CX-50 Series
Compact X-ellence Station

- RED-tech technology reflectorless EDM
- Reflectorless up to 350 m
- Up to 15 hours battery life
- On-board software
- Red laser pointer
- Waterproof IP66
**SPECIFICATIONS**

**RED-tech Technology Reflectorless EDM**
- Fast distance measurement of 0.9 s.
- Sokkia's traditional pinpoint precision in reflectorless distance measurement.
- Reflectorless operation from 30 cm to 350 m.
- Coaxial EDM beam and laser-pointer provide fast and accurate aiming.
- Ensures accuracy even with reflective sheets.

**Waterproof, Rugged, and Operator Friendly**
- IP66 dustproof / waterproof rating.
- Rugged metal chassis and heavy duty handle.
- Standard usage temperature range -20° to 60°C.

**Advanced Angle Measurement System**
- The CX-50 series features Sokkia’s original absolute encoders which provide long-term reliability in any job site condition. The dual-axis compensator ensures stable measurements even when setup on uneven terrain.
- Sokkia’s traditional motion clamp and tangent screw are employed to ensure stable angle measurement.
- CX-52 features IACS (Independent Angle Calibration System) technology for extremely reliable angle measurement.

**Standard Accessories**
- CX-50 series total station
- Battery (BDC46C)
- Battery charger (CDC68)
- Power cable
- Lens cap
- Lens hood
- Tool pouch
- Screwdriver
- Lens brush
- Adjusting pin x2
- Cleaning cloth
- Operation manual
- Laser caution sign-board
- Carrying case
- Carrying strap

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**CX-50 Series**

- **Model**: CX-52, CX-55
- **Telescope**
  - Magnification / Resolving power: 30x / 2.5"
  - Length: 171 mm
  - Objective aperture: 45 mm (48 mm for EDM)
  - Image: Erect
  - Field of view: 1°30' (26 m/1,000 m)
  - Minimum focus: 1.3 m
  - Reticle illumination: 5 brightness levels
- **Angle Measurement**
  - Display Resolution: 1° / 5° (0.0002 / 0.001 gon, 0.005 / 0.02mil)
  - Accuracy (ISO 17123-3:2001): 2’
  - IACS (Independent Angle Calibration System): Provided
  - Dual-axis compensator / Collimation compensation: Working range: ±6’ (±111 mgon)
    - Collimation compensation available
- **Distance Measurement**
  - Laser output (Reflectorless mode): Class 3R / Prism / sheet mode: Class 1
  - Measuring range (under average conditions): Reflectorless: 0.3 to 350 m
    - Reflective sheet: R920N: 1.3 to 500 m
      - R920N: 1.3 to 300 m
      - R520N: 1.3 to 100 m
    - Mini prisms: CP01: 1.3 to 2,500 m
    - OR1PA: 1.3 to 500 m
  - Display resolution: Fine: 0.001 m / 0.01 ft. / 1/8 in.
    - Rapid: 0.01 m / 0.1 ft. / 1/2 in.
  - Accuracy (ISO 17123-4:2001)
    - (D=measuring distance in mm)
      - Reflectorless: (3 + 2ppm x D) mm
      - Reflective sheet: (3 + 2ppm x D) mm
      - AP/CP prism: (2 + 2ppm x D) mm
  - Measuring time: Fine: 0.9s (initial 1.7s)
    - Rapid: 0.7s (initial 1.4s)
    - Tracking: 0.3s (initial 1.4s)
- **Interface and Data management**
  - Display / Keyboard: Graphic LCD, 192 x 80 dots, backlight, contrast adjustment / alphanumeric keyboard / 25 keys with backlight
  - Control panel location: Both sides
  - Data storage (internal memory): Approx. 5,000 points
  - Interface: Serial RS-232C
- **General**
  - Laser-pointer: Coaxial red laser using EDM beam
  - Leveling: Graphic (6 linear Circle)
  - Optical: Magnification: 3x
    - Minimum focus: 0.3 mm from tribrach bottom
  - Dust and water protection: IP66 (IEC 60529:2001)
  - Operating temperature: 20 to 60°C
  - Size with handle (w x d x h mm): 177 x 181 x 348
  - Weight with battery and tribrach: Approx. 5.4 kg
- **Power supply**
  - Battery (BDC46C): Detachable battery
    - Li-ion rechargeable battery
  - Operating time (20°C): BDC46C: Approx. 15 hours