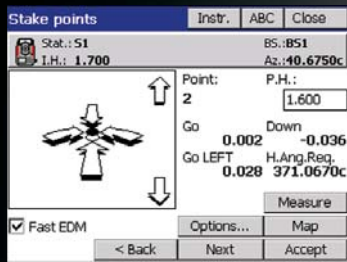




# THE EVOLUTION SERIES W-800

Graphical assistance during stake-out



Power Topo CE  
With Intelligent Cursor

Display results in real time with colour maps as you measure

**PENTAX®**  
Ahead of Vision

# Pentax W-800 Series Specifications

| Model                       |   | W-822NX  | W-823NX                              | W-825NX                                      | W-835NX                              | W-822EX      | W-823EX      | W-825EX   | W-835EX |  |
|-----------------------------|---|--|--------------------------------------|--|--------------------------------------|--------------|--------------|-----------|---------|--|
| <b>Telescope</b>            | Objective aperture  | 45mm (EDM 45mm)  |                                      |  |                                      |              |              |           |         |  |
|                             | Magnification   | 30X  |                                      |  |                                      |              |              |           |         |  |
|                             | Resolving power   | 3"   |                                      |  |                                      |              |              |           |         |  |
|                             | Field of view   | 1°30'  |                                      |  |                                      |              |              |           |         |  |
|                             | Minimum focus distance  | 1.0m   |                                      |  |                                      |              |              |           |         |  |
|                             | Focus   | Auto focus + Power focus + Manual focus  |                                      |  |                                      |              |              |           |         |  |
| <b>Angle measurement</b>    | Measuring method  | Absolute Rotary Encoder  |                                      |  |                                      |              |              |           |         |  |
|                             | Minimum angle display   | 1"   |                                      |  |                                      |              |              |           |         |  |
|                             | Standard deviation (Angle)  | 2" (0.6mgon)   | 3" (1.0mgon)                         | 5" (1.5mgon)                                 | 2" (0.6mgon)                         | 3" (1.0mgon) | 5" (1.5mgon) |           |         |  |
|                             | Compensator   | Triple Axis  |                                      | Dual Axis                                    |                                      | Triple Axis  |              | Dual Axis |         |  |
|                             | Working range   | 3'   |                                      |  |                                      |              |              |           |         |  |
| <b>Distance measurement</b> | Accuracy: Reflecterless   | ±(5+2ppm x D)mm<br>(>270m: ±(7+10ppm x D)mm)   |                                      | ±(5+3ppm x D)mm<br>(>270m: ±(7+10ppm x D)mm) |                                      | N/A          |              |           |         |  |
|                             | Reflective sheet  | ±(2+2ppm x D)mm  |                                      |  |                                      |              |              |           |         |  |
|                             | Prism   | ±(2+2ppm x D)mm  |                                      |  |                                      |              |              |           |         |  |
| Distance measurement:       | Reflecterless   | 1.5 - 270m (or more, still to be confirmed)  |                                      |  |                                      | N/A          |              |           |         |  |
|                             | Reflective sheet  | 1.5 - 600m (good conditions: 800m)   |                                      |  |                                      |              |              |           |         |  |
|                             | Mini Prism  | 1.5 - 1100m (good conditions: 1600m)   |                                      |  |                                      |              |              |           |         |  |
| Prism:                      | 1P  | 1.5 - 3400m (good conditions: 4500m)   | 1.5 - 3000m (good conditions: 4000m) | 1.5 - 3400m (good conditions: 4500m)         | 1.5 - 3000m (good conditions: 4000m) |              |              |           |         |  |
|                             | 3P  | 200 - 4500m (good conditions: 5600m)   | 200 - 4000m (good conditions: 5000m) | 200 - 4500m (good conditions: 5600m)         | 200 - 4000m (good conditions: 5000m) |              |              |           |         |  |
|                             | 9P  | -  |                                      |  |                                      |              |              |           |         |  |
| Measurement time:           | Normal  | Prism, Ref.sheet 2.0sec. (1mm) [Initial measure: Reflecterless 2.3sec. (1mm)] (not confirmed yet)  |                                      |  |                                      |              |              |           |         |  |
|                             | Fast  | Prism, Ref.sheet 1.2sec.(1mm) [Initial measure: Prism, Ref.sheet 2.5sec.(1mm)] (not confirmed yet) |                                      |  |                                      |              |              |           |         |  |
|                             | Tracking  | Prism, Ref.sheet 0.4sec. (1cm) (not confirmed yet)   |                                      |  |                                      |              |              |           |         |  |
| Laser class                 | Class 3R/ Class 2 (Selective)   |  |                                      |  | Class 2                              |              |              |           |         |  |
| <b>Miscellaneous</b>        | Plate Vial sensitivity  | 30" / 2mm  |                                      |  |                                      |              |              |           |         |  |
|                             | Circular level sensitivity  | 8' / 2mm   |                                      |  |                                      |              |              |           |         |  |
|                             | Laser Plummet: type   | Visible Laser  |                                      |  |                                      |              |              |           |         |  |
|                             | Optical Plummet: Magnification  | -  |                                      |  |                                      |              |              |           |         |  |
|                             | Field of view   | -  |                                      |  |                                      |              |              |           |         |  |
|                             | Focusing range  | -  |                                      |  |                                      |              |              |           |         |  |
|                             | OS  | Microsoft Windows CE .NET 4.2  |                                      |  |                                      |              |              |           |         |  |
|                             | CPU Clock frequency   | 400 MHz  |                                      |  |                                      |              |              |           |         |  |
|                             | Internal memory RAM   | SDRAM: 64MB  |                                      |  |                                      |              |              |           |         |  |
|                             | ROM   | Flash: 128MB (built-in)  |                                      |  |                                      |              |              |           |         |  |
|                             | Interface   | RS-232C, USB 1.1(USB Mini-B Connector), CF Type II Slot, SD Slot                                   |                                      |  |                                      |              |              |           |         |  |
|                             | Display: type   | Translucent LCD, 640X480 pixels, 3.7 inch TFT Color LCD (touch panel), with Backlight              |                                      |  |                                      |              |              |           |         |  |
|                             | quantity  | 2  | 1                                    |  | 2                                    | 1            |              |           |         |  |
|                             | Keyboard  | 33 keys  |                                      |  |                                      |              |              |           |         |  |
|                             | Water resistance  | IP54 (still to be finalized)   |                                      |  |                                      |              |              |           |         |  |
| Dimension (mm)              | 197(W) x 347(H) x 277(L)mm  |  |                                      |  |                                      |              |              |           |         |  |
| Weight                      | 6.3kg   |  | 6.1kg                                |  | 6.3kg                                |              | 6.1kg        |           |         |  |
| <b>Software</b>             | PowerTopo CE is very practical and user-friendly, it is easy to use on the field and at the same time equipped with advanced functions both for survey and staking. The presence of a graphic CAD allows to verify directly the object of the survey compared, for example, to an existing map or to complete, on field, the survey drawing |  |                                      |  |                                      |              |              |           |         |  |

