



# Trinity<sup>TM</sup> Pro

## Cameras

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Sophisticated cameras  
Easy swapping and access to data



TRINITY PRO

SONY RX1 RII

# Sony RX1 RII

## RGB Camera

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The Sony RX1 RII meets the highest demands for RGB image quality and resolution in everyday surveying and monitoring applications, especially in the mining, civil survey, and agricultural sector.



With its resolution of 42.4 megapixels, the Sony RX1 RII is ideal for all applications where the highest requirements are placed on the images. The output possibilities vary from precise data sets like digital ortho photos (DOP),

digital terrain models (DTM), digital surface models (DSM), high-resolution point clouds and detailed 3D models.

# Sony RX1 RII

## Technical Specifications



Sensor Resolution	42.4 MP (7952 × 5304 px)
GSD	1.29 cm @100m AGL
Trigger Interval	1.4 seconds
Sensor Type	CMOS
Sensor Format	Full frame
Sensor Size	35.9 mm × 24.0 mm
Lens	f=35 mm, F2.0
Payload Weight RTF	693,7 g
Storage	SD-Card (internal slot)

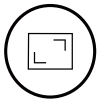
## Sample Data



**FLIGHT ALTITUDE**  
120 m | 393 ft AGL



**FLIGHT SPEED**  
17 m/s



**GSD**  
1.55 cm/px



**DOWNLOAD**  
SAMPLE DATA





TRINITY PRO

OBLIQUE D2M

# Oblique D2M

## Five-lens RGB Camera

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The Oblique D2M is a powerful oblique imaging system consisting of five high-resolution multidirectional cameras, making it the ideal tool for large scale 3D photogrammetry.



A fast trigger interval along with custom high-speed storage provides class-leading time efficiency without compromising data quality. The payload combines four oblique and one NADIR camera to capture complex geometries with ease.

This ensures remarkable detail even on slanted surfaces and makes Oblique D2M destined for 3D mesh generation of high-rise areas, industrial environments, archaeological sites and alike.

# Oblique D2M Technical Specifications



GSD	1.50 cm @100m AGL
Cameras	1 x NADIR, 4 x oblique
Sensor Resolution	26 MP (6252 x 4168 px)
Total Resolution	130 MP
Trigger Interval	≥ 0.8 seconds
Sensor Type	CMOS
Sensor Format	APS-C
Sensor Size	23.5 x 15.6 mm
Focal Length	25 mm NADIR, 35 mm (oblique)
Payload Weight RTF	833.7 g
Flight Time	60 minutes
Storage	High speed data storage device (640 GB)

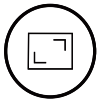
## Sample Data



**FLIGHT ALTITUDE**  
120 m | 393 ft AGL



**FLIGHT SPEED**  
17 m/s



**GSD**  
1.8 cm/px



**DOWNLOAD**  
SAMPLE DATA







TRINITY PRO

QUBE 240

# Qube 240

## LiDAR Scanner

The Qube 240 is a geomatics grade LiDAR scanner providing essential information by generating an accurate point cloud of the processed environment through 240,000 distance measurements per second.



The Qube 240 produces images with an unmatched level of accuracy that is achieved with the help of the integrated Applanix APX15 INS. It generates precise, three-dimensional information using the shape of the earth and its surface characteristics. This information can then be used in applications, such as calculating stock

volumes in mines, inspecting power lines, gathering elevation models of ground under dense vegetation, or for calculating biomass feedstocks. LiDAR technology can also be used for mapping infrastructure and for surveying large areas, even at night.

# Qube 240

## Technical Specifications



Wavelength	905 nm
Maximum Altitude	140 m AGL
Suggested Altitude	100 m AGL
Precision	1.8 - 2.5 cm*
Accuracy	< 3 cm**
Scanner Field of View	70°
Shots per Second	240,000
Point Density @100 m	50 -100 points/m <sup>2</sup>
Multi-echo Technology	up to 3 echoes per shot
Payload Weight RTF	948.7 g
Flight Time	60 minutes

- Class 1 (Eye Safe)
- Applanix POSPac™ UAV, GNSS and INS software for PPK (license for one year included)
- YellowScan Cloudstation Software to generate survey grade LAS files (license must be bought separately)

\* Precision, also called reproducibility or repeatability, accounts for the variation in successive measurements taken on the same target. Depends on altitude AGL

\*\*Accuracy is the degree of conformity of a measured position to its actual (true) value.

