WHAT WE DO

WITH

HI-TARGET

SALES AND SERVICES
**Hi-TARGET Surveying Instrument Co., Ltd.**

**PERFORMANCE SPECIFICATIONS**

**SATELLITE SIGNALS TRACKED SIMULTANEOUSLY**
226 Channels

GFS

GLONASS

BeiDou

Galileo

SBAS

555 Channels (Optional)

GFS

GLONASS

BeiDou

Galileo

SBAS

Initialization time

Typically 2-10s

Horizontal

8mm+0.5ppm RMS

Vertical

15mm+1ppm RMS

Real Time Kinematic (RTK) Surveying

Horizontal

200mm+3ppm RMS

Vertical

450mm+5ppm RMS

Hot Start

Typically < 10s

Cold Start

Typically < 15s

High-Precision Static

Horizontal

2.5 mm ±0.1 ppm RMS

Vertical

3.5 mm ±0.4 ppm RMS

Static and Fast-Mode

Horizontal

2.5 mm ±0.3 ppm RMS

Vertical

5mm ±0.5 ppm RMS

Post Processing Kinematic (PPK / Stop & Go) GNSS Surveying

Horizontal

8mm ±0.3ppm RMS

Vertical

15mm ±0.5ppm RMS

Initialization time

Typically 10 minutes for base station

Initialization reliability

Typically > 99.9%

**POSINGITION PERFORMANCE**

<table>
<thead>
<tr>
<th></th>
<th>Typically</th>
<th>&lt; 10s</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Arturo</strong></td>
<td>99.9%</td>
<td></td>
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**POSITIONING PERFORMANCE**

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</tr>
<tr>
<td><strong>Arturo</strong></td>
<td>99.9%</td>
<td></td>
</tr>
</tbody>
</table>

**TRANSMITTING POWER**

- 0.1W ~ 1W adjustable
- 0.5W, 1W, 2W adjustable
- 5W, 10W, 20W adjustable
- 50W

**RECHARGEABLE BATTERY**

- 7.4V, 5000mAh Lithium-ion battery in internal compartment

**SOFTWARE SPECIFICATIONS**

- Synchronize to the highest-order surveys for the applicable application, including occupation times appropriate for baseline length
- Data output in a 1Hz positioning output, up to 50Hz - depends on installed option
- Requires GNSS and RTK software version 2.1.3.5 or later
- Supports the standard protocol 802.11b/g/n
- GPS, GLONASS, BeiDou, Galileo, SBAS

**Electrical**

- Power consumption: < 5W
- Electrical efficiency: > 99.5%

**Transmitting Speed**

- 9.6Kbps
- 19.2Kbps

**Transmitting Power**

- 0.1W ~ 1W adjustable
- 0.5W, 1W, 2W adjustable
- 5W, 10W, 20W, 30W adjustable

**Transmission Speed**

- 9.6Kbps
- 19.2Kbps

**APPLICATIONS**

- Static and Kinematic Surveying
- RTK Surveying
- Real Time Kinematic (RTK) Surveying
- PPK / Stop & Go GNSS Surveying
- Static and Kinematic Surveying
- RTK Surveying
- Real Time Kinematic (RTK) Surveying
- PPK / Stop & Go GNSS Surveying

**Specifications and Descriptions are subject to change without notice**
PERFORMANCE SPECIFICATIONS

SATELLITE SIGNALS TRACKED SIMULTANEOUSLY

228 Channels
QZSS: 50 channels L1, L2, L1C/L2C, L1C/L2C, L1C/L2C
SBAS: L1, L2, L2C
GPS: L1, L2, L1C/L2C, L2C/L1C, L5, L1C/L2C, L5/L2, L5/L1, L5/L2
GLONASS: L1, L2, L1C/L2C, L2C/L1C, L5, L1C/L2C, L5/L2, L5/L1, L5/L2
Galileo: L1, L2, L1C/L2C, L2C/L1C, L5, L1C/L2C, L5/L2, L5/L1, L5/L2
IRNSS: L1, L2, L1C/L2C, L2C/L1C, L5, L1C/L2C, L5/L2, L5/L1, L5/L2
QZSS: L1, L2, L1C/L2C, L2C/L1C, L5, L1C/L2C, L5/L2, L5/L1, L5/L2

