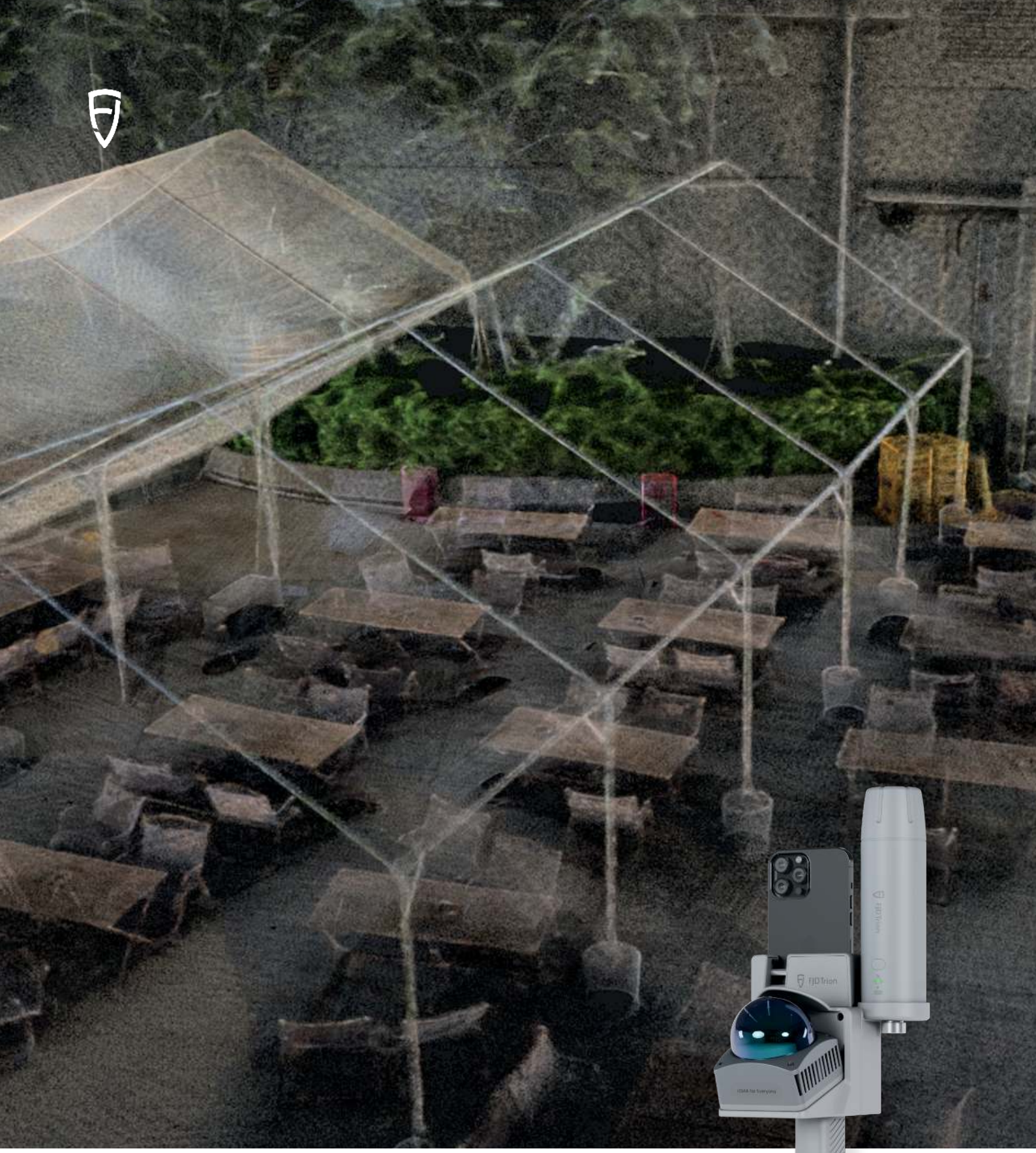
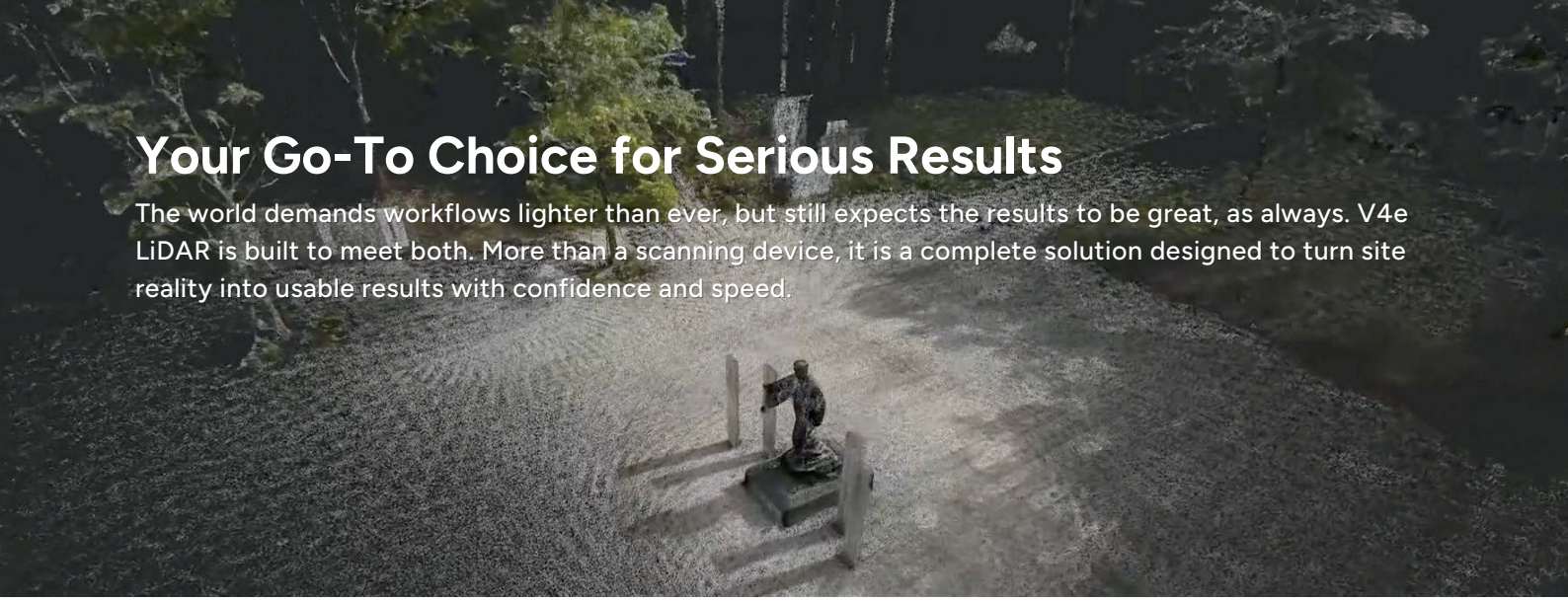


