



## ■ More accurate measurement

Measure angle more accurate, supported by our absolute encoder and distance, and measure distance more accurate, supported by our powerful EDM unit.

#### Faster and more convenient measurement

Measure more points per day due to faster measurement and stakeout (including guide light, trigger key for instant measuring), supported by our comprehensive and user-friendly software.

## More reliable result

Use both X-axis and Y-axis compensators to ensure the reliability of your measurement result.

# ■ Rich software applications

Experience rich applications, including offsets, tie distance, area & volume, remote height, reference line/arc, construction and 2D road, to meet your filed measurement needs.

### ■ High quality, designed for harsh environments

Operate the device even under harsh environments (like dust, mud, rain, extreme heat and cold) for many years, supported by its high level of quality.

E3 / E3L is a high precision manual total station, with accurate angle and distance measurement. It can work reliably and deliver accurate results even in harsh environments. And its simple operations make most survey and stakeout tasks more easily and efficiently.

# Specification





| Angle Measurement  |                  |    |    |
|--------------------|------------------|----|----|
| Reading system     | Absolute encoder | √  | V  |
| Display resolution | 1" / 5" / 10"    | √  | √  |
| Accuracy           | 2"               | N. | 2/ |

| Minimum reading     |   | 0.0001 m | 0.001 m      |
|---------------------|---|----------|--------------|
| Measurement display | 10 digits   | √        | √            |
| Range               | <ul><li>Prism: 2 - 3000 m</li><li>Reflector: 2 - 800 m</li><li>Non-Prism: 2 - 800 m</li></ul> | <b>V</b> | $\checkmark$ |
| Accuracy            | <pre>Prism: ± (2 mm + 2 ppm • D) Reflector: ± (3 mm + 2 ppm • D) Non-Prism:</pre>             | √        | V            |

| Telescope            |         |           |          |
|----------------------|---------|-----------|----------|
| Magnification        | 30x     | V         | V        |
| Field angle          | 1°30'   | <b>V</b>  | √        |
| Minimum focus        | 1 m     | <b>V</b>  | <b>V</b> |
| Objective aperture   | 50 mm   | √         | <b>√</b> |
| Image                | Erect   | √         | V        |
| Resolution           | 3"      | √         | V        |
| Reticle illumination | •       | 10 levels | 1 level  |
| Laser pointer        | Support | <b>V</b>  | V        |
| Guide light          | Support | V         | <b>√</b> |

| Compensator            |           |   |   |
|------------------------|-----------|---|---|
| Compensator type       | Dual axis | √ | √ |
| Compensator range      | ±3'       | √ | V |
| Compensator resolution | 1"        | √ | V |

| Measurement Time                    |   |   |   |
|-------------------------------------|---|---|---|
| Tracking/rapid/fine 0.2 s / 0.6 s / | s | √ | √ |

| Level Vial Sensitivity |            |              |   |
|------------------------|------------|--------------|---|
| Plate level            | 30" / 2 mm | √            | √ |
| Circular level         | 8' / 2 mm  | $\checkmark$ | √ |

| Laser Plummet  |                          |   |   |
|----------------|--------------------------|---|---|
| Laser accuracy | ±1 mm within 0.8 - 1.5 m | √ | √ |
| Laser spot     | ≤2 mm within 0.8 - 1.5 m | √ | √ |
| Wavelength     | 635 nm                   | √ | √ |
| Safety         | Class 2                  | √ | √ |
| Output power   | 0.7 - 1.0 mW             | V | √ |





| Data Management        |  |              |           |
|------------------------|--|--------------|-----------|
| Memory                 | 50,000 points  | V            | √         |
| SD card                | 8 GB   | $\checkmark$ | √         |
| Bluetooth              | Support  | √            | √         |
| Software Menu Style    |  |              |           |
| Text-based             | Support  | √            | ×         |
| Icon-based             | Support  | ×            | $\sqrt{}$ |
|                        |  |              |           |
| Battery                |  |              |           |
| Voltage                | DC 7.4 V   | √            | √         |
| Capacity               | 2600 mAh   | √            | √         |
| Alert                  | <ul><li>Low voltage</li><li>Power off automatically after 10 minutes</li></ul>   | √            | √         |
| Working time           | <ul> <li>Angle and distance measurement: &gt;8 hours<br/>(measure distance every 30 seconds)</li> <li>Angle measurement: &gt;12 hours</li> </ul> | √            | √         |
| Charge time            | 4 hours  | √            | √         |
|                        |  |              |           |
| Physical Specification |  |              |           |
| Dimension              | 170 x 190 x 345 mm   | V            | √         |
|                        | = Alphanumariaal kauhaard  | 1            | 1         |

| Physical Specification   |  |                  |                          |
|--------------------------|--|------------------|--------------------------|
| Dimension                | 170 x 190 x 345 mm   | √                | √                        |
| Screen                   | <ul> <li>Alphanumerical keyboard</li> <li>Dual screens</li> <li>30 x Keys (per side)</li> <li>Graphic LCD (8 lines)</li> </ul> | V                | <b>V</b>                 |
| Key for fast measurement | Support  | √                | √                        |
| Interface                | RS-232C, SD card, mini USB   | √                | √                        |
| Water/dust proof         | IP55   | √                | √                        |
| Working temperature      | -20°C - +50°C  | √                | √                        |
| Storage temperature      | -40°C- +70 °C  | √                | √                        |
| Prism constant range     |  | -99.9 - +99.9 mm | -999.9 - + 999.9 mm      |
| Atmos correction PPM     |  | -499 - +499 ppm  | Automatically calculated |
| Certificate              | CE, FCC  | √                | √                        |





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