



## PDM Photo Detector Module

The PDM is a fully self contained detector system, featuring an exceptionally low noise amplifier design. The PDM module was developed as a sub-component of EOS' successful Eyesafe Laser Rangefinder (ELRF) product. EOS Optronics GmbH now offers this module as a stand-alone product. The standard features are listed in the table below.

The PDM is designed to function as part of Laser Range Finder module. EOS Optronics GmbH will work with you to customise the features to suit your application including:

- Clear aperture and optical prescription
- Detector – InGaAs PIN diode or APD
- Interface (electronic and mechanical)

The electronics module can also be offered separately ( $\varnothing$  26.5 mm x 11.5 mm package)

### Standard PDM Features

- 30 mm optics
- InGaAs Pin diode with 300  $\mu$ m active area, with 75 % quantum efficiency at 1.5  $\mu$ m
- Low noise equivalent power (NEP) at detector front end. NEP < 2 nW at signal bandwidth of 12 MHz in standard model
- Time programmable gain compensation for typical rangefinding applications
- Digitally settable trigger threshold for TTL output
- Three wire TTL interface
- Exceptionally low noise design



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## Technical Specifications

<b>Voltage input:</b>	Single input 12 V, 40 mA
<b>Operating temperature:</b>	-40°C to +85°C <sup>1</sup>
<b>Detector:</b>	InGaAs PIN
<b>Field of view:</b>	5 mrad
<b>Clear aperture:</b>	27 mm
<b>Width:</b>	35 mm
<b>Height:</b>	45 mm
<b>Length:</b>	81 mm

<sup>1</sup> Varies according to selected detector and other conditions

## Contact

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