

### 275 Ultra Low Noise Pre-Amplifier Module Brochure



# **Overview**

The 275 is an ultra-low noise voltage pre-amplifier module designed for use as the lock-in amplifier front-end for Mercury Cadmium Telluride detectors operated in the photoconductive mode.

This module features an input shorting switch to avoid damage to the detector during connection and a constant current biasing circuit allowing the precise setting of bias current, recommended by the detector manufacturer.

## **Core benefits**

- ✓ Worry-free operation of MCT detectors
- ✓ Ultra-low noise
- ✓ Simple and accurate setting of bias current
- ✓ Input shorting detector protection



#### **Features**

- Single width module housed within the 417/417T unit
- Single input fixed gain amplifier
- Adjustable bias current
- Input shorting switch

# **275 Ultra Low Noise Pre-Amplifier Module Specifications**

Electrical	Model	275 Ultra Low Noise Pre-amplifier Module
	Short circuit input noise	<1nV/Hz½ at 1kHz
	Voltage gain	500
	Bandwidth (-3dB)	5Hz to >100kHz
	Slew rate	11V/ms
	Bias current	5- 50mA
	Bias current compliance voltage	10V
	Maximum output	±10V
Interface, Mechanical	Interface	Front Panel
	Panel Controlled Features	Bias current set, input short, bias on
	Dimensions	Single width module, 3U high
	Connector	BNC

# **Ordering Information**

S200_275	275 ultra-low noise pre-amplifier modules	

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