# FJDTrion V4e LiDAR

The easy way into 3D scanning



# Your Go-To Choice for Serious Results

The world demands workflows lighter than ever, but still expects the results to be great, as always. V4e LiDAR is built to meet both. More than a scanning device, it is a complete solution designed to turn site reality into usable results with confidence and speed.

## Built for Teams at Every Stage

### New to 3D scanning and ready to bring clarity into your projects?

V4e LiDAR is a straightforward entry into professional reality capture.

### Already experienced in the field?

V4e LiDAR delivers reliable performance, reduces overhead, and scales output without adding complexity.

## One Kit, Two Solutions

### Meet V4e Combo: Pin It to the Map

Powered by GNSS positioning, V4e Combo brings outdoor 3D scans into real-world coordinates. Produce georeferenced point clouds that align seamlessly with plans, layouts, and downstream workflows.

### Meet V4e LiDAR: Indoor Scanning Made Simple

Designed for mobility, V4e LiDAR delivers accurate indoor scans with a lightweight design and efficient setup. Move quickly through spaces, reduce rechecks, and get every job done correctly on the first pass.

## Precise Scan on Every Pass

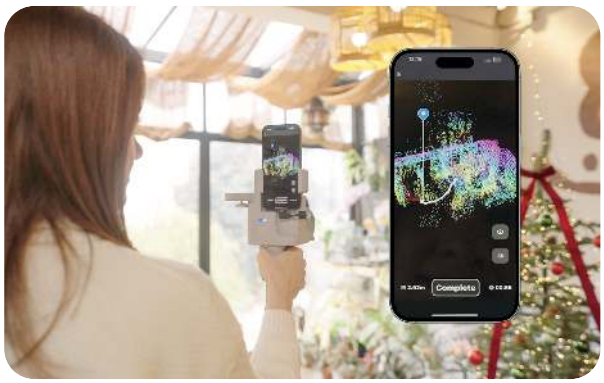
Capture 154,600 points per second, every time. Each walkthrough delivers dense, accurate data, so the first scan is the one you keep.

