



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 Specifications

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 GPI /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