High-Precision Static
Initialization time: Typically 2-10s
Vertical: 15mm + 0.5ppm RMS
Horizontal: 8mm + 0.5ppm RMS

Real Time Kinematic (RTK) Surveying
Initialization time: Typically 20s
Horizontal: 2.5mm + 1ppm RMS
Vertical: 2mm + 1ppm RMS

SBAS
Vertical: 50cm + 1ppm RMS
Horizontal: 25cm + 1ppm RMS

SATEL Internal UHF Radio
Frequency: 400MHz with 116 channels
Transmitting power: 5W, 10W, 20W adjustable
Transmitting speed: 9.6kbps, 19.2kbps
Working range: 8-10km typically, 15-20km optimal

Advanced External UHF Radio (Optional)
Frequency: 401-470MHz
Transmitting power: 5W
Working range: 8-10km typically, 15-20km optimal

Advanced GNSS Kinematic Surveying
Initialization time: Typically 20s
Vertical: 15mm + 0.5ppm RMS
Horizontal: 8mm + 0.5ppm RMS

Electronic Bubble
Tilt Survey System

HI-TARGET External UHF Radio
Frequency: 400MHz with 116 channels
Transmitting power: 5W, 10W, 20W, 30W adjustable
Transmitting speed: Up to 10.28kbps
Working range: 8-10km typically, 15-20km optimal

Advanced GNSS Kinematic Surveying
Initialization time: Typically 20s
Vertical: 15mm + 0.5ppm RMS
Horizontal: 8mm + 1ppm RMS

SATEL External UHF Radio
Frequency: 401-470MHz
Transmitting power: 0.1W adjustable
Transmitting speed: 9.6kbps, 19.2kbps
Support most of radio communication protocols
Working range: 8-10km typically, 15-20km optimal

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V90 PLUS GNSS RTK SYSTEM

With a hi-tech, fully integrated design, the conveniently sized V90 Plus is one of the most flexible choices for any measuring task. Built-in Linux 3.2.0 operating system, pre-loaded multiple smart applications such as tilt surveying, electronic bubble calibration, NFC and voice DIY. The V90 Plus GNSS system provides surveyor industry-leading GNSS operation.

Multi-constellation Tracking
- 220 tracking channels
- NGS approved full-wave GNSS antenna
- Supports GPS, GLONASS, GALILEO, BDS, SBAS
- Supports a wide range of satellite signals
- A large receiving area designed for multipath mitigation
- Air dielectric is light and stable

Smart Application
- Offers tilt survey with a maximum tilt angle of 30 degrees
- Supports electronic bubble
- Intelligent voice assistance guides field operations. Voice can be DIY
- Standard Rinex data and HI-TARGET raw data recorded simultaneously

Optional Transceiver UHF Radio
- The transceiver UHF radio enables switchable working modes between base and rover
- Three types of internal UHF radio provide different frequencies based on users requirements. The SATEL internal UHF radio is compatible with other radios

Multi-network Connection
- Supports GPRS, GSM and WCDMA
- Supports WPI

Powerful Battery
- Powered by high-capacity (5000mAh) Li-ion battery to ensure full day operation

Rugged Design
- IP67 dustproof and waterproof
- Able to survive a 2-meter natural fall onto concrete

iHand20 Field Controller
Default Configuration

This field-ready workhorse is built for power, functionality and ruggedness. It features a large 3.5 inch display with a pressure sensitive touchscreen, advanced GPS, integrated keyboard and plenty of power to run your apps. The unit is fully compatibility with SurvCE, MicroSurveyFieldGenius, Digitera Explorer and EsriArcPad. The PS336 Field Controller is compact enough to operate in one hand and it offers the highest durability standards in the industry.

