

FOCUS 4

Total Stations



- 5" Angle accuracy
- 689 ft (210 m) reflectorless measurement
- Accurate distances and stable angles
- Simple to learn and use
- On-board data collection
- External data collection with Survey Pro on a TDS data collector
- All-weather construction
- Long battery life

The Spectra Precision FOCUS 4 Total Station offers clear-to-view quality optics, smart design and superior components your surveying jobs demand. The FOCUS 4 is a fast measuring device in both Prism (0.5 s to 2.0 s) and Non-prism (0.8 s to 3.0 s) modes for improving your day-to-day field operations.

For most construction and surveying applications the FOCUS 4 Total Station's 5" accuracy is ideal. Coupled with its quality, you can be confident that you are achieving this level of accuracy with every measurement.

On a single battery, the FOCUS 4 provides a full measurement every 30 seconds for 15+ hours. It's tough, water resistant and will continue working no matter what the weather brings. The smart small design of the FOCUS 4 is convenient and portable for all occasions.

The Spectra Precision FOCUS 4 has intuitive, on-board software that is easy to use. It has a large configurable display that makes data management simple. The recommended data transfer software for your PC is Connex from TDS. Want to make your FOCUS 4 even more powerful? Instead of on-board data collection you can choose to use a TDS Ranger, Nomad or Recon with Survey Pro for your data collection to maximize performance in the field. When you use a data collector in the field, the recommended companion data transfer software for your PC is ForeSight DXM.

TELESCOPE

Magnification
26× (16×/32× with optional eyepieces)
Effective diameter of objective
1.57 in (40 mm)
Minimum focusing distance
5.3 ft (1.6 m)

Accuracy (Prism/Precise mode)
±(3+2 ppm × D) mm
Accuracy (Reflectorless/Precise mode)
±(5+2 ppm × D) mm

Measuring interval
Prism mode
Precise mode ~1.3 sec. (initial 2.0 sec.)
Normal mode ~0.5 sec. (initial 1.6 sec.)

DISTANCE MEASUREMENT

Reflectorless mode (white target)¹
5.3 ft to 689 ft (1.6 m to 210 m)
Range with specified prisms
Good conditions (no haze, visibility over 25 miles (40 km))
With reflector sheet (5 × 5 cm) 5.3 ft to 980 ft (1.6 m to 300 m)
With single prism
5.3 ft to 16,400 ft (1.6 m to 5,000 m)

Reflectorless mode
Precise mode ~1.6 sec. (initial 2.6 sec.)
Normal mode ~0.8 sec. (initial 2.0 sec.)
Least count
Precise mode ~0.002 ft (1 mm)
Normal mode ~0.02 ft (10 mm)

¹ Kodak Gray card (90% reflective)

GENERAL SPECIFICATIONS

Ambient temperature range
-4 °F to +122 °F (-20 °C to +50 °C)
Atmospheric correction
-40 °F to +140 °F (-40 °C to +60 °C)
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)
5"/1.5 mgon

Display
Graphic LCD (128 × 64 dot); Single side
Point memory
10,000 records

Dimensions (W × D × H)
Approx. 6.6 in × 6.8 in × 13.7 in
(168 mm × 173 mm × 347 mm)

Weight (approx.)
Main unit (with battery)
10.9 lb (4.96 kg)

Tribrach
1.7 lb (0.76 kg)

Clip-on NiMH battery BC-65S
Operation time
Continuous distance/angle measurement
Approx. 6.5 hours (Reflectorless mode: 7 hours)
Distance/angle measurement every 30 seconds
Approx. 15 hours (Reflectorless mode: 16 hours)

Angle measurement every 30 seconds
Approx. 27 hours
(Prism and Reflectorless modes)

Quick charger
Approx. 3.0 hours for full recharge

Water protection
IPX4

Tilt sensor

Type
Single-axis

Level vial

Plate level vial

30"/2 mm

Circular level vial

10"/2 mm

Optical plummet Magnification

10"/2 mm

Circular level vial

4×

