



### ULTRA LOW NOISE PHOTODETECTOR-AMPLIFIER MODULE

- ULTRA LOW NOISE - DOWN TO 10fW/√Hz
- BANDWIDTH - FROM DC TO 140kHz
- HIGH GAIN - UP TO 7.7V/nW
- SILICON OR InGaAs PINS, OR AVALANCHE PHOTODIODES



### DESCRIPTION:

The **711 Series** Ultra Low Noise Photodetector-Amplifier Modules offer a choice of variable or fixed gain amplifiers and the flexibility of incorporating various silicon or InGaAs detectors for low signal level sensing applications. The amplifier is based on the **311 and 341 Series** transimpedance amplifiers. Much lower noise can be achieved with smaller area PIN detectors on the Models **711-1 and 711-2** since the performance is detector limited. Consult factory for different detectors.

### SPECIFICATIONS:

<b>Input</b>	Silicon or InGaAs photodetectors (See table on reverse for characteristics.)	<b>Polarity</b>	Non-Inverting Positive output with flux applied.
<b>Coupling</b>	AC (add -AC to part number) DC (add -DC to part number) AC cut-on frequency of $\leq 120\text{Hz}$	<b>Power</b>	$\pm 15\text{VDC}$ at 30mA typical Internal $\pm 12\text{V}$ regulators
<b>Output</b>		<b>Temperature</b>	0° to 70°C
Load	50Ω	<b>Connections</b>	
Swing	2.5V pk (-1 and -2) 6V pk (-3)	Input	Photodetector
<b>Gain</b>	Multiply transimpedance gain by detector responsivity at peak wavelength to get V/W in table. Trimpot adjustable (-3 only)	Output	BNC
		Power	Filter feed-thru pins and ground lug
		Bias	Pin decoupled with 0.01μF, 1kV capacitor. (See table on reverse.)
		<b>Size</b>	3.49" x 1.93" x 0.92"
		<b>Weight</b>	3.2 ounces



Specifications subject to change without notice.

### APPLICATIONS:

*Photodetection of Ultra Low Signal Levels*