Post-processing Software
HI-TARGET Geomatics Office (HGO) software
- Provides the complete GPS/GLONASS/BDS/GALILEO processing solution
- Standard Rinex data format and Hi-Target raw data format can be processed flexibly and easily
- Easy operation

CONTROLLER PERFORMANCE SPECIFICATIONS

<table>
<thead>
<tr>
<th>iHand20</th>
<th>GETAC PS336</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>System configuration</strong></td>
<td></td>
</tr>
<tr>
<td>OS: Android 4.2</td>
<td>OS: Windows Mobile 6.1</td>
</tr>
<tr>
<td>Processor: MT6589, 1.5GHz, 4core</td>
<td>Processor: T1 AM3715, 1GHz</td>
</tr>
<tr>
<td>RAM: 1GB</td>
<td>Flash memory: 8GB</td>
</tr>
<tr>
<td>Flash memory: 4GB</td>
<td></td>
</tr>
<tr>
<td><strong>Communication interface</strong></td>
<td></td>
</tr>
<tr>
<td>Bluetooth, NFC, Max USB, WIP1802 1.1b/g</td>
<td>Bluetooth, 9-pin serial port, 4-pin docking connector, Mini USB, WIP1802 1.1b/g</td>
</tr>
<tr>
<td>MicroSD card slot, supports up to 32GB</td>
<td>MicroSD card slot, supports up to 32GB</td>
</tr>
<tr>
<td><strong>Power supply</strong></td>
<td></td>
</tr>
<tr>
<td>3.7V, 5600mAh lithium battery, up to 25 hours continuous operation</td>
<td>3.7V, 5600mAh lithium battery, up to 12 hours continuous operation</td>
</tr>
<tr>
<td><strong>Physical properties</strong></td>
<td></td>
</tr>
<tr>
<td>Integrated keyboard</td>
<td></td>
</tr>
<tr>
<td>Size: 213mm x 89mm x 35mm</td>
<td>Integrated keyboard</td>
</tr>
<tr>
<td>Weight: 520g (with battery)</td>
<td>Size: 178mm x 89mm x 30mm</td>
</tr>
<tr>
<td>Weight: 32g (with battery)</td>
<td>Weight: 530g (with battery)</td>
</tr>
<tr>
<td>Operating temperature: -20 °C to +55 °C</td>
<td>Operating temperature: -20 °C to +60 °C</td>
</tr>
<tr>
<td>Storage temperature: -30 °C to +55 °C</td>
<td>Storage temperature: -40 °C to +70 °C</td>
</tr>
<tr>
<td>Water/dustproof IP67</td>
<td>Water/dustproof IP68</td>
</tr>
<tr>
<td>Anti-shock: 1.2m natural fall</td>
<td>Anti-shock: 1.82m natural fall</td>
</tr>
</tbody>
</table>

Advanced Transceiver: 80900 SSM is a compact multi-constellation receiver designed to deliver centimeter accuracy for a variety of applications.
**HD-Lite**

Compact Singlebeam Echosounder

<table>
<thead>
<tr>
<th>Specifications</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>200kHz</td>
</tr>
<tr>
<td>Power</td>
<td>800W</td>
</tr>
<tr>
<td>Depth Range</td>
<td>0.15 - 160m</td>
</tr>
<tr>
<td>Resolution</td>
<td>±10mm, ±0.1%, 1m</td>
</tr>
<tr>
<td>Draft</td>
<td>0.0m - 15m</td>
</tr>
<tr>
<td>Velocity Range</td>
<td>1370 - 1750m/s, evolution 1m/s</td>
</tr>
<tr>
<td>CPU</td>
<td>1.2GHz dual-core</td>
</tr>
<tr>
<td>Memory</td>
<td>2G</td>
</tr>
<tr>
<td>Sampling Rate</td>
<td>30Hz</td>
</tr>
<tr>
<td>Storage</td>
<td>16GB</td>
</tr>
<tr>
<td>Display</td>
<td>3.5”320x240, resolution 1280x1024@60Hz</td>
</tr>
<tr>
<td>Interface</td>
<td>2<em>RS-232, 1</em>USB</td>
</tr>
<tr>
<td>VGA</td>
<td>Available</td>
</tr>
<tr>
<td>Temperature</td>
<td>-30°C - 70°C</td>
</tr>
<tr>
<td>Weight</td>
<td>5.6kg</td>
</tr>
</tbody>
</table>