## Portable But Mighty

Say goodbye to sore hands. With a main unit at about 890 g and 5+ hours of runtime, V4e LiDAR won't slow you down or wear you out.

## Plug and Play, Ready in 60s

Designed to get you moving fast. With just a few compact parts, even first-time users can start scanning in about a minute.

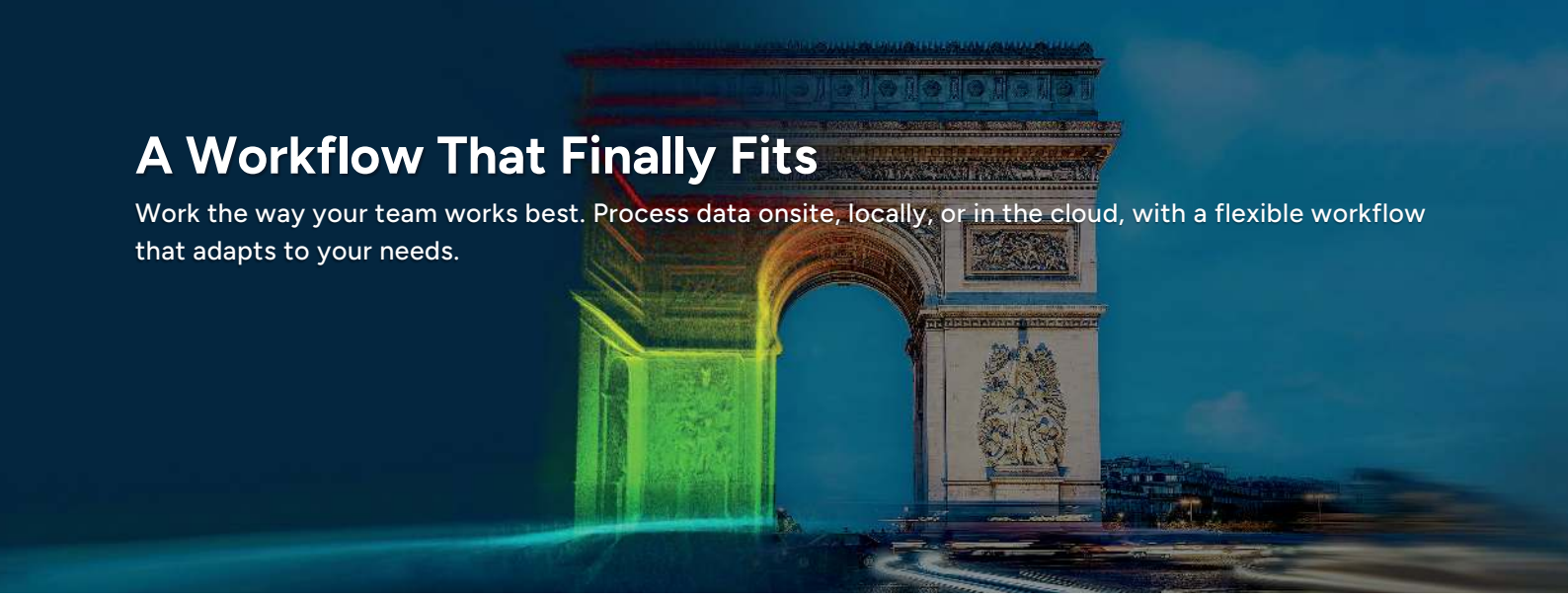



## Reality, Digitized as You Walk

Watch the point cloud come together as you move through the space. Live preview turns the real world into a detailed digital twin in real time.

## Scan Anywhere

From tight interiors to open sites, V4e LiDAR helps you say YES to more projects with certainty.



# A Workflow That Finally Fits

Work the way your team works best. Process data onsite, locally, or in the cloud, with a flexible workflow that adapts to your needs.

## One Scan, Multiple Deliverables

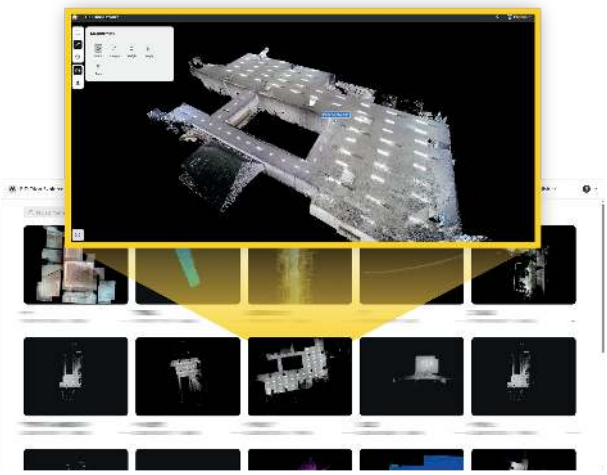
Capture once and deliver more. Generate point clouds, BIM-ready files, meshes, and more, all within FJD Trion Model.

