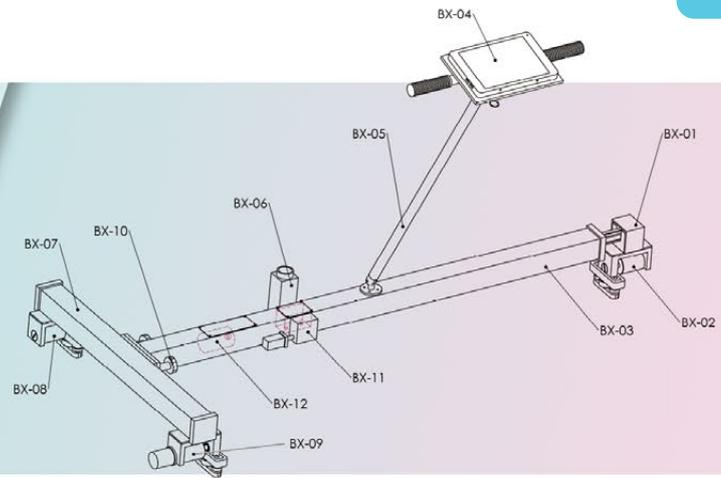


ASSEMBLY

TPJC-XC Portable Trolley for Overhead Line Catenary and Tunnel Section Geometry Measurement is mainly composed of a measurement host part and a measurement trolley. The measurement host part includes industrial computer, measuring trolley, motor, three insulation rollers, automatic tracking laser measuring system, camera and other sensors.



XC-01. Linear guide rail

XC-03. 1435mm measuring beam(imperial sizing optional)

XC-05. T-handle push rod

XC-07. Vertical beam

XC-09. Zirconia Counter wheel

XC-11. Laser head rotating mechanism

XC-02. Zirconia Road wheel(right)

XC-04. Pad measurement controller

XC-06. Laser ranging module

XC-08. Zirconia Road wheel(left)

XC-10. Lock screw

XC-12. Lithium battery



MAIN TECHNICAL PARAMETERS

WORKING CONDITION

Working temperature	-20~+50℃
Related humidity	≤90%RH
Altitude	≤2500m
Classification of waterproof	IP65

ELECTRICAL PARAMETERS

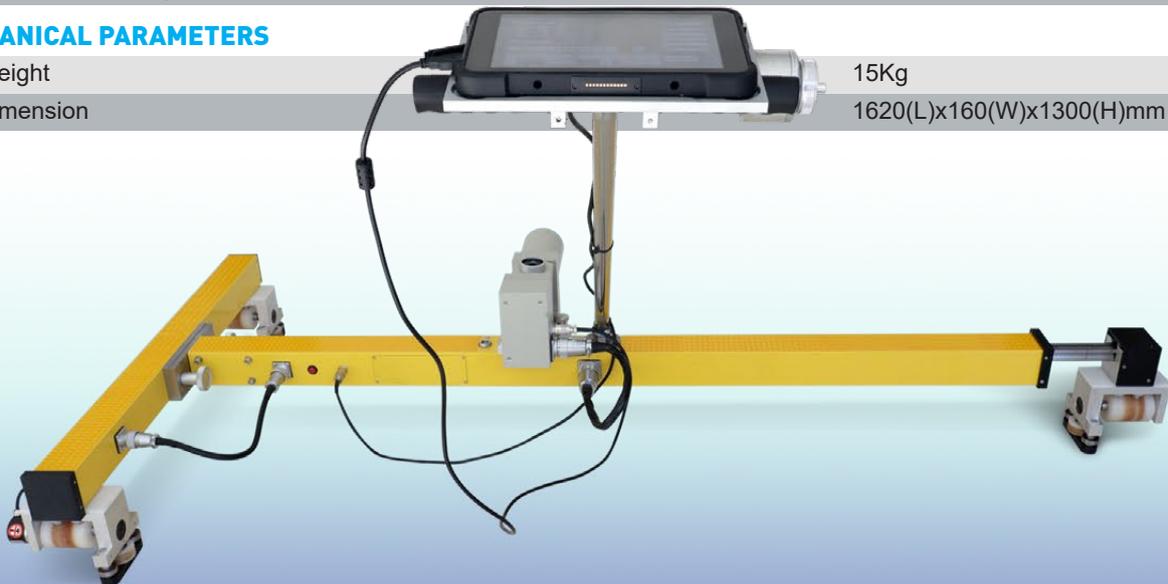
Voltage	16.8V
Electric current	390mA
Continuous working time	no less than 15 hours
Laser wavelength	650nm
laser safety grade	class 2

TECHNICAL SPECIFICATION

	Range	Accuracy
Cable Height	5100~6500mm	±3mm
Cable stagger	±600mm	±5mm
Gross center	Height	5100~6500mm
	Deviation Value	±600mm
Elevation difference at 500mm		±4mm
Track gauge	1410~1470mm	±0.5mm
Super-Elevation(horizontal)	±185mm	±1mm
Red Line		±4mm
Mast gauge	2400~6500mm	±5mm
Dropper Space		±5mm
Overlap section	Horizontal distance	±7.5mm
	Vertical distance	±5mm
Distance between railway transmission lines and contact wire		±4mm
Free measurement	Horizontal distance	±4mm
	Vertical distance	±3mm
Mast span on both sides of the track	35000mm	±5mm
Tunnel section Parameter	Measuring radius	0.05-100m any point 1mm
	Azimuth coverage	0-180°
Operation system	Windows 10	
Registration arm slope	1:n(n accurate to 0.1)	

MECHANICAL PARAMETERS

Weight	15Kg
Dimension	1620(L)x160(W)x1300(H)mm



BASIC PARAMETER MEASUREMENT

After booting, the device will automatically enter the “basic parameter measurement” interface and display 4 basic parameters columns. A red cross-line will be in the center of the left part of the LCD screen. By moving the measuring beam frame position back and forth and rotating the laser heads left and right, till the cross-line center and the target object to be measured are completely coincident aimed and all clear showing in the screen.

When aiming, you can use the laser head to make coarse adjustments by hand, and then fine-turn the fine-tuning knob as needed, until object aim at the target.

Click the “M” button and wait for the “Cable Height” and “Cable Stagger” to display normally.

Click “Lock Contact Network” to lock the current contact network. After aiming at the target, you can press measure and display the measuring target, the screen shows “Retry to enter the dead zone or misaligned target, please measure again.”

When measuring the stagger, the stagger value is positive when the wire is deflected toward the measuring beam fixed foot block direction; the stagger value is 0 when the measured target is in the center of the rail. When the wire is toward to the beam sprung foot block direction, the stagger value is negative.

Height” and “Cable Stagger” to display normally.

the corresponding function button to measurement result; if there is no the prompt message



FUNCTIONS

- ⊙ Track gauge measurement
- ⊙ Super elevation measurement
- ⊙ Cable height measurement
- ⊙ Cable stagger measurement
- ⊙ Cross center measurement
- ⊙ Overlap section measurement
- ⊙ Mast gauge measurement
- ⊙ Elevation difference measurement at 500mm
- ⊙ Red line measurement
- ⊙ Registration arm slope measurement
- ⊙ Dropper space measurement
- ⊙ Mast perpendicularity measurement
- ⊙ Data storage and export TXT file to computer
- ⊙ GPS(optional)

