# data sheet

## GrayWolf Classical Line Instruments



# Zephyr II

## Differential Pressure Meters (Auto-Zeroing)

Differential pressure ( $\Delta P$ ) measurement is a crucial parameter for determining pollutant pathways for IAQ and worker

exposure applications. It is also a key HVAC parameter in commercial and institutional buildings and in manufacturing plants, for validating system balance, including testing pressure drop across various components, verifying filter performance and many other important applications.

Each Zephyr instrument includes a built-in, auto-zeroing micro-manometer for measuring differential pressure and static pressure. The auto-zeroing feature allows for highly accurate differential pressure logging over time. With a pitot tube, the Zephyr provides direct air velocity readings and volume flow rate (VFR) over a wide range. There is also a 'K'-type thermocouple input

for a variety of temperature probes (air/surface/penetration/etc.). Zephyrs may also be fitted with a telescoping 3-function probe (model 2300-AHTS-CL) to measure humidity, (Pt-100 RTD) temperature and (hotwire) airspeed/VFR.

The display and menu system provide step-bystep guides for each operation. This ensures minimal user training is required. Volumetric flow is calculated by simply entering the size of the duct and the instrument performs the necessary calculation.



This meter offers excellent low-end  $\Delta P$  sensitivity and (due to the auto-zeroing capacity) exceptional stability near zero (to 0.5Pa, 0.002 in.H<sub>2</sub>O). However, it also provides a very wide  $\Delta P$  measurement range (to +/-7000Pa, +/-29 in.H<sub>2</sub>O).

## **Product Features:**

- Tried and true, rugged design
- Multiple parameter

Measure Differential Pressure alone, together w/ a K-type thermocouple temperature probe, with a 2300AHTS %RH/Temperature/Airspeed combo probe, or measure airspeed and VFR with a pitot tube.

- Standard inputs Built-in, auto-zeroing micro-manometer. K-type thermocouple. 3-function "smart" probe.
- Large and clear display
   Show up to 4 variables simultaneously.
   Scroll through all other readings on the display.
   Wide viewing angle.
   Automatically updated when probes plug in.
   On screen instructions for easy operation.
- Data-logging (Zephyr II+ only) Manual or automatic datalogging available. Advanced datalogging for unattended surveys. Logged data downloads to Desktop PC for analysis.
- Intuitive menu system
   Minimal training required.
   Easy to use.
   Screen prompts guide user through operation.
- Comfortable to use Large rubber grip. Single-handed operation.
- