Raptor photonics

Toucan 261 - OEM Spectroscopy

Cooled CCD for Raman applications



Key Features and Benefits

- **15µm x 15µm Pixels**
  Optimized pixels for high dynamic range and resolution
- **TE cooling options to -70°C**
  Minimizing noise with Pentavac Cooling Technology
- **Low Readout Noise <5e-**
  Enables lowest detection limit
- **Compact and Rugged Platform**
  Ideal for OEM integration
- **Spectral Rates of up to 212SPS**
  Higher throughout Experiments

Resolution	2048 x 264
Digital Output	16 bit
Non Linearity	<1%
Spectral Rate	212 SPS

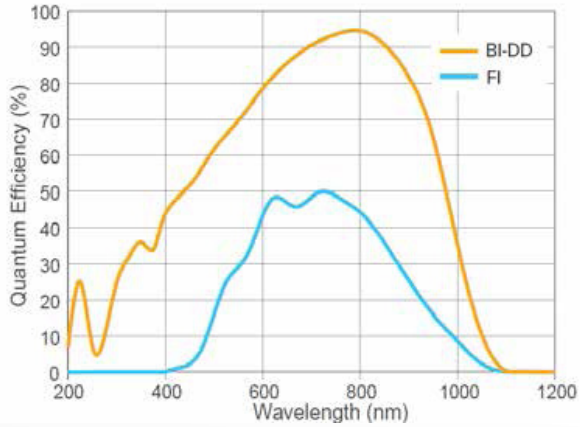
PentaVac

USB 2.0

Specification for Toucan 261

Sensor	E2V CCD 261			
Sensor Options	FI, BB-DD			
Active Pixel	2048 x 264			
Pixel Size	15µm x 15µm			
Active Area	30.7mm x 4.0mm			
Digital Output	16 bit			
Non Linearity	<1%			
Readout Noise (@500HZ)	<8e- <5e-(Typ)			
Cooling in ambient of 25ºC	Deep Cooled - 40ºC		Turbo Cooled - 70ºC	
Sensor	FI	BI-DD	FI	BI-DD
Peak Quantumn Efficeny	50% @ 730nm	95% @ 800nm	50% @ 730nm	95% @ 800nm
Accessible Pixel Well Depth	>110ke-	>90ke-	>110ke-	>90ke-
Dark Current (e/p/s)	<1.0 <0.29(Typ)	<3 <1.5(Typ)	<0.03 <0.007(Typ)	<0.1 <0.03 (Typ)
Total Power Consumption	<18W		<50W	
Inergration Times	up to 60 minutes			
Pixel Readout Rates	500kHz			
Image Clock Speed	32µs/16µs			
Spectral Aquisition Rate	up to 212SPS			
Data Interface	USB 2.0			
Synchronisation	Trigger in and Out - TTL compatiable			
Power Supply	12V DC ± 10%			
Operating Temperature	-20˚C to +55˚C			
Storage Temperature	-40˚C to +70˚C			
Dimensons (excluding standard mounting)	80mm x 80mm x 90 mm			
Flange mounting Hole Dimensons	90mm x 52 mm			
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	TO261-BI
Toucan 261 TC BIDD	TO261TC-BI
Toucan Power Supply Cable	RPL-TOTC-PSU

Achievebale Spectral Rates (SPS)

Height	IClock =32µs	IClock = 16µs
264	76	113
30	180	198
20	191	205
10	203	212

Note 1. Height reduction requires optical mask

Note 2. Iclock = 16µs may resilt in lower well depth

For detailed tehnical drawings, volume pricing

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Raptor photonics

Willowbank Business Park
Larne, Co Antrim
BT40 2SF,
Northern Ireland

Raptor Photonics Ltd. (UK)
T: +44 (0) 2828 270 141
E: sales@raptorphotonics.com
www.raptorphotonics.com

Raptor Photonics Inc. (USA)
T: +1 (877) 230-4836
E : sales@raptorphotonics.com
www.raptorphotonics.com