DAS-HRES

16 Bit, High Resolution A/D Interface
For IBM PC/XT/AT and Compatibles







- ✓ 16 Bit Measurement Resolution
- ✓ 8 Full Differential Input Channels

times times in minimum

- ✓ 2 Channels of 16 Bit Analog Output
- ✓ 3 Counter/Timers
- Software Selectable Gains 1, 2, 4 and 8
- ✓ 8 Bits Digital I/O
- ✓ 47.6 kHz Throughput

The DAS-HRES is a multi-function, high resolution (16-bit) analog/digital I/O board designed for IBM personal computers and compatibles. The DAS-HRES plugs directly into any I/O slot of an IBM PC/AT/XT or IBM PS/2 model 25/30 or compatible computers.

The DAS-HRES offers 8 fully differential input channels, plus two channels of analog output at 16 bits resolution. In addition, the DAS-HRES offers 8 bits of digital I/O, three counter/timers and switch selectable unipolar and bipolar input ranges. It has an interrupt source and offers software-driven calibration, in addition to traditional gain adjustments.

Included with the DAS-HRES are driver routines callable from BASIC, as well as test and calibration programs. While the DAS-HRES is software compatible with the DAS-16G to the register level, the output connector is compatible with the DAS-20.

Specifications Channels: 8 differential

Resolution: 16 bits **Absolute Accuracy**

(Autocalibration Enabled): Gains of 1, 2, 4 0.003% full scale range ±1bit; Gain of 8 0.0045% of full scale range

Accuracy with Autocalibration Disabled: ±0.01% of FSR, ±1 bit Overvoltage: Continuous single channel to ±35 V

Input Impedance: >100 Mohms A/D SPECIFICATIONS

Type: Successive approximation

Conversion Rate: 47.6 kHz max.

D/A CONVERTERS Channels: 2 independent Type: 16 bit double buffered Linearity: 0.006% full scale range

Output Range: ±10 V

Resolution: 16 bits

Settling Time: 180 µsec to 0.01% for full scale step

DIGITAL I/O Output Port: 8 bits Input Port & Trigger: 8 bits Compatibility: TTL/CMOS

Counters: 3 down counters, 16 bit. 2 permanently connected to 1/10 MHz clock as programmable timer. 1 counter free

Shown with STA-HRES terminal panel (\$120) and CDAS-2000 cable (\$30).

GENERAL ENVIRONMENTAL Operating Temp.: 0 to 50°C (32 to

Storage Temp.: -20 to +70°C Relative Humidity: 0 to 90%

non-condensing Weight: 270 g (9 oz.)

To Order (Specify Model No.)		
Model No.	Price	Description
DAS-HRES	\$2249	High resolution multi-function board
STA-HRES	120	Terminal panel (requires CDAS- 2000 cable, see below)
CDAS-2000	30	Cable

Comes with complete operator's manual and utility software.

Ordering Example: DAS-HRES high resolution multifunction board, STA-HRES terminal panel, plus CDAS-2000 cable, \$2249 + 120 + 30 = \$2399.