU 2.0 GHz |
| RAM              | 8 GB                           |
| ROM              | 256 GB                         |
| Extension        | Micro SD Card, up to 512GB     |

| GNSS Accuracies <sup>(1)</sup> |   |
|--------------------------------|---|
| Channel                        | 1408  |
| Constellation                  | GPS: L1C/A, L2C, L2P(Y), L5<br>GLONASS: L1, L2, L3*<br>Galileo: E1, E5a, E5b, E6*<br>BDS: B1I, B2I, B3I, B1C, B2a, B2b*<br>QZSS: L1C/A, L1C, L2C, L5<br>NavIC/ IRNSS: L5<br>SBAS: L1, L5* |
| RTK                            | 2 cm HRMS   |
| SBAS                           | < 1 m HRMS  |
| Autonomous                     | H: 1.5 m RMS   V: 2.5 m RMS   |
| PPK                            | H: 3 mm + 1 ppm RMS<br>V: 5 mm + 1 ppm RMS  |
| PPP                            | Support PPP-B2b, Galileo E6B-HAS<br>H: 10 cm   V: 20 cm (w/o external antenna)<br>H: 5 cm   V: 10 cm (w/ external antenna)<br>Initialization time: < 3 min                                |

| Display           |   |
|-------------------|---|
| Size              | 6.3" touch screen   |
| Resolution        | 2340 x 1080   |
| Brightness        | 550 cd/m <sup>2</sup><br>glare resistant,<br>excellent sunlight readable screen |
| Touch Screen      | Capacitive multi-touch, 5 points  |
| Screen technology | IPS display panel<br>Corning <sup>®</sup> Gorilla <sup>®</sup> Glass 3          |

| Cameras     |            |
|-------------|------------|
| Front       | 8 MP       |
| Rear        | 16 MP      |
| Flash light | Integrated |

| Physical             |   |
|----------------------|---|
| Dust and Water Proof | IP67 (according to IEC 60529)<br>for water and dust resistance,<br>protected against temporary<br>immersion at a depth of up to 1m. |
| Shock                | 1.5 m fall onto concrete  |
| Humidity             | 5% - 95% RH (without<br>condensation)   |
| Size<br>(L x W x H)  | 212.4 mm x 81.5 mm x 32.8 mm<br>(8.4 in x 3.2 in x 1.3 in)  |

|             |   |
|-------------|---|
| Weight      | 400 g (14.1 oz)   |
| Environment | Operating: -20°C to + 60°C (-4°F to +140°F)<br>Storage: -40°C to + 70°C (-40° F to +158° F) |
| Vibration   | MIL-STD-810H  |

| Communication          |   |
|------------------------|---|
| SIM Card Type          | Nano-SIM card   |
| Wi-Fi                  | Wi-Fi IEEE 802.11a/b/g/n/ac   |
| Bluetooth <sup>®</sup> | Bluetooth <sup>™</sup> 5.1  |
| USB                    | Type C, OTG   |
| Network 4G modem       | GSM: 850/900/1800/1900<br>WCDMA: B1/B2/B4/B5/B8/B19<br>CDMA EVDO: BC0<br>TD-SCDMA: B34/B39<br>LTE-FDD: B1/B2/B3/B4/B5/B7/B8/<br>B12/B17/B18/B19/B20/B26/B28<br>LTE-TDD: B34/B38/B34/B39/B40/<br>B41 |

| Battery                 |   |
|-------------------------|---|
| Li-ion battery capacity | Built-in non-removable battery<br>6,000 mAh |
| Voltage                 | 3.8 V                                       |
| Battery life            | 8 h <sup>(2)</sup>                          |
| Charging Time           | 4.0 h<br>Fast Charging: QC 3.0              |

| Internal sensors                                  |  |
|---|--|
| NFC; G-Sensor; Light Sensor; E-Compass; Gyroscope |  |

| Accessories  |  |
|--|--|
| <ul style="list-style-type: none"> <li>- Screen protector</li> <li>- Packaging box</li> <li>- Type-C USB cable</li> <li>- Charger</li> </ul> |  |



\* All specifications are subject to change without notice.  
 \* Android<sup>™</sup>, Google Play and other marks are trademarks of Google LLC.  
 \* Bluetooth<sup>®</sup> is the trademark owned by Bluetooth SIG, Inc.  
 \* All optional parameters can't be changed after delivery.  
 (1) Autonomous and RTK accuracy are based on full GNSS constellations (GPS, GLONASS, Galileo and BDS) availability, under clear unobstructed environment, multipath-free, standard satellite geometry and atmospheric conditions. Performances assume follow up of recommended general GNSS practices. Compliant, but subject to availability of BDS ICD, GLONASS, Galileo, QZSS and IRNSS commercial service definition. GLONASS L3, Galileo E6, Galileo E6 High Accuracy Service (HAS), BDS B2b and SBAS L5 will be provided through future firmware upgrade.  
 (2) 25°C continuous data collection, 100% brightness. Battery life is dependent on factors such as environment temperature, brightness, CPU service conditions etc.



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