**iBeam8120**

Multibeam Echosounder

<table>
<thead>
<tr>
<th>Specifications</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>200kHz</td>
</tr>
<tr>
<td>Swath coverage</td>
<td>30°-130°/degree</td>
</tr>
<tr>
<td>Resolution</td>
<td>1cm</td>
</tr>
<tr>
<td>Angle (Cross-track)</td>
<td>±2°</td>
</tr>
<tr>
<td>Angle (Along-track)</td>
<td>±1.5°</td>
</tr>
<tr>
<td>Number of beams</td>
<td>512</td>
</tr>
<tr>
<td>Range</td>
<td>0.5m - 300m</td>
</tr>
<tr>
<td>Depth rating</td>
<td>50m</td>
</tr>
<tr>
<td>Ping rate</td>
<td>Up to 30Hz</td>
</tr>
<tr>
<td>Work mode</td>
<td>Equiangular mode</td>
</tr>
<tr>
<td>Roll stabilization</td>
<td>±1°</td>
</tr>
<tr>
<td>Input voltage</td>
<td>220VAC/50Hz</td>
</tr>
<tr>
<td>Power</td>
<td>200W</td>
</tr>
<tr>
<td>Temperature (Operational)</td>
<td>-2°C - 40°C / -30°C - 55°C</td>
</tr>
<tr>
<td>Transducer cable length</td>
<td>Standard 15m (Optional)</td>
</tr>
<tr>
<td>Transducer weight</td>
<td>12.5kg (air)</td>
</tr>
<tr>
<td>Transducer size</td>
<td>Emitting unit : 240x120x130mm</td>
</tr>
<tr>
<td></td>
<td>Receiving unit : 320x110x149mm</td>
</tr>
</tbody>
</table>
**iBoat BS1**

**Unmanned Surface Vehicle**

- **Hull Parameters**
  - Dimensions: 1047mm x 555mm x 190mm
  - Weight of base boat: 1.85kg
  - Hull material: High-strength Kevlar and carbon fibre composite
  - Boat shape design: Double-M streamlined design
  - Anti-wavebreak: 3rd wind level and 2nd wave level
  - Battery endurance: 4 hours at 2mph
  - Top speed: 4.5mph
  - Propulsion: Brushless DC outdrives
  - Propeller type: Two ducted propellers
  - Direction control: Steering without driving engine and sailing reversely
  - Auto-return: Auto-return while low battery or signal interruption

- **Power and Betical Parameters**
  - Operating system: Support Windows and Android (Laptop or pad available relying on necessity)
  - Communicating mode: RF point to point in real-time
  - Transmission distance: Wireless bridge 5km(5km/50km/5km optional)
  - Navigation mode: Manual or autopilot, switchable at any time
  - Reacting distance: 2km
  - Waterproof grade: IP65
  - Function: Switchable work mode plus basic USV information display, velocity and direction control all in real-time

- **Sounding Performance**
  - Work frequency: 200kHz
  - Beam angle: 5° ±0.5°
  - Sounding range: 0.15m~30m
  - Sounding resolution: 1mm/1mm/depth 1mm depth resolution

- **Location Accuracy**
  - RTK: Horizontal ±3mm + 1ppm RMS
  - Vertical: ±15mm + 1ppm RMS
  - Beacon (optional): 0.5m(L)
  - SBAS: 1.6m(EP)

- **System Software**
  - Hull control system: Autopilot, hull parameters control, coordinate conversion, etc.
  - IMAX sounding software: Support parameter configuration, coordinate conversion, depth location collecting, post-processing, cumulative depth, and digital depth combining for conveniently judging false depth, sampling feature point randomly, RTK and tide document, etc.

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**iFlow RP600**

**Acoustic Doppler Current Profiler**

- **Specifications**
  - Frequency: 600kHz
  - Transducer Type: Piston
  - Beam: 4 beams, 60°, 20°
  - Profiling Range (Velocity): ±5m/s (Standard), ±20m/s (Optional)
  - Profiling Range (Distance): 1~75m
  - Velocity Accuracy: ±0.25%/0.25cm/s
  - Velocity Resolution: 1cm/s
  - Number of Cells: 1~256
  - Cell Size: 0.1~4m
  - Update Frequency: 1~2Hz
  - Velocity Accuracy: 0.25%/0.25cm/s
  - Operating Mode: Wide-band
  - Bottom Detection Range: 0~90m
  - Internal Sensors:
    - Temperature: Range / Accuracy / Resolution: -10°C~+60°C/±0.1°C/0.01°C
    - Heading: Range / Accuracy / Resolution: 0°~360°/±0.5°/0.001°
    - Roll/Pitch: Range / Accuracy / Resolution: ±10° / ±0.2° / 0.001°
    - Pressure: Range / Accuracy / Resolution: 0~200m / ±0.3% FS / 0.01m
  - Input Voltage: 9~18VDC (Standard 12V)
  - Power: 3.5W (Average), 0.3W (Sleep), 70W (Peak)
  - Interface: RS-232/RS-422
  - Baud Rate: 1200~115200
  - Software: iFlow Flow Measurement Software
  - Internal Storage: 4G
  - Reading Depth: 200m
iSide 1400
Side Scan Sonar System

