

# Toucan 30-11 OE - OEM Spectroscopy

e2v Spectroscopy Cooled CCD • Cooled to  $-70^{\circ}\text{C}$

•  $1024 \times 256$  •  $26.6\text{mm} \times 6.7\text{mm}$  Area •  $26\mu\text{m} \times 26\mu\text{m}$  Pixel Pitch •



## Key Features and Benefits

- **26 x 26  $\mu\text{m}$  pixels**  
Optimized pixel format for high dynamic range and resolution
- **TE cooling to  $-70^{\circ}\text{C}$**   
Minimizing noise with Pentavac Cooling Technology
- **Low readout noise & dark current**  
Enables lowest detection limit, even in UV
- **Compact and rugged platform**  
Ideal for OEM integration with MilSpec operating temperatures
- **Open Electrode Pixel**  
UV Response without loss of back side illumination

Resolution	<b>1024 × 256</b>
Digital output	<b>16 bit</b>
Non linearity	<b>&lt; 1%</b>
Weight	<b>&lt; 750g</b>

PRELIMINARY

## Specification for Toucan 30-11 OE

Sensor	E2V CCD 30-11
Active Pixel	1024 x 256
Pixel Size	26µm x 26µm
Active Area	26.6mm x 6.7mm
Digital Output	16 bit
Non Linearity	< 1%
Readout Noise (@ 500kHz)	<9e- <6.5e- (Typ)
Cooling in ambient of 25°C	-70°C in an ambient of +25°C
Peak Quantum Efficiency	58% @ 780nm
Accessible Pixel Well Depth	200ke- 300ke- (Typ.)
Dark Current (e/p/s) @ -70°C	<0.003 <0.0014 (Typ)
Total Power Consumption	≤50W (TEC ON, Steady State)
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 <sup>1</sup>	90 x 52mm
Weight	<750g

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## Ordering Information

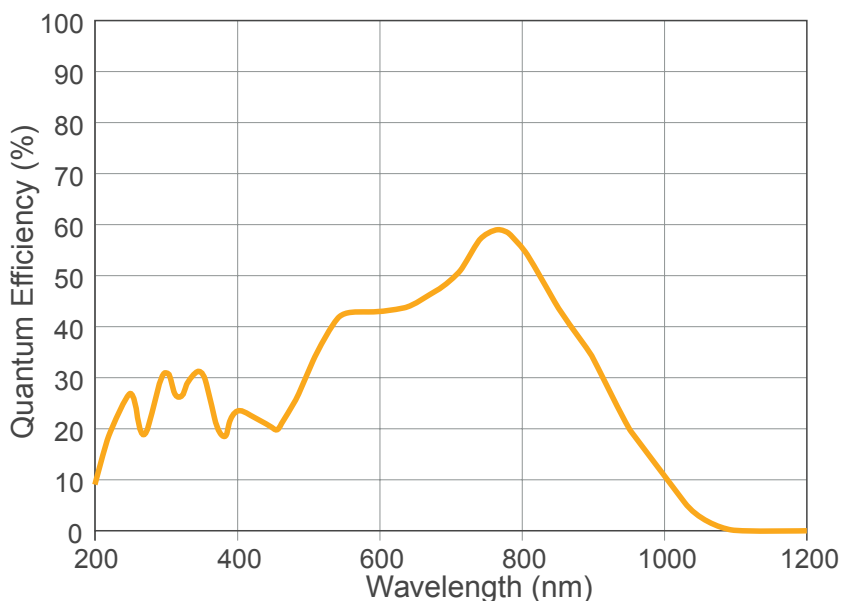
### Camera

Toucan 30-11 OE	TO3011TC-OE
Toucan Power Supply Cable	RPL-TOTC-PSU

Pricing AOR subject to volumes.

Detailed technical drawings can be downloaded at [www.raptorphotonics.com](http://www.raptorphotonics.com)

## Quantum Efficiency



\*Data supplied by sensor manufacturer

## Applications

### Scientific

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

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