

PENTAX

W-800

A TRULY INTEGRATED SYSTEM



- **Open Platform** allows you to run major softwares such as PowerTopoCE, SurvCE
- **Graphical Stakeout** display results in real time on colour maps as you measure in the field
- **Increased Productivity** swift and easy connectivity, large colour LCD, 640x480 pixels with touch screen function
- **AF** Pentax's exclusive **Auto Focus** system

Microsoft
Windows CE .net



AHEAD OF VISION

PENTAX W-800 Series Technical Specifications

| Model | | W-822NX | W-823NX | W-825NX | W-835NX | W-822EX | W-823EX | W-825EX | W-835EX |
|----------------------------------|------------------------|---------------|---------|---------|---|---|---------------------------|--|-----------|
| Telescope | Magnification | | | | 30 x | | | | |
| | Optical aperture | | | | 45 mm (EDM 45 mm) | | | | |
| | Resolving power | | | | 3i | | | | |
| | Field of view | | | | 1° 30' (2.6%) | | | | |
| | Minimum focus | | | | 1.0 m | | | | |
| Focus | | | | | Auto-focus + Power Focus + Manual | | | | |
| | | | | | Phase differential | | | | |
| Data Processor | CPU, Clock frequency | | | | Intel Xscale, 400 MHz | | | | |
| | OS | | | | Microsoft Windows CE.NET 4.2 (Pro plus version) | | | | |
| | Internal memory | | | | SDRAM = 64 MB | | | | |
| | | | | | FLASH = 128 MB (built-in) | | | | |
| | Interface | | | | RS-232C USB (USB Mini-B Connector) (ver 1.0) CF Type II Slot SD Slot | | | | |
| | Display | | | | 3.7 inch, Color LCD, 640 x 480 pixels *(5), with back light and touch panel function | | | | |
| | Quantity | 2 | | 1 | | 2 | | 1 | |
| EDM | Key board | | | | 33 keys | | | | |
| | Laser class | | | | Class (IIIa) 3R / Class (II) 2 (Selective) | | | Class (II) 2 | |
| | Distance | | | | 1.5 ~ 270 m | | | N/A | |
| | Measurement Range | | | | 1.5 m ~ 1100 m (1600 m) *(1) | | | | |
| | | | | | 1P | 1.5 m ~ 3500 m (4500 m) *(2) | | 1.5 m ~ 3000 m (4000 m) *(2) | |
| | | | | | 3P | 200 m ~ 4500 m (5600 m) *(2) | | 200 m ~ 4000 m (5000 m) *(2) | |
| | | | | | Reflective sheet | | | 1.5 m ~ 600 m (800 m) *(3) | |
| | Accuracy | | | | Prism, Reflector sheet | ± (2 + 2 ppm x D) mm | | | |
| | | | | | Reflectorless | ± (5 + 2 ppm x D) mm *(4) | ± (5 + 3 ppm x D) mm *(4) | N/A | |
| | Measuring time | | | | Repeat measuring | Normal: Prism, Ref. sheet 2.0 sec. (1 mm) Track: Prism, Ref. sheet 0.4 sec. (1 cm) | | Normal: Prism, Ref. sheet 1.2 sec. (1 mm) Quick mode *(5) | |
| | | | | | Initial measuring | Normal: Reflectorless 2.3 sec. (1 mm) Normal: Prism, Ref. sheet 4.0 sec. (1 mm) | | Normal: Prism, Ref. sheet 2.0 sec. (1 mm) Quick mode *(5) | |
| Application Software | | | | | Selective | | | | |
| Memory | Internal memory | | | | 128 MB | | | | |
| | Memory Card | | | | 2 GB (Max) *(6) | | | | |
| Angle | Method | | | | Absolute Rotary Encoder | | | | |
| Measurement | Accuracy (ISO 17123-3) | 2i (0.6 mgon) | 3i | | 5i | 2i (1.0 mgon) | 3i | | 5i |
| | Compensator | | | | Triple Axis | | | Triple Axis | Dual Axis |
| Tangent screw | | | | | 2 speed | | | 2 speed | 1 speed |
| Calendar clock | | | | | Available | | | | |
| Plummet | | | | | Visible Laser, ±0.8 mm (instrument height 1.5 m) | | | | |
| Plate level (electronic) | | | | | Plate level (electronic) 30i/1div. | | | | |
| Circular level | | | | | 8i/2 mm | | | | |
| Water resistant | | | | | IP54 | | | | |
| Ambient temperature | | | | | -20 C ~ +50 C / -4 F ~ 122 F (Working range) | | | | |
| Battery Pack BP02 | | | | | Ni-MH (Rechargeable) (4300 mAh), DC 6V | | | | |
| | Operation time | | | | Continuous Approx. 3 hrs (ETH+EDM), 8 hrs (ETH) with Approx. 2.2 hrs of charging time | | | | |
| | Weight | | | | Approx. 380g | | | | |
| Charger BC03 and AC Adapter AC01 | | | | | Input voltage: AC100~240 V (AC01) | Output voltage: DC7.5 V (BC03) | | Weight: 280 g | |
| Base | | | | | Detachable | Shifting | Detachable | | Shifting |
| Physical (including Battery) | Instrument Dimension | | | | 197(W) x 347(H) x 217(L) mm (x 187(L) with 1 Display) | | | | |
| | Weight | | | | 6.3 kg | 6.2 kg | 6.3 kg | | 6.2 kg |