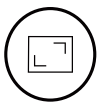
## Sample Data



**FLIGHT ALTITUDE**  
80 m | 262 ft AGL



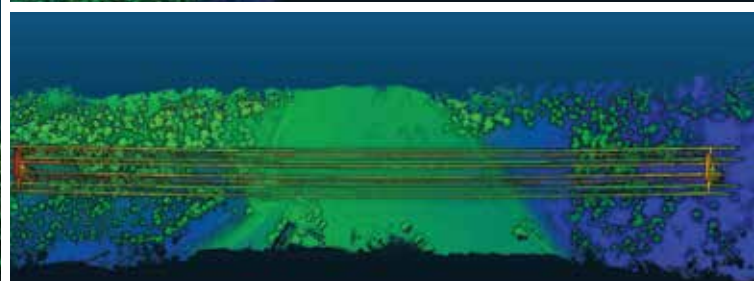
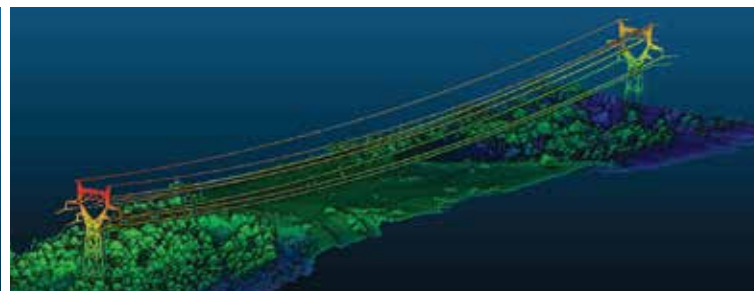
**FLIGHT SPEED**  
18 m/s



**GSD**  
118 pts/sqm



**DOWNLOAD**  
SAMPLE DATA





TRINITY PRO MICASENSE REEDGE-P

# MicaSense RedEdge-P

## RGB and Multispectral Data

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The RedEdge-P is the ultimate solution for collecting high-resolution RGB and multispectral data for agriculture, forestry, environmental monitoring and more.



The RedEdge-P is the premium multispectral camera for monitoring general plant health as well as plant counting, early weed detection and other tasks requiring machine learning.



# RedEdge-P

## Technical Specifications

Sensor Resolution	1456 x 1088 (1.6MP per MS band), 2464 x 2056 (5.1MP panchromatic band)
Wavelength	Blue (475 nm center, 32 nm bandwidth), Green (560 nm center, 27 nm bandwidth), Red (668 nm center, 14 nm bandwidth), RedEdge (717 nm center, 12 nm bandwidth), near-IR (842 nm center, 57 nm bandwidth)
RGB Color Output	5.1 MP (global shutter, aligned with all bands)*
GSD	7.7 cm per pixel (per MS band) at 120m (393 ft) AGL 3.98 cm per pixel (panchromatic band) at 120m (393 ft) AGL
Trigger Interval	0.8 seconds
Interfaces	3 configurable GPIO / select from trigger input, PPS input, PPS output, and top of frame signals. Host virtual button. USB 2.0 port for WiFi. Serial. 10/100/1000 Ethernet.
Field of View	50° HFOV x 38° VFOV (MS), 44° HFOV x 38° VFOV (PAN)
Storage	CFexpress Card
Payload Weight RTF	503.7 g
Dimensions	8.9 x 7.0 x 6.7 cm (3.5in x 2.8in x 2.6in)
External Power	7.0 V - 25.2 V
Power Input	5.5/7.0/10W (standby, average, peak)

