



Simple and Easy Entry level Reflectorless Total Station



About 2LS™

2LS marks a new market concept in the laser tools business. 2LS incorporates products, sales and marketing material into a self-explaining platform. Products are high quality positioning tools that bridge the gap between "do-it-yourself" laser gadgets and industrial quality laser and surveying instruments used on large construction and civil engineering projects. And materials around the products ensure minimum time effort in understanding the capabilities, applications and unique feature points of the products via various modern marketing methods.

Specifications

Telescope Magnification 30x Image Erect Field of View 1º30' Resolving power 3.0." Minimum focus distance 1.3m Angle measurement Display resolution 1º/5" Accuracy 2º 2" Axis compensator 1 axis, ±3' (Compensation range) Distance measurement Measuring range Reflectorless *1 250m Prism 2,300m*2 (Single Prism) Accuracy Reflectorless *1 1.1s Prism (2+2 ppm x D)mm Measuring time (Fine) Reflectorless 1.1s Prism 1.1s Interface and Data Management Display Graphic LCD Keyboard 24 Alpha-Numeric Keys Control panel location 2 sides Interface Serial RS-232C General Levels Plate Level 30" / 2mm Circular level 10' / 2mm Optical plummet (Magnification) 3x	Model		CYGNUS
Magnification 30x Image Erect Field of View 1°30' Resolving power 3.0" Minimum focus distance 1.3m Angle measurement 1"/ 5" Display resolution 1 "/ 5" Accuracy 2" Axis compensator 1 axis, ±3' (Compensation range) Distance measurement Measuring range Reflectorless "I Prism 2,300m*2 (Single Prism) Accuracy Reflectorless "I Prism (2+2 ppm x D)mm Prism (2+2 ppm x D)mm Measuring time (Fine) Reflectorless Reflectorless 1.1s Prism 1.1s Interface and Data Management Display Keyboard 24 Alpha-Numeric Keys Control panel location 2 sides Data storage Internal memory 24,000 pts Plug-in memory device N/A Interface Serial RS-232C General Plate Level 30" / 2mm Circular level 10' / 2mm Optical plummet (Magnification) 3x			KS-102
Image			
Field of View	Magnification		30x
Resolving power 3.0" Minimum focus distance 1.3m Angle measurement 1"/ 5" Display resolution 1"/ 5" Accuracy 2" Axis compensator 1 axis, ±3' (Compensation range) Distance measurement Measuring range Reflectorless *1 230m Prism 2,300m*2 (Single Prism) Accuracy Reflectorless *1 (3+2 ppm x D)mm Measuring time (Fine) Reflectorless *1.1s Prism 1.1s 1.1s Interface and Data Management Display Graphic LCD Keyboard 24 Alpha-Numeric Keys Control panel location 2 sides Data storage Internal memory 24,000 pts Plug-in memory device N/A Interface Serial RS-232C General Circular level 30" / 2mm Optical plummet (Magnification) 3x			
Minimum focus distance Angle measurement Display resolution Accuracy Axis compensator Distance measurement Measuring range Reflectorless *1			
Angle measurement Display resolution Accuracy Axis compensator Distance measurement Measuring range Reflectorless *1	Resolving power		3.0"
Display resolution 1"/ 5" Accuracy 2" Axis compensator 1 axis, ±3' (Compensation range) Distance measurement Measuring range Reflectorless *1 230m Prism 2,300m*2 (Single Prism) Accuracy Reflectorless *1 (3+2 ppm x D)mm Prism (2+2 ppm x D)mm Measuring time (Fine) Reflectorless 1.1s Prism 1.1s Interface and Data Management Display Graphic LCD Keyboard 24 Alpha-Numeric Keys Control panel location 2 sides Data storage Internal memory 24,000 pts Plug-in memory device N/A Interface General Levels Plate Level 30" / 2mm Optical plummet (Magnification) 3x	Minimum focus distance		1.3m