\* Designs and specifications are subject to change without notice. - © PENTAX 2006 - AS591320 - SURVEY01/1/10/06

**PENTAX Industrial Instruments Co., Ltd.**  
**World Headquarters**  
 2-5-2 Higashi-Oizumi  
 Nerima-ku, Tokyo 178-8555, Japan  
 Tel.: +81 3 5905 1222  
 Fax: + 81 3 5905 1225  
 e-mail: international@piic.pentax.co.jp  
 www.pentax.co.jp/piic/survey

**European Headquarters**  
**PENTAX Technologies Europe-Surveying Div.**  
 Weiveldlaan 3-5  
 B-1930 Zaventem, Belgium  
 Tel.: +32 2 306 1111  
 Fax: +32 2 306 1199  
 e-mail: info\_survey@pentaxeurope.com

Visit the R-300X series at: [www.pentaxsurveying.com](http://www.pentaxsurveying.com)

**CAUTION**  
 LASER RADIATION - DO NOT STARE INTO BEAM  
 620-690 nm/0.95mW max.  
**CLASS II LASER PRODUCT**  
 Laserclass II, conform FDA 21 CFR Ch. 1 § 1040

**DANGER**  
 LASER RADIATION - DO NOT STARE INTO BEAM OR VIEW DIRECTLY WITH OPTICAL INSTRUMENT INTO SUNLIGHT  
 620-690 nm/4.95mW max.  
**CLASS IIIa LASER PRODUCT**  
 Laserclass IIIa, conform FDA 21 CFR Ch. 1 § 1040



**JSIMA**  
 Japan Surveying Instruments Manufacturers' Association  
 Member symbol of the Japan Surveying Instruments Manufacturers' Association representing the high quality surveying products.

Your Official Pentax Dealer