Key Benefits

Simultaneous capture of up to six discrete spectral bands, enabling outputs such as RGB color, crop vigor, and high resolution panchromatic.

Removable, professional-grade CFexpress storage up to 2TB allowing for 2 captures/second.

Synchronized multispectral and thermal imagers for pixel-aligned outputs across multiple bands and at incredibly high resolutions.

Use Cases and Applications

The surface temperature of plants changes rapidly under stress conditions. Uses and applications are included but not limited to:

- Irrigation scheduling
- Plant disease detection
- Plant phenotyping
- Fruit yield estimations
- Fruit maturity evaluation and bruise detection
- Water stress prediction
- Pressure issues and clogs detection in irrigation systems

Specifications:

Model	Altum-PT
Weight	460 g (Camera + DLS2)
Dimensions	11x8x6.9□cm□
External power	7V-25.2V

Sensor resolution	2064x1544 (3.2MP per MS band) 4112X3008 (12MP per PAN band) 320x256 Thermal IR
Center wavelength	Blue Light 475 (32) Green Light 560 (27) Red Light 668 (14) Red Side 717 (12) Near infrared 842 (57)
RGB camera	12.4MP (global shutter, aligned with all frequency bands)
Thermal infrared band	LFIR LWIR 7.5-13.5um
Ground-level resolution (multi-spectrum)	120M 5.28cm per pixel
Ground-level resolution (thermal infrared)	120M 33.5cm per pixel
Ground resolution (euchromatic camera)	120M 2.49cm per pixel
Capture rate	Two times / second
Joggle	Three configurable GPIO: trigger input, PPS input, PPS output, and frame top signal; host virtual button; USB 2.0 port for WiFi; serial interface; 10 / 100 / 1000 Ethernet; CFexpress for storage
Angle of field	50 HFOV x 38 VFOV (Multispectral) 46 HFOV x 35 VFOV (Full color) 48 x 39 (Hot IR)