*(1), *(2), *(3): Values in () are distance measurement range in good condition *(4) Over 200 to 270 m : ± (7+10 ppm x D) mm *(5) Depending on application software. *(6) Memory card is not supplied with the instrument.

[Note]

- i The measurement range may vary by measurement conditions.
- i Normal conditions: 20 km visibility with slight shimmer.
- i Good conditions: 40 km visibility, overcast, no heat, no shimmer and moderate wind.
- i Reflector sheet: PENTAX genuine reflector sheet (5 cm x 5 cm).
- i Quick Mode, which is effective only under Normal mode (1mm) setting, functions with Prism and Reflector less Sheet. It is incorporated in all X series models and effective up to 500 m.
- i When Quick Mode is on, the EDM accuracy using prism and reflector sheet is ± (3 + 2 ppm x D) mm.
- i When automatic correction is activated in Quick Mode, the EDM accuracy is ± (3 + 10 ppm x D) mm.
- i EDM Measuring time varies according to distance to be measured and conditions of the environment.

i Reflector less:

- The measurement range and accuracy of Reflector less are based on the condition that laser beam is emitted perpendicular to the white side of the Kodak Gray Card.
- The measurement range may be influenced by the shape of the target and its environment.
- The measurement range at TRACK mode is over 5 m.
- It takes time, longer than usual, to measure the distance exceeding 200 m or to measure the distance to the object that is hard to measure.
- The maximum distance that can be shown on the display is 322 m in the non-prism measurement mode.
- The measurement range, accuracy of distance measurement and time required to measure may be influenced by the shape, size of surface area and reflection rate of the target and its environment.

Pentax industrial instruments co. ltd international marketing department

Tel.: +81-3-3960-0502
Fax: +81-3-3960-0509
e-mail: international@piic.pentax.co.jp
www.pentax.co.jp/piic/survey

Pentax technologies europe european headquarters

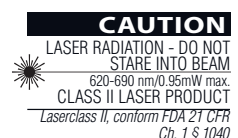
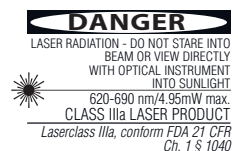
Tel.: +32 2 306 1111
Fax: +32 2 306 1199
e-mail: info_survey@pentaxtech-eu.com

Visit the W-800 series at:

www.pentaxsurveying.com



The CE marking assures that this product complies with the requirements of the EC directive for safety.



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