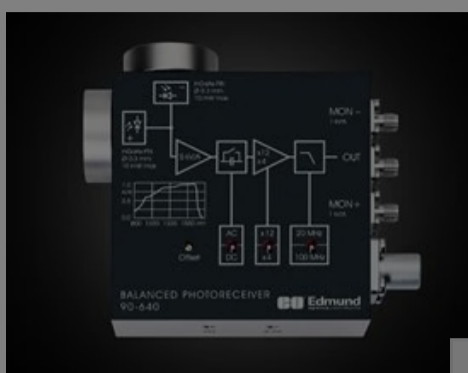


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InGaAs Free-Space

1700nm



#90-640 InGaAs Free-Space Balanced Photoreceiver, 800-1700nm

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1

€3.725^{,00}

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Volume Pricing

Qty	€3.725,00
1+	each
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General

Note: Includes:
Lemo®3-pin connector
(3) Adapter SMA (male) to BNC (female)
Datasheet

Physical & Mechanical Properties

Weight (g): 410

Dimensions (mm): Case Size: 80 x 80 x 30.5

Optical Properties

Spectral Range: 800 - 1700 nm

Sensor

Detector Type: InGaAs PIN photodiode

Electrical

Transimpedance Gain (Ω): 2 x 10⁴ or 6 x 10⁴(switchable)

Noise Equivalent Power NEP (W/ Hz^{1/2}): 4.3 x 10⁻¹² @880nm

Bandwidth (-3 db): 100 MHz

Output Signal: ±1.0 V at 50 Ω load (for linear gain and low harmonic distortion), maximum ±2.0 V at 50 Ω load

Conversion Gain (V/W): 19 x 10³ or 57 x 10³(switchable)

Common Mode Rejection (dB): 50

Hardware & Interface Connectivity

Power Requirement: ±15 V (±14.5 V ... ±16.5 V) -90 / +120 mA

Power Supply: Power Supply Required and Sold Separately:

USA: #59-180
 Europe: #59-180
 Japan: Not Available

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Environmental & Durability Factors

Operating Temperature (°C): 0 to +60

Regulatory Compliance

RoHS 2015: **Compliant**

Certificate of Conformance: [View](#)

Product Details

- Subtracts Two Photodiode Signals for Differential Detection
- Improved Signal to Noise Ratio (SNR) for Weak or Modulated Optical Signals
- High Common-Mode Noise Suppression for Improved Measurement Sensitivity and Accuracy
- Available in Si and InGaAs models for UV-VIS and NIR spectral ranges

Balanced Photoreceivers use true differential detection by subtracting the photocurrents from two matched photodiodes, producing a single electrical output proportional to the difference in optical power between the two inputs. This suppresses common-mode noise, such as laser intensity fluctuations, improving SNR and measurement sensitivity. Balanced Photoreceivers are engineered with a low-noise transimpedance amplifier, which ensures stable, consistent performance for precision optical measurements. Available in Si and InGaAs models for UV-VIS (320-1000nm) and NIR (800-1700nm) spectral ranges, these photoreceivers are ideal for coherent optical detection, interferometry, spectroscopy, and optical coherence tomography (OCT).

Note: Power supply sold separately. Please see specifications for more details.

Accessories

Note: Compatible accessories for individual stock numbers may vary. If unsure about which accessories work with your products, please contact us [here](#).

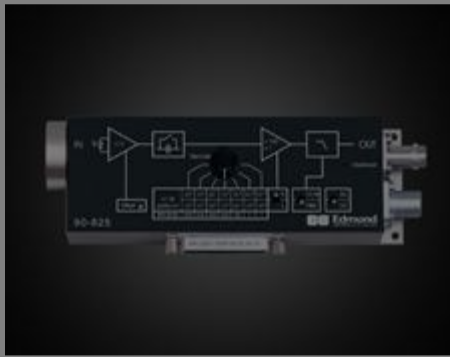
	Title	Compare	Stock Number	Price	Buy
MORE+	110-240V Amplifier & Photodetector Power Supply		#59-180	€280,00 Volume Pricing Request Quote	CONTACT US <input type="text" value="1"/>
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MORE+	2m Low Noise BNC to BNC Cable		#90-649 NEW	€200,00 Request Quote	1 In Stock <input type="text" value="1"/>

	Title	Compare	Stock Number	Price	Buy
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MORE+	5m Low Noise BNC to BNC Cable				1 In Stock <input type="text" value="1"/>
MORE+	3-Pin Lemo® Connector			Request Quote	1 In Stock <input type="text" value="1"/>
MORE+	4-Pin Lemo® Connector		#90-654 NEW	€40,00 Request Quote	1 In Stock <input type="text" value="1"/>

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