

**Department of Optoelectronics, University of Kerala, Kariavattom,  
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**Quotation Notification**

OPTO/P-07/2017-18

Quotations are invited for the following item in the Department of Optoelectronics, University of Kerala, Kariavattom, Thiruvananthapuram

**Item No. 1: Quadrant Position Detector**

- Substrate Si
- Wavelength Range 400 - 1050 nm
- Photodiode Diameter  $\varnothing 7.8$  mm
- Gap Size 42  $\mu$ m
- Detector Bandwidth 150 kHz
- Responsivity 0.45 A/W @ 633 nm
- Transimpedance Gain 10 kV/A
- Dark Current( $V_{Rvrs} = 10$  V) 5 nA
- Rise Time, Typical 40 ns @ 10 V
- Breakdown Voltage 15 V
- Damage Threshold 100 mW/cm<sup>2</sup>
- Compactable with Lock in amplifier SRS830

**Item No. 2: Position Sensing Detector (PSD) Auto Aligner with power supply**

- Auto Alignment of Beam to Center of Sensor when in Closed-Loop Mode
- Beam Position Measurement when in Open-Loop Mode
- OLED Menu and Position Display for Complete On-Unit Control
- Voltage Outputs for Sum, Difference, and Feedback Signals
- X& Y Difference Outputs -10 to 10 V, SMA Connectors
- Sum Output 0 to 10 V, SMA Connector
- Quadrant Detector Input 6-Pin Hirose Connector
- Closed-Loop Bandwidth Up to 1 kHz
- Monitor Mode Bandwidth (-3.0 dB) 100 kHz

**Item No.3: Variable-Gain Temperature-Compensated Avalanche Photodetector.**

- Detector Type UV Enhanced Silicon APD
- Wavelength Range 200 - 1000 nm
- Output Bandwidth (3 dB) DC - 10 MHz
- Active Area Diameter 0.5 mm

- Typical Max Responsivity 25 A/W @ 600 nm (M = 50)
- Transimpedance Gain 250 kV/A with 50  $\Omega$  Termination  
500 kV/A with High-Impedance Termination
- Max Conversion Gain  $12.4 \times 10^6$  V/W
- M Factor Adjustment Range 5 - 50 (Continuous)
- Saturation Power (CW) 0.32  $\mu$ W @ 600 nm, M = 50  
3.20  $\mu$ W @ 600 nm, M = 5
- Minimum NEP 0.09 pW/ $\sqrt{\text{Hz}}$  (DC - 10 MHz)

The price may clearly indicate applicable tax, packing, forwarding and handling charges (if any) separately. The firms who wish to supply the item are requested to submit the quotation in sealed cover to the undersigned not later than 4:30pm on 18.01.2018. Quotations will be opened at 10:30 am on next working day (19.01.2018) in the presence of the suppliers or their authorized agents.

30.12.2017



A handwritten signature in black ink, consisting of several horizontal strokes and a vertical line, positioned above the printed name.

Associate Professor & Head

**Associate Professor & Head**  
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