

LARGE AREA PHOTORECEIVERS

UV - VIS **300 - 1000 nm**

- **S-050-H** **5mm dia**
- **S-100-H** **1cm dia**

NIR **1000 - 1700 nm**

- **G-050-H** **5mm dia**
- **G-100-H** **1cm x 1cm**
- **IGA-030-H** **3mm dia**
- **IGA-050-H** **5mm dia**

MWIR **1 - 5 um**

- **PBS-060** **6mm x 6mm**
- **PBS-050** **5mm x 5mm**
- **PBSE-050** **5mm x 5mm**

BROADBAND **UV - 50+ um**

- **LT-080** **8mm dia**

OPTIONS

- **Other Active Areas**
- **TE-cooling**
- **Gain/Bandwidth Selection**
- **2-color Detectors**
- **Certified Calibrations**

H-SERIES HOUSING

The EOS family of large area photoreceivers provides the user with the most universal set of detectors in the industry, covering wavelengths ranging from the UV to 50+ microns. The receivers are mechanically interchangeable and have a universal threaded design for mounting filters, optical elements, fiber-optic connectors, etc.

Features include:

- High Sensitivity photodetector elements
- Dual Gain Amplifier (Switch selectable)
- BNC output connector
- 1.035"-40 threaded adapter/mount
- 1/4-20 threaded hole for post mounting
- Shielded power cable for use with EOS power supplies
- +/- 6VDC to +/- 15VDC operation

EOS offers a variety of options to insure the best performance for any given application. Consult the factory for details.



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UV - VIS

Large area, high performance silicon photodiode/amplifier modules.

MODEL	ACTIVE AREA	SPECTRAL RANGE	BANDWIDTH	RESPONSIVITY	NEP	PRICE
S-050-H	5mm dia	300 - 1000 nm	DC - 2kHz	$10^8 / 10^7$ V/W	$<1.5 \times 10^{-14}$	\$295.
S-050-TE2-H			DC - 500Hz	$10^9 / 10^8$ V/W	$<1.0 \times 10^{-14}$ W/Hz ^{1/2}	\$465.
S-100-H	10mm dia	300 - 1000 nm	DC - 2kHz	$10^8 / 10^7$ V/W	$<1.5 \times 10^{-14}$	\$325.
S-100-TE2-H			DC - 500Hz	$10^9 / 10^8$ V/W	$<1.0 \times 10^{-14}$ W/Hz ^{1/2}	\$565.

Optional sizes: 2.5mm dia, 1.0mm dia. TE2 = 2-stage TE cooling.

NIR

Large area, high performance germanium photodiode/amplifier modules.

MODEL	ACTIVE AREA	SPECTRAL RANGE	BANDWIDTH	RESPONSIVITY	NEP	PRICE
G-050-H	5mm dia	700 - 1800 nm	DC - 2kHz	$10^6 / 10^5$ V/W	$<1.2 \times 10^{-12}$	\$375.
G-050-TE2-H		700 - 1650 nm		$10^7 / 10^6$ V/W	$<2.0 \times 10^{-13}$ W/Hz ^{1/2}	\$545.
G-100-H	1cm x 1cm	700 - 1800 nm	DC - 2kHz	$10^5 / 10^4$ V/W	$<2.5 \times 10^{-12}$	\$650.
G-100-TE2-H		700 - 1650 nm		$10^6 / 10^5$ V/W	$<5.0 \times 10^{-13}$ W/Hz ^{1/2}	\$875.

Optional sizes: 13mm dia (*SUPER SIZE*), 3mm dia, 2mm dia, 1mm dia.
TE2 = 2-stage TE cooling.

Large area, high performance InGaAs photodiode/amplifier modules.

MODEL	ACTIVE AREA	SPECTRAL RANGE	BANDWIDTH	RESPONSIVITY	NEP	PRICE
IGA-030-H	3mm dia	900 - 1700 nm	Dc - 2kHz	$10^8 / 10^7$ V/W	$< 6.0 \times 10^{-14}$ W/Hz ^{1/2}	\$575.
IGA-030-TE2-H		900 - 1600 nm		$10^8 / 10^7$ V/W	$< 1.5 \times 10^{-14}$ W/Hz ^{1/2}	\$750.
IGA-050-H	5mm dia	900 - 1700 nm	DC - 2kHz	$10^7 / 10^6$ V/W	$< 2.5 \times 10^{-13}$ W/Hz ^{1/2}	\$1550.
IGA-050-TE2-H		900 - 1600 nm		$10^8 / 10^7$ V/W	$< 5.0 \times 10^{-14}$ W/Hz ^{1/2}	\$1750.

Optional sizes: 2mm dia, 1mm dia. TE2 = 2-stage TE cooling.



M W I R

Large Area, high performance PbS and PbSe photoconductor/amplifier modules.

MODEL	ACTIVE AREA	SPECTRAL RANGE	BANDWIDTH	RESPONSIVITY	NEP	PRICE
PBS-060-H	6mm x 6mm	1. - 2.6 um	5 - 500 Hz	$10^6 / 10^5$ V/W	$< 7.5 \times 10^{-12}$ W/Hz ^{1/2}	\$380.
PBS-060-TE2-H		1. - 2.8 um	5 - 300 Hz	$5 \times 10^6 / 10^5$ V/W	$< 2.5 \times 10^{-12}$ W/Hz ^{1/2}	\$545.
PBS-050-H	5mm x 5mm	1. - 2.6 um	5 - 500Hz	$10^6 / 10^5$ V/W	$< 6.0 \times 10^{-12}$ W/Hz ^{1/2}	\$350.
PBS-050-TE2-H		1. - 2.8 um	5 - 300Hz	$5 \times 10^6 / 10^5$ V/W	$< 1.5 \times 10^{-12}$ W/Hz ^{1/2}	\$525.
PBSE-050-H	5mm x 5mm	1. - 4.2 um	5 - 5 kHz	$10^5 / 10^4$ V/W	$< 2 \times 10^{-10}$ W/Hz ^{1/2}	\$400.
PBSE-050-TE2-H		1. - 4.5 um	5 - 5 kHz	$5 \times 10^5 / 10^4$ V/W	$< 5 \times 10^{-11}$ W/Hz ^{1/2}	\$575.

Optional sizes: 3mm x 3mm, 2mm x 2mm, 1mm x 1mm. TE2 = 2-stage TE cooling.

B R O A D B A N D

Large area, high performance lithium tantalate pyroelectric/amplifier module.

MODEL	ACTIVE AREA	SPECTRAL RANGE	BANDWIDTH	RESPONSIVITY	NEP	PRICE
LT-080-H	8mm dia	UV - 50 um	1 - 100 Hz	$10^3 - 10^2$ V/W	$< 7.5 \times 10^{-9}$ W/Hz ^{1/2}	\$1350.

Optional Sizes: 5mm dia, 2mm dia (HIGH SENSITIVITY).

OPTIONS

- **Other active areas as listed.**
- **1- and 2-stage TE cooling options.**
- **Custom gain and bandwidth settings for all detectors. Ask about our 1MHz modules.**
- **Continuously adjustable gain modules.**
- **2-color sandwich style modules with either silicon or InGaAs as the top layer are available in several size combinations. Contact the factory for specifics.**
- **NIST-traceable spectral calibrations are available. Contact the factory for pricing.**
- **Housing accessories include filter mounts, fiber-optic connectors, and mounting posts.**
- **Power supplies: Model PS-1 for uncooled modules; Model PS/TC-1 for cooled modules. Multi-channel versions available.**
- **Other E-O accessories such as choppers, lock-in amplifier modules and data acquisition hardware are available.**