\*with appropriate post-processing

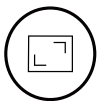
## Sample Data



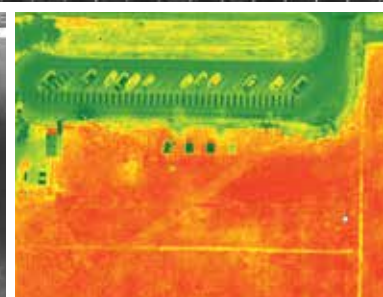
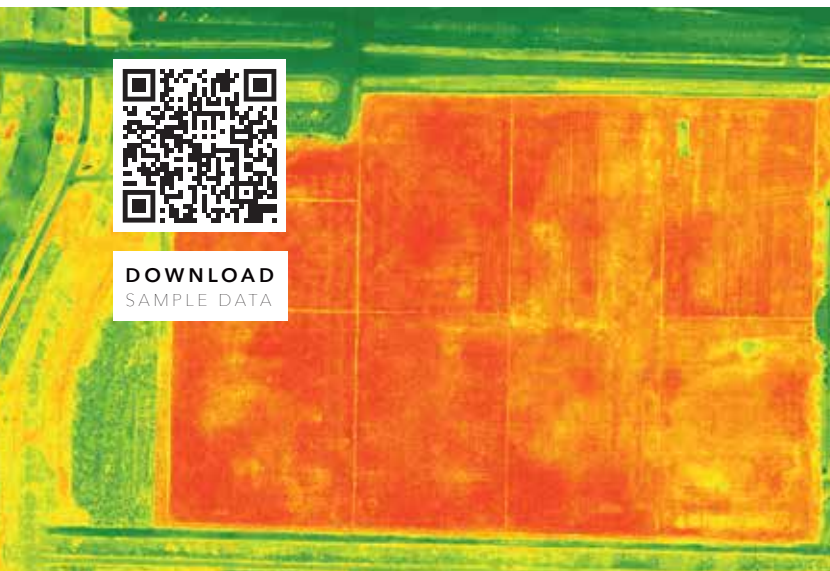
**FLIGHT ALTITUDE**  
120 m | 393 ft AGL



**FLIGHT SPEED**  
17 m/s



**GSD**  
4.01 cm/px





TRINITY PRO

MICASENSE ALTUM-PT

# MicaSense Altum-PT

## RGB, Multispectral and Thermal Camera

The Altum-PT is the best-in-class multispectral camera with synchronized thermal images ideal for production agriculture, phenotyping, and environmental monitoring.



The MicaSense Altum-PT captures synchronized multispectral, thermal, and panchromatic data for pixel-aligned outputs at high resolutions for advanced vegetation research applications.

This includes plant health monitoring from early emergence on, with thermal data for water stress and irrigation system monitoring.

# Altum-PT

## Technical Specification

Sensor Resolution	2064 x 1544 (3.2MP per MS band), 4112 x 3008 (12MP per PAN band) 320 x 256 thermal infrared
Spectral Bands	Blue (475 nm center, 32 nm bandwidth), Green (560 nm center, 27 nm bandwidth), Red (668 nm center, 14 nm bandwidth), Red Edge (717 nm center, 12 nm bandwidth), NIR 842 nm center, 57 nm bandwidth)
RGB Color Output	12.4 MP (global shutter, aligned with all bands)
Thermal	FLIR LWIR thermal infrared 7.5-13.5um radiometrically calibrated
Multispectral GSD	5.28 cm per pixel at 120 m (per multispectral band)
Thermal GSD	33.5 cm per pixel at 120 m
Panchromatic GSD	2.49 cm per pixel at 120 m
Trigger Interval	1.0 seconds
Interfaces	3 configurable GPIO: select from trigger input, PPS input, PPS output, and top of frame signals. Host virtual button. USB 2.0 port for WiFi. Serial. 10/100/1000 Ethernet.
Field of View	50° HFOV x 38° VFOV (multispectral) 46° HFOV x 35° VFOV (panchromatic) 48° x 39° (thermal)
Storage	CFexpress Card
Payload Weight RTF	733.7 g
Flight Time	60 min
Dimensions	11.0 x 8.0 x 6.9 cm (4.3 in x 3.1 in x 2.7 in)
External Power	7.0 V - 25.2 V
Power Input	5.5/7.0/10W (standby, average, peak)



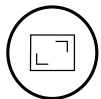
## Sample Data



**FLIGHT ALTITUDE**  
60 m | 197 ft AGL



**FLIGHT SPEED**  
17 m/s



**GSD**  
1.27 cm/px



**DOWNLOAD**  
SAMPLE DATA