## Onsite Processing, Made Real

Process and review data directly on your pad while still on site. FJD Trion brings real-time feedback into the field, helping teams confirm results before leaving the job.

## Light as a Cloud

Sync scans to FJD Trion Model Web for fast sharing, review, and collaboration. Teams stay aligned without being limited by device performance or local storage.



# SPECIFICATIONS

## LiDAR

| | |
|---|---|
| **Laser Wavelength** | 905 nm ±5nm |
| **Eye Safety Rating** | Class 1 (IEC 60825-1:2014) |
| **Detection Range** | 0.05–50 m (90% reflectivity) |
| | 0.1–25 m (10% reflectivity) |
| **Minimum Detection Distance** | 0.05 m |
| **Field of View (FOV)** | Horizontal: 360° |
| | Vertical: -10° to 60° |
| **Post-Processed Point Cloud Accuracy*** | 1 cm (Relative) |
| | 3 cm (Absolute) |
| **Sampling Rate** | >200 kHz |
| **Point Cloud Output** | 154,600 points/s @ 70° vertical FOV |

*Lab-tested accuracy; actual results may vary

## Mobile Compatibility

| | |
|---|---|
| **iOS** | Compatible with iPhone 15 and later |
| **Android** | Compatible with Samsung Galaxy S20 and later |

## Electrical & Interface Specificaions

| | |
|---|---|
| **Charging Specifications** | 5 V / 3 A |
| **Lithium Battery** | 3.6 V / 6,700 mAh |
| **Power Consumption** | <5 W (at 25 °C) |
| **Charging Time** | ≤3 hours |
| **Operating Time** | ≥5 hours |
| **Data Port** | USB 3.0 |
| **Charging Port** | USB 2.0 (Charging / Data) |
| **Firmware Upgrade** | OTA (Over-the-Air) |

## Physical Characteristics

| | |
|---|---|
| **Dimensions (L × W × H)** | 137 × 155 × 250 mm |
| **Weight** | Approx. 890 g |
| **Mounting Interface** | 5/8-inch internal threaded mount |
| **Operating Temperature** | -20 °C to 60 °C |
| **Charging Temperature** | 0 °C to 45 °C |

# V4e & V4e Pro

## GNSS

| | |
|---|---|
| **BDS (Beidou)** | B1I, B2I, B3I, B1C, B2a, B2b* |
| **GPS** | L1 C/A, L2P, L5 |
| **GLONASS** | G1, G2 |
| **Galileo** | E1, E5b, E5a, E6* |
| **QZSS** | L1, L2, L5 |
| **SBAS** | L1 C/A |
| **Parallel Channels** | 1408 |

*Supported firmware versions coming soon

## Data Types

| | |
|---|---|
| **Differential Data Formats** | RTCM 2.3, RTCM 3.x, CMR |
| **Output Data Format** | NMEA-018 |

## Precision and Reliability

| | |
|---|---|
| **Signal Reacquisition Time** | ≤1 s |
| **Time to First Fix (TTFF)** | Cold start: ≤30 s, Hot start: ≤5 s |
| **RTK Initialization Time** | <5 s |
| **Initialization Data Reliability** | >99.9% |
| **Data Update Rate** | Measurement & positioning: |
| | 1 Hz, 2 Hz, 5 Hz, 10 Hz, 20 Hz |
| **Single Point Positioning Accuracy (RMS)** | H: ≤1.5 m, V: ≤2.5 m |
| **DGPS (RMS)** | H: ≤0.4 m, V: ≤0.8 m |
| **RTK (RMS)** | H: ≤0.8 cm + 1 ppm, V: ≤1.5 cm+1 ppm |
| **Time Accuracy (RMS)** | 20 ns |
| **Speed Accuracy (RMS)** | 0.03 m/s |
| **Laser Tilt Measurement Accuracy (V4e Pro)** | |
| | ≤3 cm error at 3 m distance (θ ≤ 30°) |
| **Tilt Measurement Accuracy (V4e Pro)** | |
| | 3D error ≤2.5 cm (θ ≤ 30°); 3D error ≤3.5 cm (θ ≤ 60°) |

FJDTrion

## Contact Us


www.fjdtrion.com

FJDTrionOfficial

fjd_trion

FJD Trion

sales@fjdtrion.com