

# 19 SPECIFICATIONS

## Telescope

Aperture	: 45mm
Magnification	: 30×
Image	: Erect
Field of view	: 1°30'
Minimum focus	: 1.5m
Reticle illumination	: Provided

## Distance measurement

Measuring range (in good atmospheric conditions)

Non- prism (Reflector: Kodak Gray Card, 90% reflective)

MTS1002R	--- 600m
MTS1002R <sup>+</sup>	--- 1000m

Single prism:

MTS1002R	--- 5.0km
MTS1002R <sup>+</sup>	--- 7.5 km
MTS1002	--- 5.0km
MTS1005	--- 5.0km

Accuracy :

Prism mode	$\pm(2\text{mm}+2\text{ppm}\cdot\text{D})$
Non-prism mode	$\pm(5\text{mm}+3\text{ppm}\cdot\text{D})$

Minimum reading:

Fine measurement mode	: 1mm (0.005ft.)
Coarse measurement mode	: 10mm (0.02ft.) / 1mm (0.005ft.)
Tracking measurement mode	: 10mm (0.02ft.)

Measuring time:

Fine measurement (repeat)	about 1.0sec (first time 2sec)
Coarse measurement (repeat):	about 0.7sec (first time 2sec.)
Tracking measurement:	about 0.3 sec (first time 1.5sec.)

## Angle measurement

Minimum reading: 5" /1" (1mgon / 0.2mgon)

Standard deviation:

MTS1002R	---2"(0.6mgon)
MTS1002R <sup>+</sup>	---2"(0.6mgon)
MTS1002	-----2"(0.6mgon)
MTS1005	-----5"(1.5mgon)

Measuring time: 0.1sec

## Tilt correction

Type	Dual-Axis
Range of compensation:	$\pm 3'$
Correction unit:	1"



### Level sensitivity

Circular level: 8'/2mm  
Plate level: 30"/2mm

### Plummet

Red laser 1.5mm (Ins.H:1.5m)

### Data management and transfer

Memory points 40000  
Data transmission  
RS-232C  
Bluetooth  
USB flash drive

### Battery

Voltage: DC 7.2~7.4V

#### Capacity

Rechargeable batteries BDC25H 2.5AH  
Working duration (20°C):  
Distance and angle measurement: 6 hours  
Angle measurement only 20 hours

Rechargeable batteries BDC40L(optional) 3.2AH  
Working duration (20°C):  
Distance and angle measurement: 8 hours  
Angle measurement only 25 hours

### Temperature range

Storage: -40°C~+60°C  
Operating: -20°C~+55°C

**Dimension** 190X210X350mm

**Weight** 6.5kg

