## SPECIFICATIONS

| | | | KTS-472R10LC | KTS-472R20LC |
|---|---|---|---|---|
| **Distance Measurement** | | | | |
| Max.Range | Single prism | | 5.0km | |
| | Reflectorless | | 1000m | 2000m |
| | Reflector Sheet | | 1.0km | |
| ※Object in shade, or sky overcast | | | | |
| Accuracy | Reflectorless | Fine | ±(3＋2ppm×D) mm | |
| | Reflector | Fine | ±(2＋2ppm×D) mm | |
| | | IR sheet | ±(2＋2ppm×D) mm | |
| Reading | | | Max:99999999.9999m  Min:0.1mm | |
| Measuring Time | Reflectorless | | Fine Mode:＜0.3s; Tracking Mode:＜0.1s | |
| Atmospheric Correction | | | Manual Input, Auto Correction | |
| Prism Constant | | | Manual Input, Auto Correction | |
| Temperature Sensor | | | Freecale Sensor | |
| **Angle Measurement** | | | | |
| Measuring Method | | | Absolute Continuous | |
| Dia. of Encoder Disk | | | 79mm | |
| Minimum Reading | | | 0.1″ | |
| Accuracy | | | 2″ / 5″ | |
| Detection Method | | | Horizontal: Dual, Vertical: Dual | |
| **OS and Hardware platform** | | | | |
| Operate System | | | Windows CE 6.0 | |
| Display | | | 3.5 inch. 640x480 Highlighted Touch Screen | |
| Data Communication | | | RS-232C, Mini USB, SD Card, USB (32GB) | |
| Processor | | | Intel PXA310 806MHZ | |
| Memory | | | 128M DDR, 512M NAND Flash(＞2,000,000 points) | |
| Bluetooth | | | 30M range. Class 2, V2.0+EDR | |
| WiFi | | | Optional (wifi is not included in default configuration since April. 30th 2022) | |
| Power Control Processor | | | Auto Adjust Voltage and Frequency, Save energy | |
| **Telescope** | | | | |
| Image | | | Erect | |
| Tube Length | | | 154mm | |
| Effective Aperture | | | 45mm,(EDM:50mm) | |
| Magnification | | | 30x | |
| Field of View | | | 1° 30′ | |
| Minimum Focus Distance | | | 1m | |
| Resolving Power | | | 3″ | |
| **Auto Compensator** | | | | |
| System | | | Dual Axis Liquid-electric | |
| Working Range | | | ±3′ | |
| Accuracy | | | 1″ | |
| **Vial** | | | | |
| Plate Vial | | | 30″ / 2mm | |
| Circular Vial | | | 8/ 2mm | |
| **Laser Plummet (default)** | | | | |
| Accuracy | | | ±1.0mm/1.5m | |
| **Optical Plummet (optional)** | | | | |
| Image | | | Erect | |
| Magnification | | | 3x | |
| Focusing Range | | | 1m - ∞ | |
| Field of View | | | 5° | |
| **On-Board Battery** | | | | |
| Type | | | Rechargeable Li-ion Battery | |
| Voltage | | | DC 7.4V | |
| Continuous Operation Time | | | One battery up to 10 hrs, two batteries up to 20 hrs. | |
| **Others** | | | | |
| Temperature | | | −20℃ ～ ＋50℃ | |
| Dimension and Weight | | | 200x190x350mm, 6.0kg | |
| Dust / Water Proof | | | IP65 | |

## STANDARD CONFIGURATION



| | | |
|---|---|---|
| 1. Total Station | 1x |
| 2. Rechargeable Battery | 2x |
| 3. Battery Charger | 1x |
| 4. Communication Cable | 1x |
| 5. Mini USB Cable | 1x |
| 6. SD Card | 1x |
| 7. Tools Kit | 1x |
| 8. Dryer | 1x |
| 9. Plummet | 1x |
| 10. Carrying Case | 1x |
| 11. Operation Manual (E-copy) | 1x |
| 12. Rain Cover | 1x |
| 13. Belt for Case | 2x |

### Battery and Charger



LB-01     LC-10

EU/ US  type chargers choosable

## OPTIONAL ACCESSORIES



Solar Filter
KF-20

Diagonal Eyepiece
KDE20

**K⊕LIDA**
Professional's Choice

## Smaller Size
## Increased Performance

# KTS-472R10LC/R20LC
## WinCE TOTAL STATION

# KTS-472R10LC WinCE Total Stations

**KOLIDA's new 472 Series Total stations**
**New Advanced Design with Improved Technology**

KTS-472R10LC is designed to deliver the latest technology to surveyors worldwide, you will appreciate the technical improvement and advantages from the beginning of working with this equipment.