Specifications
- Frequency: 100kHz/400KHz, simultaneous dual frequency
- Pulse type: CW/DM
- Pulse width: 20 ~ 100μs (p/cw)
- 1 ~ 4ms (DM/Chirp)
- Horizontal angle: 0° ~ 10° (cw/DM)
- 0° ~ 15° (Chirp)
- Vertical angle: 45°
- Depress angle: 10° ~ 15°, 20° optional
- Resolution: 2.5mm@100KHz
- 1.25mm@400KHz
- Range: 600m@100KHz
- 200m@400KHz
- Depth rating: 450m
- Towfish dimension: 105mm×1300mm (diameter×length)
- Structure: 316L stainless
- Weight: 30kg
- Internal sensor: Attitude/pressure/depth sensors
- Cable: kevlar strengthened cable, standard 50m
- Power: 40W
- Optional: 255m kevlar strengthened cable

K9
Heading and positioning RTK receiver

Specifications
- Channel: 223 channels
- GPS L1/L2/L5/L8, BEIDOU B1/B3, GALILEO E1/E5a, QZSS L1/L2, SBAS, WAAS, MSAS, EGNOS
- Positioning accuracy: Static: Horizontal ±5m +1ppm Vertical ±5mm +3ppm
- RTK: Horizontal ±5mm +1ppm Vertical ±15mm +1ppm DOP/SDOP ≤10m CD
- Heading accuracy: ±0.5°
- Initial time: < 10s
- Position output rate: 1Hz, 2Hz, 5Hz, 10Hz, 20Hz
- Differential format: CMR, CMR+, RTCM 2.1, 2.2, 2.3, 3.0, 3.1
- Navigation output format: NMEA 0183, GSV, AVP, RMC, ROV, VDG, VDG, PPS, GGA, GSA, ZDA, VTG, G2000, P10, P20, EUL, GPS, BDS and TDD (GGF)
- Power input: 7 ~ 36V DC
- Working temperature: -35°C ~ +85°C
- Storage temperature: -40°C ~ +85°C
- Weight: 1.2 kg
- Dimension: 225mm×130mm×70mm
- Waterproof level: IP67
### Hi-TARGET

Surveying the world. Mapping the future.

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#### HITS-420 Total Station

- **Dual-axis reflectorless total station**
- **2” accuracy with 350meter range**
- **Wireless bluetooth communication**
- **Big storage, can be extended up to 32GB**
- **Convenient data import and export with USB port**