Accuracy Axis compensator Distance measurement Measuring range Reflectorless *1 230m Prism 2,300m*2 (Single Prism) Accuracy Reflectorless *1 (3+2 ppm x D)mm Prism (2+2 ppm x D)mm Measuring time (Fine) Reflectorless 1.1s Prism 1.1s Interface and Data Management Display Graphic LCD Keyboard Control panel location Data storage Internal memory Plug-in memory device Interface General Levels Plate Level Circular level Optical plummet (Magnification) Reflectorless 1.1s Caraphic LCD Caraphic LCD Accuracy Reflectorless 1.1s Prism 2,300m*2 (Single Prism) Accuracy Garaphic Very ppm x D)mm Accuracy Graphic LCD Caraphic LCD Caraphic LCD Caraphic LCD Caraphic LCD Accuracy Alpha-Numeric Keys Coraphic LCD Accuracy Alpha-Numeric Keys Caraphic LCD Accuracy Alpha-Numeric Keys Caraphic LCD Accuracy Accurac	Angle measurement		
Axis compensator Distance measurement Measuring range Reflectorless *1 Accuracy Reflectorless *1 Prism Accuracy Reflectorless *1 Prism Reflectorless *1 Prism Reflectorless *1 Prism Reflectorless *1 Interface and Data Management Display Keyboard Control panel location Data storage Internal memory Plug-in memory device Interface Plate Level Circular level Poptical plummet (Magnification) Accuracy Reflectorless *1 (3+2 ppm x D)mm (2+2 ppm x D)mm (3+2	Display resolution		1"/ 5"
Distance measurement Measuring range Reflectorless *1 230m Prism 2,300m*2 (Single Prism) Accuracy Reflectorless *1 (3+2 ppm x D)mm Prism (2+2 ppm x D)mm Measuring time (Fine) Reflectorless 1.1s Prism 1.1s Interface and Data Management Display Graphic LCD Keyboard 24 Alpha-Numeric Keys Control panel location 2 sides Data storage Internal memory 24,000 pts Plug-in memory device N/A Interface Serial RS-232C General Levels Plate Level 30" / 2mm Circular level 10' / 2mm Optical plummet (Magnification) 3x	Accuracy		2"
Measuring rangeReflectorless *1230mPrism2,300m*2 (Single Prism)AccuracyReflectorless *1(3+2 ppm x D)mmPrism(2+2 ppm x D)mmMeasuring time (Fine)Reflectorless1.1sPrism1.1sInterface and Data ManagementGraphic LCDKeyboard24 Alpha-Numeric KeysControl panel location2 sidesData storageInternal memory24,000 ptsPlug-in memory deviceN/AInterfaceSerial RS-232CGeneralPlate Level30" / 2mmOptical plummet (Magnification)3x	Axis compensator		1 axis, ±3' (Compensation range)
Prism 2,300m*² (Single Prism) Accuracy Reflectorless *1 (3+2 ppm x D)mm Prism (2+2 ppm x D)mm Measuring time (Fine) Reflectorless 1.1s Prism 1.1s Interface and Data Management Display Graphic LCD Keyboard 24 Alpha-Numeric Keys Control panel location 2 sides Data storage Internal memory 24,000 pts Plug-in memory device N/A Interface Serial RS-232C General Levels Plate Level 30" / 2mm Circular level 10' / 2mm Optical plummet (Magnification) 3x	Distance measurement		
Accuracy Reflectorless *1 (3+2 ppm x D)mm Prism (2+2 ppm x D)mm Measuring time (Fine) Reflectorless 1.1s Prism 1.1s Interface and Data Management Display Keyboard 24 Alpha-Numeric Keys Control panel location 2 sides Data storage Internal memory 24,000 pts Plug-in memory device N/A Interface Serial RS-232C General Levels Plate Level 30" / 2mm Optical plummet (Magnification) 3x	Measuring range	Reflectorless *1	230m
Prism (2+2 ppm x D)mm Measuring time (Fine) Reflectorless 1.1s Prism 1.1s Interface and Data Management Display Graphic LCD Keyboard 24 Alpha-Numeric Keys Control panel location 2 sides Data storage Internal memory 24,000 pts Plug-in memory device N/A Interface Serial RS-232C General Levels Plate Level 30" / 2mm Circular level 10' / 2mm Optical plummet (Magnification) 3x		Prism	2,300m*2 (Single Prism)
