

Angle Measurement	Measurement Method: Absolute Encoding
	• Minimum Readout: 1"/5"/10"(0.3 mgon / 1.5 mgon / 3 mgon)
	• Accuracy¹: 2"
Distance Measurement	• Single Prism: 3000 m (9,842 ft.) under good condition ³
	• Three Prisms: 6000 m (19,685 ft.) under good condition ³
	• Reflective Sheet: 800 m (2,624 ft.)
	• Accuracy: 2 mm + 2 ppm
	Measuring Time (Fine / Quick / Tracking): 1.5s / 1s / 0.5s
Distance Measurement	• Reflectorless ² Range: 350 m (1,148 ft.)
	• Single Prism: > 7500 m (24,606 ft.)
	• Accuracy: 3 mm + 2 ppm
	Measuring Time: 1.5 s
Telescope	Magnification: 30 X
	• Field of View: 1°30′ (2.7 m at 100 m)
	Minimum Focusing Distance: 1.2 m
	Reticle: Illuminated
Compensator	System: Single-axis liquid tilt sensor
	Working Range: ±3'
	• Setting Accuracy: 1"
Communication	• Interface: Standard RS232,microUSB port ⁴
	• Internal Memory: Approx. 20,000 Points
	Data Format: ASCII
Operation	Operation System: Real-time Operating System
	Display: High resolution backlight, black and white display with contrast adjustment
	Graphics: 192 x 96 pixels / Character: 6 lines x 25 characters
	Keyboard: 2 sides Alphanumeric backlit crystal keyboard
Laser Plummet	Type: Laser point, 4 brightness levels adjustment
	Centering Accuracy: 1 mm at 1.5m instrument height
Power Supply	Battery Type: Rechargeable Li-ion battery
	• Voltage/Capacity: ZBA-400: 7.4 V (DC) / 3000 mAh
	• Operating Time: Optimal 16 hours ⁵ (Continuous angle measurement)
	every 30 seconds) / 10 hours (typical)
	Measuring Times: Approx. 12000 times
Weight	• Weight (Incl. Battery & Tribrach): Approx. 5.5 kg (12.1 lb.)
	• Operating Temperature: -20 °C ~ + 50 °C (-4 °F to +122 °F)
Environmental	• Storage Temperature: -40 °C ~ + 70 °C (-40 °F to + 158 °F)
	Dust&Water Proof (IEC60529 Standard) / Humidity: IP65, 95%, non-condensing

- Standard deviation based on ISO 17123-3.
 Calculated by Kodak Gray Card white side (90% reflective), exact distance depends on measuring object, observation and environment conditions.
 Good condition: no haze, visibility about 40km, moderate sunlight.
 Maximum extension up to 32GB.

- 5. New battery at 25°C, 24 hours continuously angel measurement mode.

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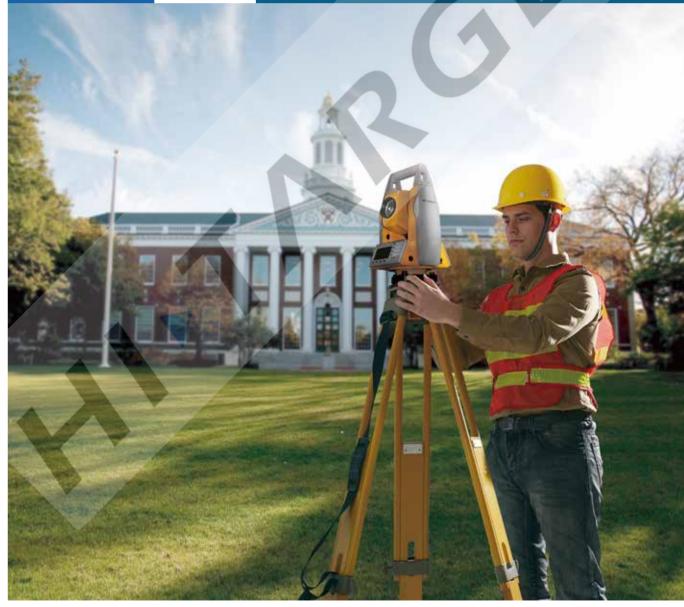
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ZTS-320R **Educational Edition Total Station**

- Big Data Storage
- Fast Measuring
- Complete Solution Experiences









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Compensation

Configured with advanced axis compensator for error elimination and accuracy improvement.



Absolute Encoding

To measure the angle without initialization after it is powered on. Information will not go missing even the machine is shut off unexpectedly.



ncoding • High-perforn

The STM32 MCU based on ARM Cortex[™]-M processor brings the extra high processing speed and low-power consumption.



High-performance MCU Data Storage

20,000 points capacity for internal storage and 32GB storage with external thumb drive.



Backlight

The display and keyboard are equipped with backlight for working in the darkness.



• Diagonal Eyepiece

Supports diagonal eyepiece for observations at steep line of sight.



• Calibration Software

Hi-Target calibration software is designed for real-time diagnosis to ensure trouble-free operation.



Desktop Software

Hi-Target desktop data transfer software supports data download and conversion to different user-defined format, including CAD, CSV, GTS-7, etc.