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#### Specifications

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurement Method</td>
<td>Absolute Encoding</td>
</tr>
<tr>
<td>Minimum Readout</td>
<td>1’0&quot;/1’0&quot; (0.3mgon/1.5mgon/3mgon) optional</td>
</tr>
<tr>
<td>Accuracy</td>
<td>1”</td>
</tr>
<tr>
<td>Distance Measurement</td>
<td>Reflectors / Range: 350m (1,148ft), 600m (1,968ft) optional</td>
</tr>
<tr>
<td></td>
<td>Single Prism: &gt;7500m (24,600ft)</td>
</tr>
<tr>
<td></td>
<td>Measuring Time: 1.5s</td>
</tr>
<tr>
<td>Distance Measurement</td>
<td>Single Prism: 3000m (9,844ft) under good condition</td>
</tr>
<tr>
<td></td>
<td>Three Prisms: &gt;3000m (9,844ft) under good condition</td>
</tr>
<tr>
<td></td>
<td>Reflective Sheet: 800m (2,624ft)</td>
</tr>
<tr>
<td></td>
<td>Accuracy: 2 mm ±2ppm</td>
</tr>
<tr>
<td></td>
<td>Measuring Time (Fine/Quick Tracking): 1.5s/1s/0.5s</td>
</tr>
<tr>
<td>Telescope</td>
<td>Magnification: 30X</td>
</tr>
<tr>
<td>Field of View</td>
<td>1’30” (2.7m at 100m)</td>
</tr>
<tr>
<td>Minimum Focusing Distance</td>
<td>1.5m</td>
</tr>
<tr>
<td>Reticle</td>
<td>Illuminated</td>
</tr>
<tr>
<td>Compensator</td>
<td>System: Single-axis liquid tilt sensor/Dual-axis (optional)</td>
</tr>
<tr>
<td>Working Range</td>
<td>±3</td>
</tr>
<tr>
<td>Setting Accuracy</td>
<td>1”</td>
</tr>
<tr>
<td>Communication</td>
<td>Interface: Standard RS232, SD card*, Micro-USB</td>
</tr>
<tr>
<td>Internal Data Memory</td>
<td>Approx. 20,000 Points</td>
</tr>
<tr>
<td>Date Format</td>
<td>ASCII</td>
</tr>
<tr>
<td>Operation</td>
<td>Raulma Operation System</td>
</tr>
<tr>
<td>Display</td>
<td>Gray and white display with adjustable contrast; 260 x 160 pixels; 8 lines x 25 characters</td>
</tr>
<tr>
<td>Keyboard</td>
<td>2 lines Alpha-numeric backlit crystal keyboard</td>
</tr>
<tr>
<td>Laser Plummets</td>
<td>Type: Laser point, 4 brightness levels adjustment / Optical plummet (optional)</td>
</tr>
<tr>
<td>Centering Accuracy</td>
<td>±1mm at 1.5m instrument height</td>
</tr>
<tr>
<td>Power Supply</td>
<td>Battery Type: Rechargeable Li-ion battery</td>
</tr>
<tr>
<td>Voltage/Capacity</td>
<td>7.4V (DC) / 3000mAh</td>
</tr>
<tr>
<td>Operating Time With ZBA-400</td>
<td>Optimal 16 hours (Continuous angle measurement every 30 seconds) / 10 hours (typical)</td>
</tr>
<tr>
<td>Measuring Times</td>
<td>Approx. 12000 times</td>
</tr>
<tr>
<td>Weight</td>
<td>Weight (incl. Battery/Trolley): Approx. 5.5kg (12.1lb)</td>
</tr>
<tr>
<td>Environmental</td>
<td>Operating Temperature: -20°C ~ + 60°C, 4°F to +122°F</td>
</tr>
<tr>
<td></td>
<td>Storage Temperature: -40°C ~ + 70°C/40°F to + 158°F</td>
</tr>
<tr>
<td></td>
<td>Dust/Water Proof (IP65) IP65, 95%, non-condensing</td>
</tr>
</tbody>
</table>

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1 Standard deviation based on ISO 7723-3.
2 Calculated by Kodak Gray Card white side (99% reflective); exact distance depends on measuring object, observation and environment conditions.
3 Good condition no haze, visibility about 45m, moderate sunlight.
4 Maximum extension up to 32GB.
5 New battery at 25°C, 24 hours continuously angle measurement mode.
Dual-axis Compensation
The HTS-420R is configured with advanced dual-axis compensator for auto error elimination and auto accuracy compensation.

Absolute Encoding
The absolute encoding disk ensures high accuracy, efficiency and stable performance. No need to initialize but to measure the angle immediately as the HTS-420R is turned on. The previous data and setting are automatically saved. No data or setting is missed even though the HTS-420R is power-off unexpectedly.

High-performance MCU SMT32
Based on ARM Cortex™-M processor, the SMT32 MCU enabling the HTS-420R extra high processing speed and low-power consumption.

Bluetooth
The Bluetooth wireless technology makes HTS-420R accessible to any data collector for real-time communication. The third party field software such as Carlson SurvCE is fully compatible with the HTS-420R.

Data Storage
Multiple data transfer options such as SD card and Micro-USB port, which can work perfectly with our complimentary dual port USB disk.

Backlight
Adjustable backlight of the screen and the keyboard offer you a visible condition to work in the dark.

