## **SPECIFICATIONS**

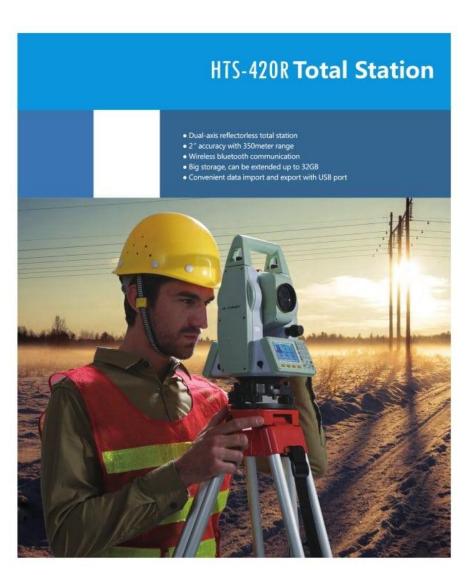
(1) 中国的特别是《日本·日本·日本·日本·日本	
	Measurement Method: Absolute Encoding
Angle Measurement	Minimum Readout: 1"/5"/10" ( 0.3mgon/1,5mgon/3mgon ) optional
	Accuracy <sup>1</sup> : 2*
	Reflectorless <sup>2</sup> Range: 350m (1,148ft.)
Distance Measurement	Single Prism: >7500m (24606ft.)
(HTS-420R Reflectorless)	Accuracy: 3mm+2ppm
	Measuring Time: 1.5s
	Single Prism: 3000m (9,842ft.) under good condition <sup>3</sup>
	Three Prisms: 6000m (19,685ft.) under good condition <sup>3</sup>
Distance Measurement	Reflective Sheet: 800m (2,624 ft.)
(HTS-420 with Reflector)	Accuracy: 2 mm +2ppm
	Measuring Time (Fine/Quick/Tracking): 1,5s/1s/ 0.5s
	Magnification: 30X
Telescope	Field of View: 1°30' (2.7m at 100m)
	Minimum Focusing Distance: 1.5m
	Reticle: Illuminated
Compensator  Communication	System: Single-axis liquid tilt sensor/Dual-axis (optional)
	Working Range: ±3'
	Setting Accuracy: 1*
	Bluetooth
	Interface: Standard RS232, SD card <sup>4</sup> , Micro-USB
	Internal Data Memory: Approx. 20,000 Points
	Data Format: ASCII
Operation	Operation System: Real-time Operating System
	Display: Gray and white display with adjustable contrast; 280 X 160 pixels; 6 lines X 25 characters
	Keyboard; 2 sides Alphanumeric backlit crystal keyboard
Laser Plummet	Type: Laser point, 4 brightness levels adjustment / Optical plummet (optional)
	Centering Accuracy: 1 mm at 1.5m instrument height
	Battery Type: Rechargeable Li-lon battery
	Voltage/Capacity: ZBA-400; 7.4V (DC) / 3000mAh
Power Supply	Operating Time With ZBA-400: Optimal 16 hours 5 (Continuous angle measurement every 30 seconds) / 10
	hours (typical)
	Measuring Times; Approx. 12000 times
Weight	Weight (Incl. Battery&Tribrach): Approx. 5.5kg (12.1lb.)
	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

<sup>&</sup>lt;sup>1</sup> Standard deviation based on ISO 17123-3.

## Hi-Target Surveying Instrument Co., Ltd

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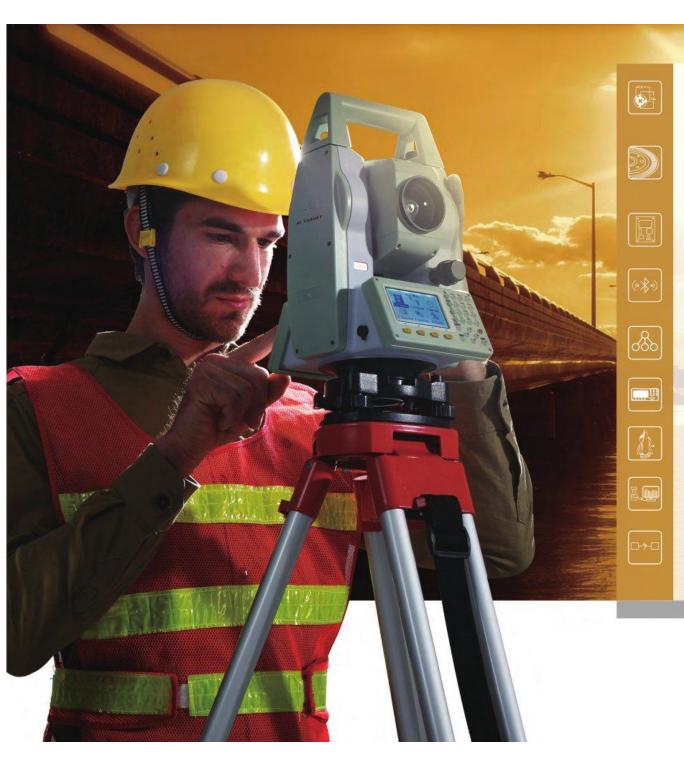


<sup>&</sup>lt;sup>2</sup> Calculated by Kodak Gray Card white side (90% reflective), exact distance depends on measuring object, observation and environment conditions.

<sup>&</sup>lt;sup>3</sup> Good condition: no haze, visibility about 40km, moderate sunlight,

<sup>&</sup>lt;sup>4</sup> Maximum extension up to 32G8.

<sup>&</sup>lt;sup>5</sup> New battery at 25°C, 24 hours continuously angel 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.

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.