





Sensor Comparison Table

RedEdge-MX and Altum.

Item	RedEdge-MX	RedEdge-MX PSDK	Altum	Altum PSDK
	 <p>RedEdge·MX™ by MicaSense®</p>	 <p>RedEdge·MX™ by MicaSense®</p>	 <p>ALTUM™ by MicaSense®</p>	 <p>ALTUM™ by MicaSense®</p>
	<p>The industry standard professional multispectral sensor for agricultural drone mapping.</p>	<p>The industry standard professional multispectral sensor optimized for DJI Skyport.</p>	<p>A revolutionary 3-in-1 solution for unparalleled sensing.</p>	<p>A revolutionary 3-in-1 solution optimized for DJI Skyport.</p>
Weight	<p>231.9 g (8.18 oz.) RedEdge-MX + DLS 2</p>	<p>294.4g (10.4 OZ.) Sensor + SkyPort adapter + DLS2</p>	<p>406.5 g (14.34 oz.) Altum + DLS2</p>	<p>468.9 g (16.5 oz.) Altum + SkyPort adapter + DLS2</p>
Dimensions	<p>8.7cm x 5.9cm x 4.54cm (3.4in x 2.3in x 1.8in)</p>	<p>8.7cm x 5.9cm x 4.54cm (3.4in x 2.3in x 1.8in)</p>	<p>8.2cm x 6.7cm x 6.45cm (3.2in x 2.6in x 2.5in)</p>	<p>8.2cm x 6.7cm x 6.45cm (3.2in x 2.6in x 2.5in)</p>
External Power	<p>4.2 V - 15.8 V</p>	<p>Provided by SkyPort adapter</p>	<p>4.9 V - 25.2 V</p>	<p>Provided by SkyPort adapter</p>
Power Input	<p>4.0/8.0W (nominal, peak)</p>	<p>Provided by SkyPort adapter</p>	<p>5.5/7.0/10W (standby, average, peak)</p>	<p>Provided by SkyPort adapter</p>

Item	RedEdge-MX	RedEdge-MX PSDK	Altum	Altum PSDK
Spectral Bands	Blue, green, red, red edge, near infrared (NIR)	Blue, green, red, red edge, near infrared (NIR)	EO: Blue, green, red, red edge, near-infrared (NIR) LWIR: thermal infrared 8-14um	EO: Blue, green, red, red edge, near-infrared (NIR) LWIR: thermal infrared 8-14um
RGB Output	3.6 MP (global shutter, aligned with all bands)	3.6 MP (global shutter, aligned with all bands)	High-resolution, global shutter, aligned with all bands	High-resolution, global shutter, aligned with all bands
Thermal			FLIR LWIR thermal infrared 8-14um radiometrically calibrated	FLIR LWIR thermal infrared 8-14um radiometrically calibrated
Sensor Resolution	1280 x 960 (1.2 MP per EO band)	1280 x 960 (1.2 MP per EO band)	2064 x 1544 (3.2 MP per EO band) 160 x 120 thermal infrared	2064 x 1544 (3.2 MP per EO band) 160 x 120 thermal infrared
Ground Sample distance (GSD)	8cm per pixel (per band) at 120m (~400 ft) AGL	8cm per pixel (per band) at 120m (~400 ft) AGL	5.2cm per pixel (per EO band) at 120m (~400 ft) AGL 81cm per pixel (thermal) at 120m	5.2cm per pixel (per EO band) at 120m (~400 ft) AGL 81cm per pixel (thermal) at 120m
Capture Rate	1 capture per second (all bands), 12-bit RAW	1 capture per second (all bands), 12-bit RAW	1 capture per second (all bands), 12-bit RAW*	1 capture per second (all bands), 12-bit RAW*
Interfaces	Serial, 10/100/1000 ethernet, removable Wi-Fi, external trigger, GPS, SDHC	Provided by SkyPort: Serial, 10/100/1000 BT Ethernet, External Trigger	Aircraft: Trigger input, top of frame out, 1 PPS out. 3.3V isolated IO 2x USB 3.0 SuperSpeed ports for WiFi or Ethernet and USB 3.0 Storage.	Provided by SkyPort adapter

Item	RedEdge-MX	RedEdge-MX PSDK	Altum	Altum PSDK
Field of View	47.2° HFOV (multispectral)	47.2° HFOV (multispectral)	48° x 37° (multispectral) 57° x 44° (thermal)	48° x 37° (multispectral) 57° x 44° (thermal)
Storage	SD Card	SD Card	USB 3.0 compatible storage devices	USB 3.0 compatible storage devices

*Capture rates vary based on write speed of USB storage device