



# DAC-200™

## DIGITAL-TO-ANALOG VOLTAGE CONVERTER

The **DAC-200™** is a digital-to-analog converter designed to convert the output of the ATVS family of instruments to 0-5VDC. The device produces an output whereby the voltage is linearly proportional to both the air velocity and temperature for the ATVS product family.



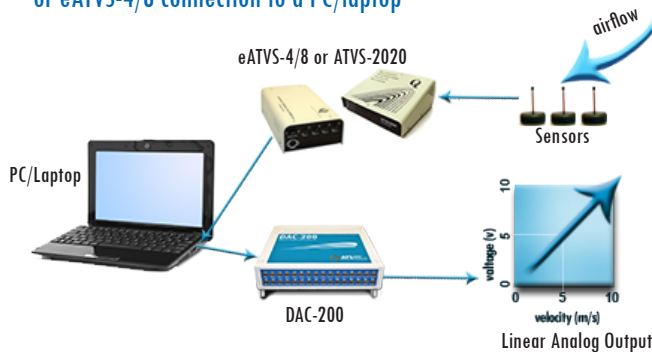
Two USB ports connect the **ATVS-2020™** or **eATVS-4/8™** and the **DAC-200™** to a computer. This product is capable of outputting 32 signals from 32 sensors of the ATVS-2020-32 system.

The **DAC-200™** is operated by **stageDAC™** software, which enables the user to specify which outputs are velocity or temperature through the software's GUI. The unit can also be used as a general purpose digital-to-analog output converter. A **LabVIEW™ VI (DAC-200™)** is provided to facilitate programming this device in a LabVIEW environment.

The availability of an analog signal is essential in many industrial applications and control systems. The **DAC-200™** plays a critical role in providing a 0-5VDC signal for such application where air velocity and temperature are measured. Furthermore, since the voltage output is linearly proportional to the air velocity and temperature, use of any data acquisition system with an ATVS product family is now made possible by the **DAC-200™**.

Additionally, the **DAC-200™** can convert flows in the range of 0-50 m/s, 0-25 m/s and 0-10 m/s to linear voltage and temperatures from -10°C to 90°C to linear output voltage. Other ranges are available upon request.

Diagram showing the DAC-200 and the ATVS-2020 or eATVS-4/8 connection to a PC/laptop



**OVERALL DIMENSIONS (W x H x D)**  
291 x 62 x 259 mm  
(11.5 x 2.5 x 10.2")

**TEMPERATURE RANGE**  
-10°C to 90°C

**FLOW RANGE**  
0-50 m/s, 0-25 m/s, and 0-10 m/s

**VELOCITY ACCURACY**  
+/- 2% of reading

**TEMPERATURE ACCURACY**  
+/- 1°C

**SOFTWARE**  
stageDAC™, DAC-200™

**POWER**  
USB port

**OUTPUT**  
Analog Voltage Linearly Proportional to Velocity and Temperature 0 to 5 VDC

### FEATURES:

- » **Output Analog Voltage**  
For integration into control circuits that require analog voltage as input signals
- » **stageDAC™ Software**  
User friendly application for easy data viewing and logging
- » **Highly Accurate**  
Provides accurate data to within 1% of the full scale
- » **Single-Sensor Technology**  
Measures air temperature and velocity using a single sensor or a combination of sensors
- » **USB Connection**  
Provides power and signal communication

### APPLICATIONS:

- » **Telecommunications**
- » **Automotive**
- » **Medical instrumentation**
- » **Pneumatic control**
- » **HVAC**
- » **Airflow monitors**
- » **Thermal management**
- » **Aerospace**
- » **Industrial automation**
- » **Process control**
- » **Real time feedback control systems**

For further technical information, please contact Advanced Thermal Solutions, Inc. at **1-781-769-2800** or **www.qats.com**