Featuring an ultra-powerful EDM, the KTS-472R10LC is able to measure up to 1000m without reflector at an incredible 3mm+2ppm accuracy, and in prism mode it is able to measure up to 5,000m with single prism.

Measurements are captured faster than ever: 0.1 second in tracking mode and 0.3 second in fine mode. The bright red laser dot pinpoints are also featured.

**New Touch Screen and New Program**

The 3.5 inch touch screen makes operation much easier. Its 640* 480 high resolution with true color highlighted quality highly improves the visibility under sunshine, and backlight function also provides more continence for night operation.

KOLIDA developed Mapping Genius and Engineering Genius as free mapping software for KTS-472R10LC. Its Windows CE 6.0 operation system also supports Carlson SurvCE, MicroSurvey Field Genius and other third party software to provide a complete field-to-office solution for various demands of survey works.

### Ultra-Powerful, Advanced EDM

- 1000m Non-prism range
- 5000m prism range
- 0.1-0.3 second measurement time
- Coaxial red laser pointer
- Improved performance under foggy condition

### Various Communication Interface

- USB port
- Up to 32GB SD card storage
- RS-232 serial port
- Environmentally protected

### Windows CE 6.0 operation system

- KOLIDA Mapping Genius
- KOLIDA Engineering Genius
- Carlson SurvCE (optional)
- MicroSurvey Field Genius (optional)

### Rugged, Waterproof Design

- Waterproof/ dust proof IP65 protection
- Atmosphere/ Temperature sensor
- Stable angle accuracy
- Alphanumeric keyboard with backlight

## ■ Abundant Software

**Mapping Genius**

Mapping Genius is an integrated software for field data collection and mapping. With the advantages of laptop, data collector, PDA, it realizes the integration of indoor and outdoor works.

**Engineering Genius**

Engineering Genius is especially designed for construction measurement works. It brings user data collection/ calculation and mapping programs which can be applied in various works.

Mapping Genius          Engineering Genius

**Carlson SurvCE** (Optional)          **MicroSurvey FieldGenius** (Optional)

## ■ Comparison of KTS Series Total Stations

|  | 442LLC | 442R6LC | 442UT | 472R10LC/R20LC |
|---|---|---|---|---|
| **Laser Type** | Infrared Laser | Visible Laser | | |
| **Range** | 5,000m by 1 prism | 600m non-prism<br>5000m by 1 prism | 1000m/ 2000m non-prism<br>5000m by 1 prism | |
| **Laser Pointer** | N/A | Yes | | |
| **Operation System** | DOS | | | Windows CE 6.0 |
| **Built-in Memory** | 2MB (24000 points) | | 12MB (100,000 points) | 128MB DDR<br>512MB NandFlash<br>(>2,000,000 points) |
| **SD Card** | Up to 32GB | | | |
| **Atmosphere/ Temperature Correction** | Manual | Automatic | | |
| **Bluetooth** | N/A | Yes | | Yes |
| **Battery** | 2700mAH | 3100mAH | | |

## ■ New Functionalities

### Bluetooth

Bluetooth communication is available for KTS-472R10LC. By the Bluetooth wireless link, you can easily connect your data collector with total station without cable. This technology brings total flexibility to you field operation.

### WIFI

KTS-472R10LC is equipped with WIFI module, and support WIFI function. You can easily surf the Internet and communicate with other mobile phones or computers with WIFI. (wifi function is no more included in default configuration since April 30th 2022)
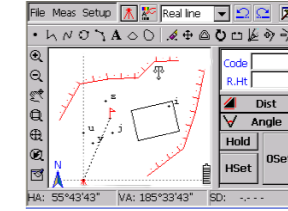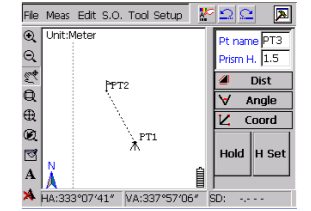
| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1000m<br>Reflectorless | Ultra Low-noise<br>Amplifier | Carrier<br>Frequency | Noise Phase<br>Analysis | HD<br>Display | Co-axial<br>Laser Beam | Ultra Fast<br>Measurement | Dual<br>Compensation | T/P<br>Sensor | |
| 4-probe<br>Encoding | IP65 | Windows CE 6.0 | Laser<br>Plummet | Laser<br>Pointing | Wireless<br>Transfer | Bluetooth<br>Link | SD<br>Storage | USB<br>Interface | |