Model 5106

Dual-Phase Analog Lock-in Amplifier PCB Assembly



FEATURES

- 5 Hz to 20 kHz operation (or single "spot" frequency up to 100 kHz)
- Voltage mode input
- Squarewave demodulation
- Adjustable low-pass and high-pass signal channel filters
- Up to 80 dB dynamic reserve
- Complete with software

APPLICATIONS

- Chopped light measurements
- Multiple instrument systems
- Teaching the principles of phase-sensitive detection
- OEM's

DESCRIPTION

The model 5106 is the tested printed circuit board assembly as used in the model 5105 (see page 52) and therefore has the same specifications as that instrument. It is especially suitable for OEM or multiple instrument use where the user is able to provide an appropriate enclosure and the necessary unregulated DC power supply.

Signal, reference and analog output connections are made either by connector or soldering to Berg pins mounted at 0.1" centers on the board. Power should be supplied to the on-board 5-pin 180° DIN connector from a remote source. The **SIGNAL RECOVERY** model PS0108 is available as an optional extra for this purpose.

Included with each unit is a copy of **5105Acquire**, a simple but versatile software package supporting up to ten instruments for an IBM PC or compatible computer, giving access to all the instrument's controls and outputs. In addition, LabVIEW drivers are available for users wishing to use that environment to develop their own control software.

Supplied complete with a 9-pin RS232 null modem cable, the card is ready to use once power is applied. Its especially low cost and high performance mean that the use of phase sensitive signal recovery techniques becomes cost-effective in even more situations than ever before.

Specifications

Specifications are the same as for the model 5105 (page 52-53), except as follows:-

General

Power Requirements

+18 V DC unregulated @ 300 mA -18 V DC unregulated @ 80 mA Dimensions Width

Depth 9½" (233 mm) Height 1½" (40 mm) Weight 14oz (400 g)

6½" (167 mm)

Optional Remote Line Power Supply Model PS0108 suitable for use with model 5106

