

FOCUS 6+

- 2" and 5" angle accuracy
- Up to 500 m (1,640 ft) reflectorless measurement¹
- Long battery life
- On-board data collection
- 25,000 point storage
- Bluetooth communication to data collector
- USB port for convenient data transfer
- All-weather construction
- Tough and reliable
- Accurate distances and stable angles



The Spectra Precision FOCUS[®] 6+ Total Station offers clear-to-view quality optics, smart design, and superior components that your surveying jobs demand. The FOCUS 6+ is a fast measuring device in both Prism (0.8 sec) and Reflectorless (1.0 sec) modes for improving your day-to-day field operations.

For most construction and surveying applications the FOCUS 6+ total station dual display 2" or single display 5" accuracy is ideal. Coupled with its quality, you can be confident that you are achieving this level of accuracy with every measurement.

Hot-swappable dual onboard batteries, the FOCUS 6+ 5" provides full measurement every 30 seconds for 25 hours, and FOCUS 6+ 2" for 57 hours. It's tough, water resistant, and will continue working no matter what the weather brings. A winterized variant is also available for operation in the most extreme cold temperatures.

The Spectra Precision FOCUS 6+ Total Station has intuitive on-board software that is easy-to-use. Want to make your FOCUS 6+ even more powerful. Instead of on-board data collection you can choose to use a Spectra Precision Ranger, T41 or Nomad data collector powered by Survey Pro to maximize performance in the field.

All FOCUS 6+ models support bluetooth communications to external data

collectors and have a USB port for data transfer via USB stick. In addition, all models come standard with a traditional optical plummet which can be upgraded to a laser plummet.

The smart small design of the FOCUS 6+ is convenient and portable for all occasions.

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- 1 White objects with high reflectivity (KGC 90%). Measuring distance may vary depending on targets and measuring conditions.
- 2 $\pm(3+3 \text{ ppm} \times D)$ mm -20°C to -10°C , $+40^\circ\text{C}$ to $+50^\circ\text{C}$ (-4°F to $+14^\circ\text{F}$, $+104^\circ\text{F}$ to $+122^\circ\text{F}$)
- 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

30x (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)

With single prism 6.25 cm (2.5 in)

2" 1.5m 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)

Accuracy² (Precise mode) ISO 17123-4

Prism $\pm(2+2 \text{ ppm} \times D)$ mm

Prism $\pm(3+2 \text{ ppm} \times D)$ mm

Measuring interval³

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)

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 1,312 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

GENERAL SPECIFICATIONS

Operating temperature range

-20 °C to +50 °C (-4 °F to +122 °F)

5" winterized

-30 °C to +50 °C (-22 °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 to 1,332 hPa

15.8 inHg to 39.3 inHg

Minimum increment (Degree, Gon, MIL6400)

Degree: 1/5/10"

Gon: 0.2/1/2 mgon

MIL6400: 0.005/0.02/0.05 mil

DIN 18723 accuracy (horizontal and vertical)

2" 0.6 mgon

5" 1.5 mgon

Dust & water protection

IP66

Tilt sensor

Type

Dual axis

Level vial

Sensitivity of circular level vial

10/2 mm

Optical plummet

Magnification

3x

Display face 1

Graphic LCD (128 × 64 dot); Single side

Display face 2 (2" only)

backlit, graphic LCD(128x64 pixel)

Point memory

25,000 records

Dimensions (W × D × 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" 3.8 kg (8.4 lb)

5" 3.6 kg (8.0 lb)

Battery

0.1 kg (0.2 lb)

Carrying case

2.3 kg (5.1 lb)

Internal Li-ion battery (x2)

Operation time⁴

2"

approx. 19 hours (continuous distance/angle measurement)

approx. 57 hours (distance/angle measurement every 30 seconds)

approx. 62 hours (continuous angle measurement)

5"

approx. 10 hours (continuous distance/angle measurement)

approx. 26 hours (distance/angle measurement every 30 seconds)

approx. 31 hours (continuous angle measurement)

Charging time (Full charge)

4 hours