

Toucan 261 - OEM Spectroscopy

e2v Spectroscopy Cooled CCD • Available in FI and BI-DD • Cooled to -40°C or -70°C
• 2048 x 264 • 30.7mm x 4.0mm Area • 15µm × 15µm Pixel Pitch •



Key Features and Benefits

- **15 x 15 µm pixels**
Optimized pixel format for high dynamic range and resolution
- **TE cooling options to -40°C or -70°C**
Minimizing noise with Pentavac Cooling Technology
- **Low readout noise**
Enables lowest detection limit
- **Compact and rugged platform**
Ideal for OEM integration with MilSpec operating temperatures
- **Low dark current**
Deep depletion version offers enhanced red response without dark current penalty

Resolution	2048 × 264
Digital output	16 bit
Non linearity	< 1%
Weight	< 750g

PRELIMINARY

Specification for Toucan 261

Sensor	E2V CCD 261			
Sensor Options	FI, BI-DD			
Active Pixel	2048 × 264			
Pixel Size	15µm × 15µm			
Active Area	30.7mm x 4.0mm			
Digital Output	16 bit			
Non Linearity	< 1%			
Readout Noise (@ 500kHz)	<8e- <5e- (Typ)			
Cooling in ambient of 25°C	Deep-Cooled -40°C		Ultra-Cooled	
Sensor	FI	BI-DD	FI	BI-DD
Peak Quantum Efficiency	50% @ 730nm	95% @ 800nm	50% @ 730nm	95% @ 800nm
Accessible Pixel Well Depth	>110ke-	>90ke-	>110ke-	>90ke-
Dark Current (e/p/s)	<0.2 <0.035 (Typ)	<3 <1.5 (Typ)	<0.002 <0.0007 (Typ)	<0.1 <0.03 (Typ)
Total Power Consumption	<18W		<50W	
Integration Times	Up to 60 mins			
Pixel Readout Rate	500kHz			
Readout Modes	1. Full resolution image 2. Full vertical binning			
Trigger Mode(s)	Internal Trigger, External Trigger			
Data Interface	USB 2.0			
Synchronisation	Trigger IN and OUT – TTL compatible			
Power Supply	12V DC ±10%			
Operating Temperature	-20°C to +55°C			
Storage Temperature	-40°C to +70°C			
Dimensions (excluding standard mounting flange)	80 x 80 x 90mm			
Flange Mounting Hole Dimensions ¹	90 x 52mm			
Weight	<750g			
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Ordering Information

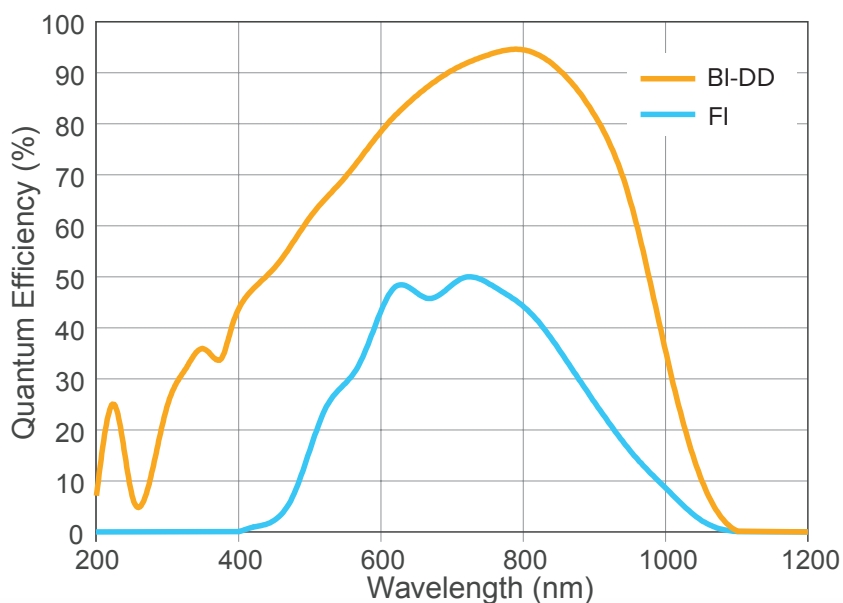
Camera

Toucan 261 DC FI	TO261-FI
Toucan 261 TC FI	TO261TC-FI
Toucan 261 DC BIDD DC	TO261-BI
Toucan 261 TC BIDD TC	TO261TC-BI
Toucan Power Supply Cable	RPL-TOTC-PSU

Pricing AOR subject to volumes.

Detailed technical drawings can be downloaded at www.raptorphotonics.com

Quantum Efficiency



*Data supplied by sensor manufacturer

Applications

Scientific

- Raman (SERS, SORS, CARS)
- Photoluminescence - Fluorescence
- Hyperspectral Imaging

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