Diagonal Eyepiece
Support diagonal eyepiece for observations at steep line of sight.

Calibration Software
Real-time diagnosis can be run with HI-TARGET Calibration software, to find out the problem quickly to ensure trouble-free operation.

New Data Transfer Software
The newly easy-to-use data transfer software supports different type of output data format, which can be used in AutoCAD or other 3rd party post processing software.
### TECHNICAL SPECIFICATIONS

**System Configuration**
- Operating System: Android 5.0
- Processor: 1.7GHz, 8 Core High Speed Processor
- RAM: 2GB
- Flash Memory: 16GB
- Display: 7 inches glare resistant, excellent sunlight readable screen, resolution 1280×800

**GPS Feature**
- Positioning Technology: GPS + BDS, AGPS, GLONASS (Optional)
- Time to First Fix: 30 seconds (Typical)
- Single Point Positioning: 1-3m with SBAS

**Data Communication**
- Dual Sim: Support 3G and 4G
- Network Type: FDD-LTE/TD-LTE/WCDMA/TD-SCDMA/GSM
- WIF: IEEE 802.11b/g/n, WAPI, AP
- Bluetooth: Bluetooth 4.0
- Expansion Cards: T-Flash storage card, Support up to 128GB extension
- USB: Micro-USB 2.0, support OTG function

**Battery Feature**
- Capacity: 7.4V/4000mAh lithium battery, Support online charging
- Working Time: Every single battery can last for 8 to 10 hours

**Applications**
- Camera: 13M Pixels camera, auto focus, Highlight LED flash
- Microphone: 3.5mm Audio Jack, External earphone can be used as FM antenna
- Build-in Sensor: G-Sensor, electronic compass, barometer, proximity sensor, light sensor, gyroscope
- NFC: Support

**Physical Characteristics**
- Size: 220mm*135mm*18mm
- Weight: 724g (With battery)
- Working Temperature: -30℃ ~ +60℃
- Storage Temperature: -40℃ ~ +80℃
- Dustproof and waterproof: IP67
- Shockproof: Anti 1.5m free drop

### OPTIONAL FUNCTIONS

**High precision CM and DM GNSS module are optional**

**CM Module**
- 120 channels
- GPS L1, L2, L5C
- GLONASS L1 L2
- BDS B1, B2, B3I
- SBAS (WAAS, EGNOS, MSAS)
- Support RTCM 2.1/2.3/3.0/3.2, CMR, CMR+ and RTCA
- Accuracy (RMS)
- Single positioning: 2m
- Network RTK: 2cm
- Static (Optional): ±5mm + 1ppm

**DM Module**
- 72 channels
- GPS L1, L2
- GLONASS L1 (Optional)
- BDS B1, B2, B3I
- SBAS (WAAS, EGNOS, MSAS)
- Support RTCM 2.3/3.1/3.2
- Accuracy (RMS)
- Single positioning: 2.5m
- Network correction: 50cm

**Barcode scanning (Optional)**
- RFID function (Optional)**

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**Hi-Target Surveying Instrument Co., Ltd**

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The Qpad X5 is a high-precision rugged tablet designed for demanding environments. Connected to a high-accuracy GNSS module, the Qpad X5 can achieve 2cm accuracy RTK performance. With professional mobile GIS software, the Qpad X5 is the best choice for your GIS field work and industry solution.

**Key features**

- **High-accuracy GNSS module realize RTK performance**
  - Connected with optional high-accuracy GNSS module, the Qpad X5 can achieve RTK performance with 2cm accuracy
  - 2 Centimeter Solution, Sub-meter Solution

- **Industry rugged design for field work**
  - 7-inch highlight screen gives you a comfortable working and viewing experience
  - Highlight display design enables the visible capacity even in direct sunlight
  - Industry rugged design IP67

- **High performance tablet computer**
  - Android 5.0 OS and 8-core processor makes the Qpad X5 impressive high speed
  - More than 8 hours battery life ensures the whole day work in the field
  - WiFi, Bluetooth, and dual SIM card for 3G/4G enable the convenient connectivity

- **Professional mobile GIS software and application solution**
  - Mobile GIS data collection
  - Forest inventory solution
  - Cadastral solution

**Qpad X5**

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