SPEC SHEET

Trimble RTS573

Robotic Total Station

Key Features

- Trimble MagDrive Servo Technology provides exceptional speed and accuracy with smooth, silent operation.
- Trimble MultiTrack Technology lock on and tracks passive prims for control measurements and active targets for dynamic measurement, stakeout and grade control.
- Trimble SurePoint Technology ensures accurate measurements by automatically correcting for unwanted movement due to wind, sinkage, and other factors.
- Trimble DR Plus EDM provides the flexibility to tackle the most demanding job site conditions.

Accuracy For Everyday Applications

With the Trimble RTS573 Robotic Total Station contractors can improve efficiency and accuracy for common layout tasks in building construction.

For Everyday Layout

Automate building layout tasks with total confidence. The Trimble RTS573 streamlines layout of curbing, retaining walls, landscape, grade checks, concrete forms, anchor bolts, or utilities. Versatile enough for light topographic projects and as-built data collection, the RTS573 can handle almost any challenge on the job site.

Built For Construction

- For construction applications, you need a measurement solution with optimal speed, accuracy and reliability.
- Visually mark points, with high precision, using the Class 2 Laser Pointer.
- Automatic Servo Focus sets the optical focus for quick manaual aiming when laying out points in DR mode.
- Combine with Trimble FieldLink software running on the Trimble Field Tablet to optimize your accuracy and productivity.

Find out more at:
fieldtech.trimble.com

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PERFORMANCE

GENERAL

	Horizontal angle measurement accuracy (standard deviation based on DIN 18723)	3" (0.9 mgon)
	Vertical angle measurement accuracy (standard deviation based on DIN 18723)	2" (0.6 mgon)
	Angle display (least count)	0.1" (0.01 mgon)
	Positioning Frequency	10 Hz

DISTANCE MEASUREMENT

TYPICAL ACCURACY	50 M (164 FT)	100 M (328 FT)	200 M (656 FT)	300 M (984 FT)
Prism Mode Standard Tracking	2 mm (5/64") 4 mm (5/32")	3 mm (1/8") 5 mm (13/64")	4 mm (5/32") 6 mm (15/64")	6 mm (15/64") 7 mm (9/32")
DR Mode Standard Tracking	2 mm (5/64") 4 mm (5/32")	3 mm (1/8") 4 mm (5/32")	4 mm (5/32") 5 mm (13/64")	5 mm (13/64") 6 mm (15/64")

MEASURING TIME

PRISM MODE	Standard	1.2 s
	Tracking	0.4 s
DR MODE	Standard	1.5 s
	Tracking	0.4 s

RANGE (Under Standard Clear Conditions[1,2])

PRISM MODE	1 Prism	2,500 m (8,202 ft)
	Shortest range	0.2 m (0.7 ft)

DR MODE

	EXTENDED MODE	GOOD (GOOD VISIBILITY, LOW AMBIENT LIGHT)	NORMAL (NORMAL VISIBILITY, MODERATE SUNLIGHT SOME HEAT SHIMMER)	DIFFICULT (HAZE, OBJECT IN DIRECT SUN, TURBULENCE)
White card (90% reflective)[3]	2,000 m (7,218 ft)	1,300 m (4,265 ft)	1,300 m (4,265 ft)	1,200 m (3,937 ft)
Gray card (18% reflective)[3]	1,000 m (3,280 ft)	600 m (1,968 ft)	600 m (1,968 ft)	550 m (1,804 ft)

	Shortest range	1.0 m (3.3 ft)

EDM SPECIFICATIONS

LIGHT SOURCE	EDM DR Plus	Laser Class 1
	Tracker	Laser Class 1
	Laser pointer	Laser Class 2
BEAM DIVERGENCE	Horizontal	2 cm/50 m (0.066 ft/164 ft)
	Vertical	4 cm/100 m (0.13 ft/328 ft)
	Atmospheric correction	-130 ppm to 160 ppm continuously

ROBOTIC RANGE

AUTOLOCK AND ROBOTIC RANGE[2]	Passive prisms	500-700 m (1,640-2,297 ft)
	Trimble MultiTrack Target	800 m (2,625 ft)
AUTOLOCK POINTING PRECISION	Passive prisms (at 200 m/656 ft) standard deviation[2]	< 2mm (0.007 ft)
	Trimble MultiTrack Target (at 200 m/656 ft) standard deviation[2]	< 2mm (0.007 ft)
	Shortest search distance	0.2 m (0.65 ft)
	Search time (typical)[6]	2-10 s

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GENERAL SPECIFICATIONS

LEVELING	Circular level in tribrach	8' / 2mm (8' /0.007 ft)
	Type	Centered dual-axis
	Accuracy	0.5" (0.15 mgon)
	Range	±5.4' (±100 mgon)
AUTOMATIC LEVEL COMPENSATOR	Servo system	MagDrive servo technology, integrated servo/angle sensor; eletromagnetic direct drive
	Rotation speed	115 degrees/s (128 gon/s)
	Rotation time Face 1 to Face 2	2.6s
	Positioning speed 180 degrees (200 gon)	2.6s
	Clamps and slow motions	Servo-driven, endless fine adjustment
	Magnification/shortest focusing distance	2.3x/0.5 m to infinity (1.6 ft to infinity)
CENTERING	Centering system	Trimble 3-pin
	Optical plummet	Built-in optical plummet
TELESCOPE	Magnification	30x
	Aperture	40 mm (1.57 in)
GENERAL	Autofocus	Standard
	Tracklight built in	Not available in all models
	Operating temperature	-20° C to + 50° C (-4 ° F to + 122° F)
	Dust and water proofing	IP55
	Humidity	100% condensing
POWER SUPPLY	Internal battery	Rechargeable Li-Ion battery 10.8V, 6.5AH, 70Wh
OPERATING TIME[4]	One internal battery	Approx. 6.5 hours
	Three internal batteries in multi-battery adapater	Approx. 18 hours
	Robotic holder with one internal battery	13.5 hours
OPERATIN TIME WITH VIDEO ROBOTIC[4]	One battery	5.5 hours
	Three batteris in multi-battery adapter	17 hours
WEIGHT	Instrument (Servo/Autolock)	5.15 kg (11.35 lb)
	Instrument (Robotic)	5.25 kg (11.57 lb)
	Trimble CU controller	0.4 kg (0.88 lb)
	Tribrach	0.7 kg (1.54 lb)
	Internal battery	0.35 kg (0.77 lb)
	Trunnion axis height	196 mm (7.71 in)
	CommunIcation	USB, Serial, Bluetooth
	Security	Dual-layer password protection

1 Standard clear: No haze. Overcast or moderate sunlight with very light heat shimmer.
2 Range and accuracy depend on atmospheric conditions, size of prisms and background radiation.
3 Kodak Gray Card, Catalog number E1527795.
4 The capacity in –20 °C (–5 °F) is 75% of the capacity at +20 °C (68 °F).
5 Bluetooth type approvals are country specific. Contact your local Trimble Authorized Distribution Partner for more information.
6 Dependent on selected size of search window..
Specifications subject to change without notice.

Contact your local dealer today

Trimble Building Construction Field Systems
10368 Westmoor Drive
Westminster CO 80021 USA
fieldtech@construction.trimble.com

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