Total station Trimble SX12

URL:https://www.sxplc.com/total-station-trimble-sx12

Product data sheet

SURVEY PERFORMANCE		
ANGLE MEASUREMENT		
	Sensor type	Absolute encoder with diametrical reading
	Angle measurement accuracy[1]	1" (0.3 mgon)
	Angle display (least count)	0.1" (0.01 mgon)
AUTOMATIC LEVEL COMPENSATOR		
	Type	Centered dual-axis
	Accuracy	0.5" (0.15 mgon)
	Range	±5.4' (±100 mgon)
	Electronic 2-axis level, with a resolution of	0.3" (0.1 mgon)
	Circular level in tribrach	8'/2 mm
DISTANCE MEASUREMENT		
Accuracy		
Prism mode	Standard[2]	1 mm + 1.5 ppm
	Tracking[2,3]	2 mm + 1.5 ppm
DR mode	Standard[2]	2 mm + 1.5 ppm
Measuring time		
Prism mode	Standard	1.6 s
DR mode	Standard	1.2 s
Range		
Prism mode[4]	1 prism	1 m–5,500 m
DR mode	Kodak White Card (Catalog number E1527795)	1 m–800 m
	Kodak Grey Card (Catalog number E1527795)	1 m–450 m
Autolock® and Robotic Range		
	Autolock range - traverse 50 mm[5]	1 m–800 m
	Autolock range - 360 prism	1 m–300 m[6] / 700 m[5]
	Angle accuracy[1]	1"
SCANNING PERFORMANCE[7]		
GENERAL SCANNING SPECIFICATIONS		
	Scanning principle	Band scanning using rotating prism in telescope
	Measurement rate	26.6 kHz
	Point spacing	6.25 mm, 12.5 mm, 25 mm or 50 mm @ 50 m
	Field-of-view	360° x 300°
	Coarse scan; Full Dome - 360° x 300° Density: 1 mrad, 50 mm spacing @ 50 m	Scan time: 12 minutes
	Standard scan; Area Scan - 90° x 45° Density: 0.5 mrad, 25 mm spacing @ 50 m	Scan time: 6 minutes
RANGE MEASUREMENT		
	Range principle	Ultra-high speed time-of-flight powered by Trimble Lightning technology
Range		
	Kodak White Card (Catalog number E1527795)	0.9 m–600 m
	Kodak Gray Card (Catalog number E1527795)	0.9 m–350 m
Range noise		
	@ 50 m on 18–90% reflectivity	1.5 mm
	@ 120 m on 18–90% reflectivity	1.5 mm
	@ 200 m on 18-90% reflectivity	1.5 mm
	@ 300 m on 18-90% reflectivity	2.5 mm
Scanning Accuracy		
	Scanning Angular Accuracy	5" (1.5 mgon)
	3D position Accuracy @ 100 m[8]	2.5 mm
EDM SPECIFICATIONS		
	Light source	Pulsed laser 1550 nm; Laser class 1M
	Beam divergence DR mode	0.2 mrad
	Laser spot size at 100 m (FWHM)	14 mm
	Atmospheric correction	Available through field and office software