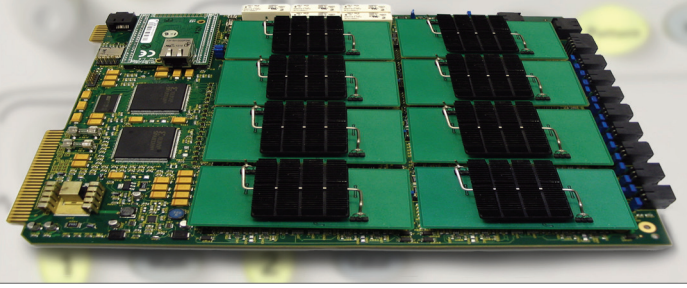
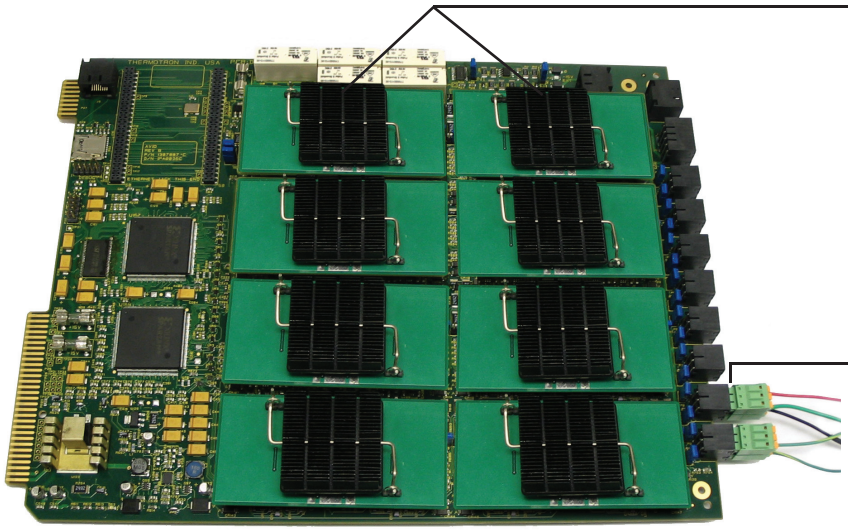
AVIO Module
Survivor Guide



The first instrument release from the TestTools product line is the AVIO (Analog Voltage Input Output) Module.

PHYSICAL ATTRIBUTES

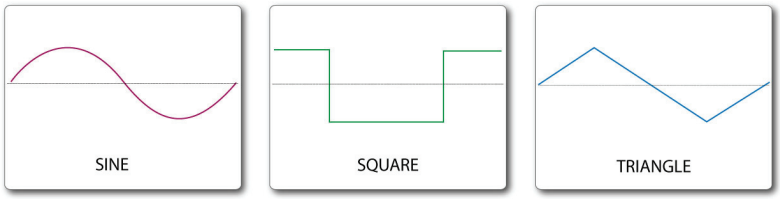


- Driver Boards protect the AVIO from overheating during high currents
- Spring-loaded connectors facilitate quick and accurate connections to devices under test

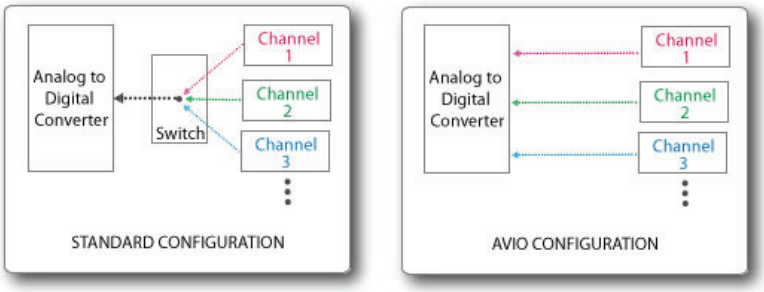
PERFORMANCE FEATURES

*The AVIO Module features **16 channels** configurable for input or output*

- One AVIO card can take the place of three standard boards and 16 measurement instruments (such as multimeters, oscilloscopes and frequency generator)
- Each channel can supply or monitor time varying AC or DC channels (sine, triangle or square waves)

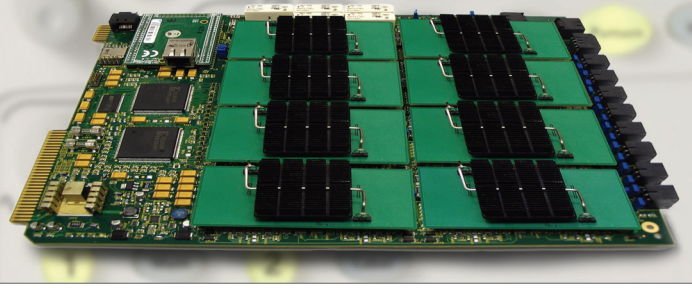


- Other cards similar to AVIO only have one Analog to Digital Converter for all channels on the card. AVIO is a cost effective and faster solution because every channel has their own dedicated Analog to Digital Converter. This produces a maximum sample rate and independent channels.



- Performance and accuracy are maximized through a steady high-speed sample rate on each channel

AVIO Module
Survivor Guide



- All voltage readings are true RMS regardless of wave shape
- Input sample rates up to 1.1 MS/s (mega samples per second) and output rates up to 1 MS/s
- Ability to drive currents up to 450 mA per channel without need for an external power supply
- Can withstand voltages between +/- 170 volts (therefore 120-volt outlets will not damage the module)
- Ethernet Interface includes a built-in web server

SPECIFICATIONS AT-A-GLANCE

OUTPUT SPECIFICATIONS

Number of Channels	*Up to 16 (shared with input mode)*
Maximum Frequency	*1 MS/s*
Output Voltage Range	*+10/-10 Volts*
Output Mode Memory Depth	*8K (8192)/channel*
Internal and External Clocking	*Yes*
Output Protection	*Over Current, Over Voltage, Over Temperature*
Failure Limit Range	*Absolute +/- voltage and current limits (user configurable)*
External Enable Trigger	*Yes (2 Triggers)*
Accuracy	*12 Bit*
Output Current/Channel (Max)	*+/-450 mA (external power required for high currrent applications)*
Slew Rate	*88.49 V/us*
Channel Impedance	*~3.00 Ohm (series)*
Ethernet Interface	*Built-in Web Server*

INPUT SPECIFICATIONS

Number of Channels	*Up to 16 (shared with output mode)* *Up to 8 (in differential mode)*
Maximum Sample Rate	*1.1 MS/s (0.909 uS)*
Input Voltage Scale	*+/-1.00; +/-12.00; +/-179 Volts*
Accuracy	*12 Bit*
Input Protection	*+/170V max*
Channel Impedance	*~36KOhm to GND (when physically disconnected)*
Ethernet Interface	*Built-in Web Server*

APPLICATIONS

- Interface with any Thermotron chamber to operate and monitor product under test
- General data aquisition
- Input measurement (ex. takes the place of 16 multimeters)

TestTools by Thermotron

THERMOTRON INDUSTRIES
291 Kollen Park Drive
Holland, Michigan, USA 49423
Mktg: (616) 393-4580
Main: (616) 392-1491
Fax: (616) 392-5643
E-mail: info@thermotron.com

Visit us on the Internet
www.thermotron.com

THERMOTRON INDUSTRIES, U.K.
Newton House
Winch Road
Kent Science Park
Sittingbourne, Kent
ME9 8EF England
Phone: 01795 436333
Fax: 01795 436777
Email: sales@thermotron.co.uk