PERFORMANCE

Angle measurement
Accuracy (Standard deviation based on ISO 17123-3) ........................................ 2° (0.6 mgon), 3° (1.0 mgon), or 5° (1.5 mgon)
Angle reading (least count) ........................................ Standard: 1° (0.1 mgon), Tracking: 2° (0.5 mgon)
Distance measurement
Accuracy to Prisms (Standard deviation based on ISO 17123-4) ........................................ 2 mm + 2 ppm (0.007 ft + 2 ppm)
Accuracy Reflectorless Mode
Standard > 30 m (984 ft) ........................................ 3 mm + 2 ppm (0.001 ft + 2 ppm)
Tracking ........................................ 5 mm + 2 ppm (0.0016 ft + 2 ppm)
Range Prism Mode
4000 m (13,123 ft) ........................................ 7000 m (22,966 ft)
Foil Reflector 60 mm .......................... 300 m (984 ft)
Range Reflectorless Mode
Good4 ........................................ 4000 m (13,123 ft)
Normal5 ........................................ 7000 m (22,966 ft)
Difficult6 ........................................ 300 m (984 ft)

EDM SPECIFICATIONS
EDM Laser and Principle
Light source ................................ Laser Diode 660 nm
Prism ....................................... Phase Shift
EDM Beam divergence
Horizontal .................................. 4 cm/100 m (0.13 ft/328 ft)
Vertical .................................... 3 cm/100 m (0.10 ft/328 ft)
Atmospheric Correction ........................................................................... -150 ppm to 160 ppm continuously

GENERAL SPECIFICATIONS
Coarse Leveling
Electronic coarse leveling range ........................................ ±3" (±0.075 mm)
Circular level in tribrach ........................................ 8'/2 mm (8'/0.007 ft)

Drives
Drive system ................................ Spectra Precision StepDrive™ system
Rotation time maximum ........................................ 90°/sec (100 gon/sec)
Rotation time Face 1 to Face 2 ........................................ 3.7 sec.
Positioning time 180° (200 gon) ........................................ 3.5 sec.
Clamps and slow motions ........................................ StepDrive driven, endless fine adjustment

Specifications are subject to change without prior notice.

1 Standard clear: No haze, overcast or moderate sunlight with very light heat shimmer. Range and accuracy are dependent on atmospheric conditions, size of prism and background radiation.
2 Kodak Gray Card, Catalog number E1527795
3 Spectra Precision GeoLock is available on data collectors after station setup.
4 Good conditions (good visibility, overcast, twilight, underground, low ambient light)
5 Normal conditions (normal visibility, object in the shadow, moderate ambient light)
6 Difficult conditions (haze, object in direct sunlight, high ambient light)