Measuring time (Fine) Reflectorless Prism 1.1s Interface and Data Management Display Keyboard Control panel location Data storage Internal memory Plug-in memory device Interface Serial RS-232C General Levels Plate Level Optical plummet (Magnification) Reflectorless 1.1s Prism 1.1s Graphic LCD 24 Alpha-Numeric Keys 24,000 pts N/A Serial RS-232C General 10' / 2mm Optical plummet (Magnification)	Accuracy	Reflectorless *1	(3+2 ppm x D)mm
Prism 1.1s Interface and Data Management Display Graphic LCD Keyboard 24 Alpha-Numeric Keys Control panel location 2 sides Data storage Internal memory 24,000 pts Plug-in memory device N/A Interface Serial RS-232C General Levels Plate Level 30" / 2mm Circular level 10' / 2mm Optical plummet (Magnification) 3x	•	Prism	(2+2 ppm x D)mm
Prism 1.1s Interface and Data Management Display Graphic LCD Keyboard 24 Alpha-Numeric Keys Control panel location 2 sides Data storage Internal memory 24,000 pts Plug-in memory device N/A Interface Serial RS-232C General Levels Plate Level 30" / 2mm Circular level 10' / 2mm Optical plummet (Magnification) 3x	Measuring time (Fine)	Reflectorless	1.1s
Display Keyboard Control panel location Data storage Internal memory Plug-in memory device Interface Serial RS-232C General Levels Plate Level Circular level Optical plummet (Magnification) Graphic LCD 24 Alpha-Numeric Keys 2 sides N/A N/A Serial RS-232C General 10' / 2mm 30" / 2mm 10' / 2mm		Prism	1.1s
Keyboard 24 Alpha-Numeric Keys Control panel location 2 sides Data storage Internal memory 24,000 pts Plug-in memory device N/A Interface Serial RS-232C General Levels Plate Level 30" / 2mm Circular level 10' / 2mm Optical plummet (Magnification) 3x	Interface and Data Management		
Control panel location Data storage Internal memory Plug-in memory device N/A Interface Serial RS-232C General Levels Plate Level Optical plummet (Magnification) 2 sides N/A N/A Serial RS-232C 30" / 2mm 10' / 2mm 3x	Display		Graphic LCD
Data storage Internal memory 24,000 pts Plug-in memory device N/A Interface Serial RS-232C General Levels Plate Level 30" / 2mm Circular level 10' / 2mm Optical plummet (Magnification) 3x	Keyboard		
Plug-in memory device N/A Interface Serial RS-232C General Levels Plate Level 30" / 2mm Circular level 10' / 2mm Optical plummet (Magnification) 3x	Control panel location		2 sides
Interface Serial RS-232C General Levels Plate Level 30" / 2mm Circular level 10' / 2mm Optical plummet (Magnification) 3x	Data storage	Internal memory	24,000 pts
General Levels Plate Level 30" / 2mm Circular level 10' / 2mm Optical plummet (Magnification) 3x		Plug-in memory device	N/A
Levels Plate Level 30" / 2mm Circular level 10' / 2mm Optical plummet (Magnification) 3x	Interface		Serial RS-232C
Circular level 10' / 2mm Optical plummet (Magnification) 3x	General		
Optical plummet (Magnification) 3x	Levels	Plate Level	
		Circular level	10' / 2mm
	Optical plummet (Magnification)		3x
Dust and water protection IP54	Dust and water protection		IP54
Operating temperature -20 to 50°C	Operating temperature		-20 to 50°C
Size with handle 336(H) x 184(W) x 172(L) mm	Size with handle		336(H) x 184(W) x 172(L) mm
Weight with battery & tribrach 4.9kg	Weight with battery & tribrach		4.9kg
Power supply			
Battery BT-77Q	Battery		BT-77Q
Operating time(20°C) Approx. 23 hours	Operating time(20°C)		Approx. 23 hours

^{*1} With Kodak Gray Card White Side (90% reflective). Reflectorless range/accuracy may vary according to measuring objects, observation situations and environmental conditions.

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Product colors in this brochure may vary slightly from those of actual products owing to limitations of the printing process.

Designs and specifications are subject to change without notice.

^{*2} Good conditions: No haze with visibility about 40km (25 miles), overcast with no heat shimmer.