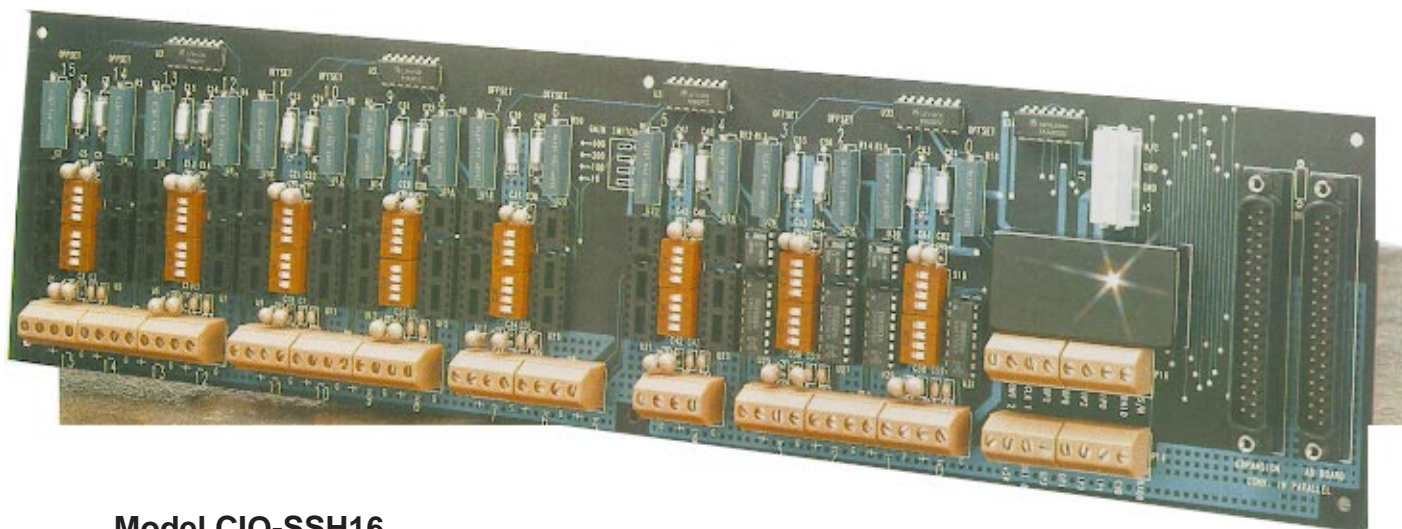# 16-Channel Simultaneous Sample and Hold Accessory Board
For CIO-DAS16 Series A/D Boards

Model CIO-SSH16
$399

✔ **16 Individually Calibrated Channels**
✔ **Total Aperture Uncertainty <50 nsec**
✔ **Eliminates Channel-to-Channel Skew Associated with Multiplexed A/D Inputs**

The CIO-SSH16 16-channel simultaneous sample and hold accessory board acts as a front end signal amplification and capture for the CIO-DAS16 series of analog input boards. Sixteen differential amplifiers feature individual switch selectable gains of 1, 10, 100, 200, 300, 500, 600, 700 and 800. After amplification, each channel's sample and hold is controlled by the CIO-DAS16 analog input board. Total aperture uncertainty for all 16 circuits is less than 50 nsec. The CIO-SSH16 eliminates the channel-to-channel skew associated with multiplexed A/D inputs. A fast A/D board sampling at 100,000 samples per second exhibits a minimum channel-to-channel skew of 10 µsec. Since the skew is additive from channel to channel, the 16 channel total scan skew is 160 µsec. In applications where a number of signals must be analyzed and captured, such as high speed transient and spectrum analysis, a channel-to-channel skew may be unacceptable. Low speed applications such as oscillographic recording and display may also require simultaneous sampling of all channels.

Works with CIO-DAS16, CIO-DAS16F, CIO-DAS16JR, CIO-DAS16-330 and CIO-DAS16-330I

Specifications
Channels: 16
Differential Amplifier: INA110
Gain Weights: 1, 10, 100, 200, 500
Sample and Hold Chip: LF398
Aperture Time (Max.): 250 nsec
Aperture Time (Avg.): 175 nsec
Aperture Uncertainty: ± 25 nsec
Acquisition Time (Max.): 10 µsec
Droop Rate: ±100 µV/¨µsec
Noise RMS 10 kHz-100: 10 µV
Accuracy: 0.01% of reading ± 1 bit
Power Consumption (Max.): 5.9 watts
Dimensions: 16" W x 4" H (406 x 102 mm)
Weight: 11.5 oz. (325 g)

To Order *(Specify Model Number)*

Model No.	Price	Description
CIO-SSH16	$399	16-channel simultaneous sample and hold accessory board with 4 channels installed (see CIO-SSH-AMP below to order additional channels.)
CIO-SSH-AMP	39	One additional channel of amp and sample and hold. Up to 12 may be added to the 4 channels installed in the CIO-SSH16 (for a total of 16). May be field installed.
C37FFS-5	30	Cable, shielded round cable with molded connectors, 5' (1.5 m) to connect to CIO-DAS16 series
C37FFS-10	40	Cable, shielded round cable with molded connectors, 10' (3 m) to connect to CIO-DAS16 series
C37FF-2	25	Cable, 2 foot unshielded flat ribbon cable. Connects to CIO-DAS16 series