FOCUS 8

- 2" and 5" angle accuracy
- Full-featured Survey Pro on-board
- Easy to use Survey Basic with roads software on-board
- Layout Pro license also included
- Up to 500 m (1,640 ft) reflectorless measurement[1]
- Long battery life
- Windows CE
- All-weather construction
- Tough and reliable

The Spectra Precision FOCUS® 8 Total Station offers the versatility of three field software options to choose from.

World class advanced Spectra Precision Survey Pro field software, and straight forward easy to use Survey Basic with Roads software both come pre-installed. Layout Pro field software can also be loaded for construction based layout work, you choose which software is best for you. Whichever you choose, the FOCUS 8 quality and reliability will ensure the best results.

Touch-screen technology improves data workflow speed to access menus and software modes for fast every day data management. Survey Basic with roads software features on-screen guidance, presenting help when and where it is needed, to keep you focused on the task at hand.

Built tough for use on your every day work site in all degrees of dust, dirt, and weather conditions. The large graphic display uses features such as different font sizes, icons, and pop-up menus to make the on-board software system intuitive and easy to learn for maximum efficiency. Combined with clear-to-view quality optics, smart design, and superior components it's what your surveying jobs demand.

Use the FOCUS 8 to reliably measure and save all your topographic and staking needs. This solution includes key features such as:

- Quick coding: for lightning fast feature coding

- CoGo: for your in-field calculations
- Fast measure: configure keys for one touch measurement.

All FOCUS 8 models support Bluetooth communications to external data collectors. In addition, all models come standard with a traditional optical plummet which can be upgraded to a laser plummet. Move your data fast and easily using a USB memory stick.

1 White objects with high reflectivity (KGC 90%). Measuring distance may vary depending on targets and measuring conditions.
2 ±(3+3 ppm × D) mm –20 °C to –10 °C, +40 °C to +50 °C (–4 °F to +14 °F, +104 °F to +122 °F)
3 Measuring time may vary depending on measuring distance and conditions. For the initial measurement, it may take a few more seconds.
4 Battery life specification at 25 °C (77 °F). Operation times may vary depending on the condition and deterioration of the battery.

Total Station

TELESCOPE

Magnification
30× (18x/36x with optional eyepieces)

Effective diameter of objective

2"
40 mm (1.6 in)
2" EDM diameter. 45 mm (1.8 in)

5"
45 mm (1.8 in)
5" EDM diameter. 50 mm (2.0 in)

Minimum focusing distance
1.5 m (4.9 ft)

DISTANCE MEASUREMENT

Reflectorless mode 2"

	Good	Normal	Difficult
KGC (18%)	350 m (1,148 ft	250 m 820 ft	200 m 656 ft)
KGC (90%)	500 m (1,640 ft	400 m 984 ft	250 m 820 ft)

Reflectorless mode 5"

	Good	Normal	Difficult
KGC (18%)	280 m (920 ft	250 m 820 ft	200 m 656 ft)
KGC (90%)	500 m (1,640 ft	500 m 1,640 ft	300 m 984 ft)

With single prism 6.25 cm (2.5 in)
2" 1.5 m to 3,000 m (4.9 ft to 9,843 ft)
5" 1.5 m to 5,000 m (4.9 ft to 16,404 ft)

Accuracy[2] (Precise mode) ISO 17123-4

Prism	±(2+2 ppm × D) mm
Reflectorless	±(3+2 ppm x D) mm

Measuring interval[3]

Prism mode

2" Precise mode	1.6 sec.
5" Precise mode	1.5 sec.
Normal mode	0.8 sec.

Reflectorless mode

2" Precise mode	2.1 sec.
5" Precise mode	1.8 sec.
2" Normal mode	1.2 sec.
5" Normal mode	1.0 sec.

Least count

Precise mode	1 mm (0.002 ft)
Normal mode	10 mm (0.02 ft)

GENERAL SPECIFICATIONS

Operating temperature range
–20 °C to +50 °C (–4 °F to +122 °F)

Atmospheric correction
–40 °C to +60 °C (–40 °F to +140 °F)

Barometric pressure
400 mmhg to 999 mmhg
533 hPa to1,332 hPa
15.8 inhg to 39.3 inhg

Minimum increment
Degree: 1/5/10"
Gon: 0.2/1/2 mgon

ISO 17123-3 accuracy (horizontal and vertical)

2"	0.6 mgon
5"	1.5 mgon

Dust & water protection
IP66

Tilt Sensor

Type
Dual axis

Level vials

Sensitivity of circular level vial
10'/2 mm

Optical plummet

Magnification
3×

Display face 1
VGA,16 bit color, TFT LCD, backlit (320x240 pixel)

Display face 2
Backlit, graphic LCD (128x64 pixel)

Point memory
128 MB RAM, 1 GB Flash memory

Dimensions (W x D x H)
14.9 cm x 14.5 cm x 30.6 cm
(5.8 in x 5.7 in x 12.0 in)

Weight (approx.)

Main unit (without battery)

2"	3.9 kg (8.6 lb)
5"	3.8 kg (8.4 lb)

Battery
0.1 kg (0.2 lb)

Carrying case
2.3 kg (5.1 lb)

Internal Li–ion battery (x2)

Operating time[4]

2"
approx. 12 hours (continuous distance/angle measurement)
approx. 26 hours (distance/angle measurement every 30 seconds)
approx. 28 hours (continuous angle measurement)

5"
approx. 7.5 hours (continuous distance/angle measurement)
approx. 16 hours (distance/angle measurement every 30 seconds)
approx. 20 hours (continuous angle measurement)

Charging time (full charge)
4 hours