

# eSA3

## PORTABLE SMART ANTENNA EMPOWERING EVERY GIS APP

The eSurvey eSA3 is a newly developed intelligent wearable portable smart antenna that provides professional-level positioning data and is compatible with all Android and iOS devices.



### Full Constellations and Multi-frequency

Ensure stable signal reception in complex environments with 1408 channels covering all major GNSS constellations and full frequencies.

### Rugged and Durable

Withstand harsh field conditions featuring IP67 protection, -20°C~+65°C operating temperature, and 1.6m drop resistance.

### Centimeter-Level Positioning

Meet professional high-precision needs with centimeter-level accuracy by delivering 8mm+1ppm planar and 15mm+1ppm elevation precision.

### Ideal for Most GIS Applications

Integrate seamlessly into most GIS workflows without separate adaptation by directly providing differential corrections to their applications.

### Support for B2b-PPP and E6-HAS Services

Elevate standalone positioning accuracy and adaptability by supporting B2b-PPP and E6-HAS services.

### Device Network (4G) for Differential Data Acquisition

Acquire differential data directly by inserting a Nano SIM card to enable the device's 4G network.



# Product Specification

## eSA3

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### GNSS Performance

|                     |                                                                                                                                                                                                                                       |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Channels            | 1408                                                                                                                                                                                                                                  |
| Satellites tracking | <ul style="list-style-type: none"><li>■ GPS: L1C/A, L2P(W), L5</li><li>■ GLONASS: L1, L2</li><li>■ GALILEO: E1, E5a, E5b, E6</li><li>■ BDS: B1I, B2I, B3I, B1C, B2a, B2b</li><li>■ QZSS: L1, L2, L5</li><li>■ SBAS: Support</li></ul> |
| Position accuracy   | <ul style="list-style-type: none"><li>■ RTK H: 8mm+1ppm, V: 15mm+1ppm</li><li>■ Single H: 1.5 m, V: 2.5 m</li><li>■ Tilt accuracy with RTK fixed solution:<br/>3.0 cm for 0°-30°,<br/>5.0 cm for 30-60°</li></ul>                     |
| Cold start          | ≤30 seconds                                                                                                                                                                                                                           |
| Hot start           | ≤5 seconds                                                                                                                                                                                                                            |
| Speed accuracy      | ≤0.03 m/s                                                                                                                                                                                                                             |

### Electrical

|               |            |
|---------------|------------|
| Input voltage | 5V dc / 2A |
|---------------|------------|

### Data Interface

|             |               |
|-------------|---------------|
| Bluetooth   | Yes           |
| Type-C port | 1 Type-C port |

### User Interface

|           |                                                                                                  |
|-----------|--------------------------------------------------------------------------------------------------|
| Button    | Power button x1                                                                                  |
| Indicator | <ul style="list-style-type: none"><li>■ Power indicator x3</li><li>■ Data indicator x1</li></ul> |
| Buzzer    | Yes                                                                                              |

### Physical

|           |                       |
|-----------|-----------------------|
| Dimension | 136 mm x 68mm x 32 mm |
|-----------|-----------------------|

### Environment

|                       |                     |
|-----------------------|---------------------|
| Operating temperature | -20°C - +65°C       |
| Storage temperature   | -40°C - +80°C       |
| Water/dust-proof      | IP67                |
| Shock resistance      | 1.6 m free drop     |
| Humidity              | 95% No condensation |