

# Femtowatt Photoreceiver with InGaAs-PIN Photodiode

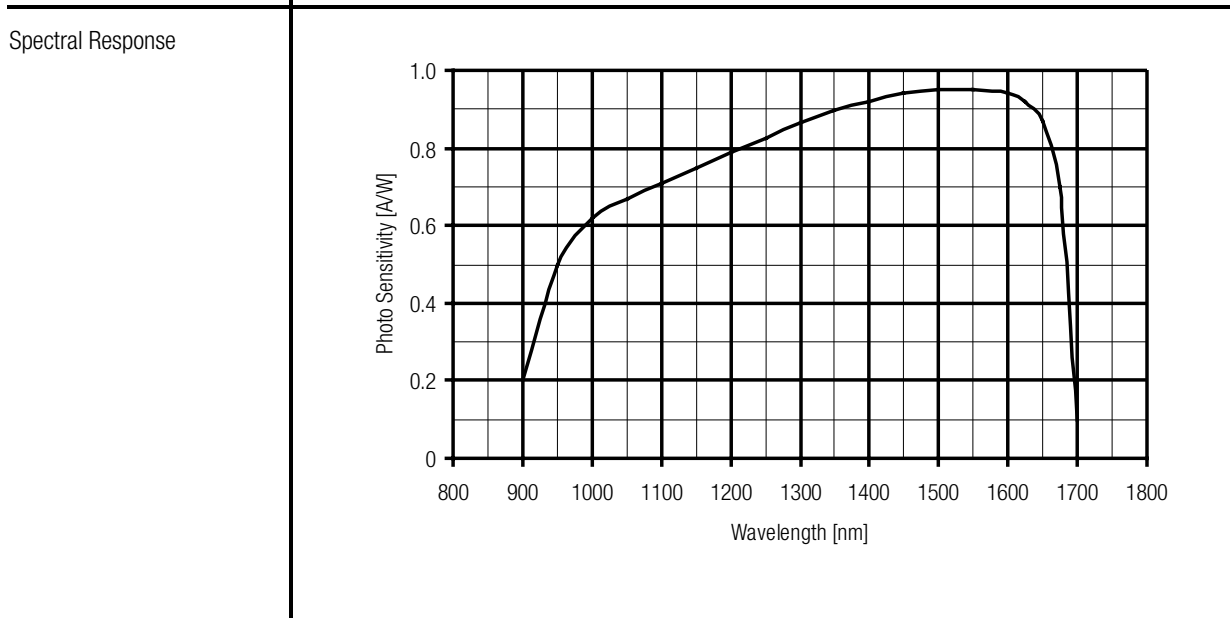


The Photoreceiver will be delivered without post holder and post.

Features	<ul style="list-style-type: none"> <li>• <b>Ultra-Low-Noise, Minimum NEP 7.5 fW/√Hz</b></li> <li>• <b>Amplifier Transimpedance Gain 1 x 10<sup>11</sup> V/A</b></li> <li>• <b>InGaAs-PIN Detector, 0.5 mm Active Diameter</b></li> </ul>	
Applications	<ul style="list-style-type: none"> <li>• <b>Fluorescence Measurements</b></li> <li>• <b>NIR Spectroscopy</b></li> <li>• <b>Electrophoresis</b></li> <li>• <b>Replacement for (liquid nitrogen) cooled Ge-Photodiodes and Avalanche Photodiodes (APDs)</b></li> </ul>	
Specifications	<p>Test Conditions</p> <p>Gain</p> <p>Frequency Response</p> <p>Detector</p> <p>Input</p> <p>Noise</p> <p>Output</p>	<p><math>V_s = \pm 15 \text{ V}, T_a = 25^\circ\text{C}</math></p> <p>Transimpedance Max. Conversion Gain</p> <p>Lower Cut-Off Frequency Upper Cut-Off Frequency Rise/Fall-Time</p> <p>Detector Material Active Area Spectral Response</p> <p>Optical Saturation Power</p> <p>Min. NEP</p> <p>Output Voltage Output Impedance Offset Voltage Max. Output Current</p>

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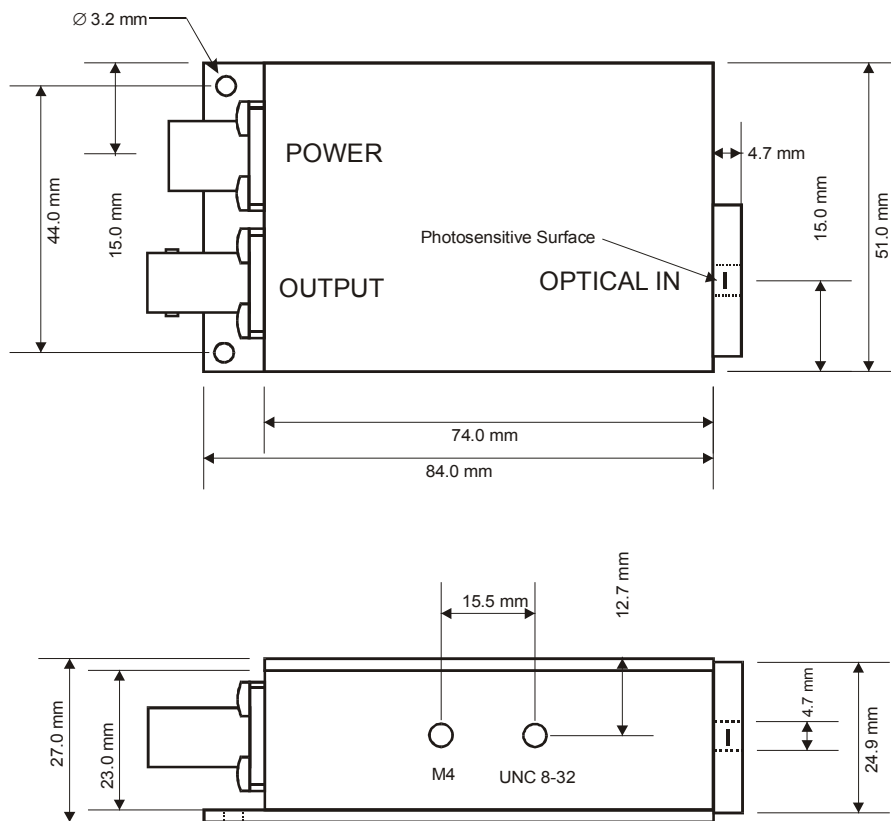
Power Supply	Supply Voltage Supply Current	$\pm 15\text{ V}$ ( $\pm 14.5\text{ V}$ to $\pm 16\text{ V}$ ) $\pm 15\text{ mA}$ typ. (Depends on Operating Conditions, Recommended Power Supply Capability Minimum $\pm 50\text{ mA}$ )
Case	Weight Material	0.19 kg (0.42 lbs) AlMg4.5Mn, nickel-plated
Temperature Range	Storage Temperature Operating Temperature	$-40\text{ }^\circ\text{C}$ to $+100\text{ }^\circ\text{C}$ $0\text{ }^\circ\text{C}$ to $+60\text{ }^\circ\text{C}$
Absolute Maximum Ratings	Optical Input Power Power Supply Voltage	10 mW $\pm 22\text{ V}$



Connectors	Input	Optical, Free Space, 25 mm $\varnothing$ Round Flange Compatible with Microbench Systems
	Output	BNC
	Power Supply	LEMO Series 1S, 3-pin fixed Socket Pin 1: +15V Pin 2: -15V Pin 3: GND

# Femtowatt Photoreceiver with InGaAs-PIN Photodiode

Dimensions



DZ-FWPR\_1.cdr

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