

TrueView 535

TrueView 535 3D Imaging System Upgraded with Three New 26 MP Cameras – Version C

The TrueView 535 builds upon the success of our best-selling TrueView 515. We've added a third LiDAR beam return to improve vegetation capture detail, two 26 MP oblique cameras and a third 26 MP nadir camera to improve photogrammetry deliverables. The longer usable LiDAR range increases flexibility. Dual drone and optional mobile mapping capability available.



LiDAR Sensor

- **Sensor:** HESAI XT32M2X
 - 905 nm Class 1 eye safe
- **Range:** Max 300 m, typical 120 m at 20%.
- **Accuracy:** +-1 cm and precision 0.5 cm typical 1 sigma
- **Number of Lasers:** 32 channels spread over 40 deg (-20.8, +19.5)
- **Total Pulse Rate:** 640,000 pts per second for single return, up to 1,920,000 points/sec 3 returns
- **Rotation Speeds:** 5-20 Hz
- **Beam Spot Size:**
 - In deg: 0.087 * 0.131
 - At 80 m: 12 cm by 18 cm
- **Returns:** 3

Platform

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| <ul style="list-style-type: none"> • Size: <ul style="list-style-type: none"> • Length: 313 mm • Width: 146 mm • Height: 212 mm • Weight: <ul style="list-style-type: none"> • 1.75 kg for payload • 2.23 kg for payload with batteries & accessories | <ul style="list-style-type: none"> • Power Consumption: 38 W • Operating Voltage: 12-34V • Operating Temperature: -15C-50C |
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Applications

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| <ul style="list-style-type: none"> • Densely Vegetated Topography • Stock Pile Volumetric Calculation • Vertical Structures | <ul style="list-style-type: none"> • Wire Extraction - Distribution • Vegetation Encroachment |
|---|---|

System

- **Control:** WIFI + button control
- **Storage:** 128 GB internal storage + 32 GB external

Navigation Solution

- **INS:** Trimble Applanix APX15EI
- **Post-Processing Options:**
 - Single Base
 - PP-RTX (no base station) with fast convergence
 - SmartBase
- **Performance (PPK):**
 - 0.03-0.05 RMSE
 - Better than 0.08° heading, 0.025 pitch & roll

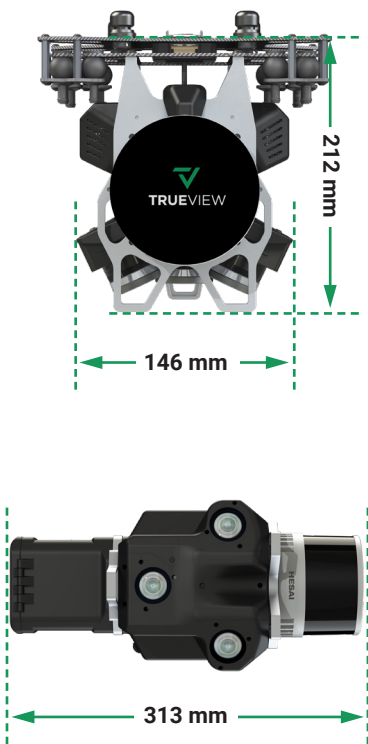
Cameras

- **Type:** 3 * 26 MP Sony mechanical leaf shutter, calibrated
- **Motion Blur:** 0.27 pixel @5 m/s @ 80 m
- **FOV:** 113° FOV configuration

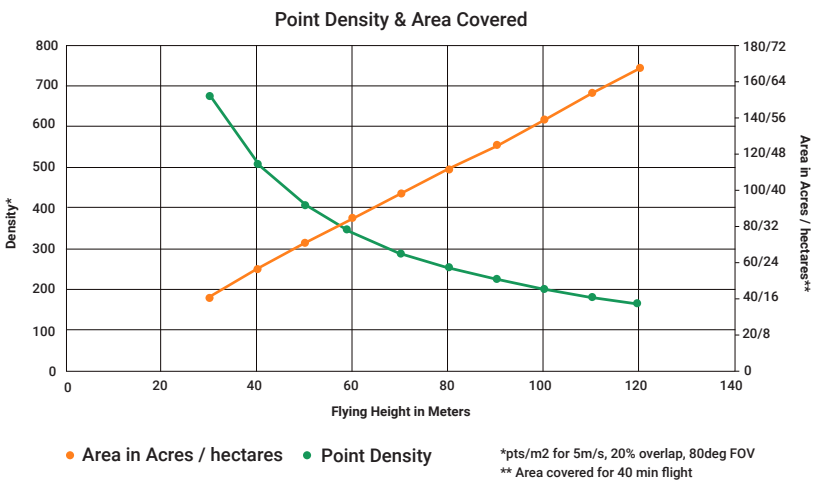
Processing Modules

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| <ul style="list-style-type: none"> • LP360 Drone (included with the following processing modules) <ul style="list-style-type: none"> • Strip Adjustment • Photo • 3D Accuracy • Optional Add On's <ul style="list-style-type: none"> • Business Intelligence • Unlimited Project • Metashape Console | <ul style="list-style-type: none"> • LP360 Cloud (optional) <ul style="list-style-type: none"> • Access <ul style="list-style-type: none"> - Store & Share • Starter <ul style="list-style-type: none"> - Stream & View Data - Power Search - Automatic Ground Classification |
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Payload Specifications



Performance Data

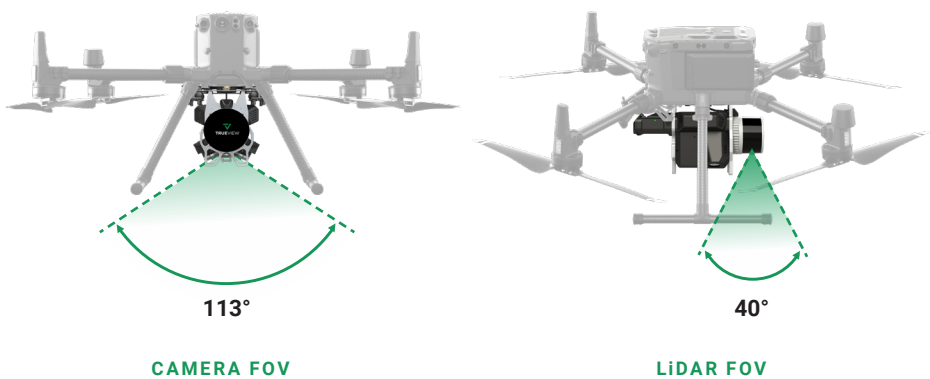


Accuracy/Precision	
Precision Observed on One Strip:	Typical 20 mm, less than 15 mm (1 sigma) observed at 75 m on concrete
Global Accuracy	Typical 3 cm RMSE, better than 5 cm 3D RMSE – depending on GNSS conditions, accuracy of control points and coordinate system

Features

- Quick Connect to Drone**
 Compatible with other TrueView payloads (plug and play with TV680, TV720, etc.)
- Optional Battery**
 Available if connection to UAV is not available
- 3 Calibrated Cameras**
 Providing true colorization over 113°

TV535 Field of View (FOV)
 40° FOV in track allow to cover vertical surfaces in the direction of the flight



Compatible Brands