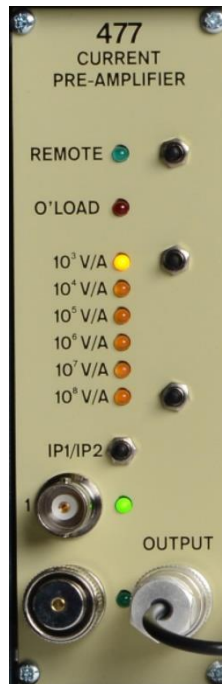


477 AC Current Pre-amplifier Module Brochure



Overview

The 477 dual channel AC current pre-amplifier module is used as the lock-in amplifier front end for current generating detectors in AC systems.

Offering short-circuit detector operation and an impressive six decades of gain, wide dynamic range measurements with excellent linearity can be realised.

The 477 can be operated from the front panel or fully automated over the USB interface. Over-load and under-load flags are included to enhance optimal remote operation.



Core benefits

- ✓ High performance pre-amplifier with six decades of gain
- ✓ High gain accuracy and stability
- ✓ Single module for two detector systems
- ✓ Low noise

Features

- ◆ Single width module housed within the 417/417T unit
- ◆ Dual input, six-decade pre-amplifier
- ◆ Pre-amplifier for lock-in amplifier
- ◆ Virtual ground input
- ◆ Front panel control
- ◆ Fully programmable via USB 2.0 interface

Ordering Information

S400_477	477 AC Current Pre-amplifier Module
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477 AC Current Pre-amplifier Module Specifications

Electrical	Model	477 AC Current Pre-amplifier Module
	Channel 1 input	Current input to trans-impedance amplifier
	Channel 2 input	Current input to trans-impedance amplifier
	Gain Ranges	108-103 V/A
	Maximum Current Input	10mA
	Gain Accuracy	0.01
	Gain Stability	200ppm/°C
	Output Stability	5ppm/°C to 500ppm/°C depending on sensitivity
	Linearity	< 0.025% departure from linearity from zero to full scale
	Input Impedance	Virtual earth
	Frequency Response 103 V/A Range (-3dB)	> 1MHz
	Frequency Response 104 V/A Range (-3dB)	1MHz
	Frequency Response 105 V/A Range (-3dB)	260kHz
	Frequency Response 106 V/A Range (-3dB)	30kHz
	Frequency Response 107 V/A Range (-3dB)	23kHz
Frequency Response 108 V/A Range (-3dB)	4kHz	
Interface, Mechanical	Interface	USB via 417/417T Unit (I2C)
	Control	Front panel/ USB
	Front Panel Controlled Features	Input select, gain range select
	Dimensions	Single width module, 3U high
	Connector	BNC
	Display	Digital display of 417-unit, channel A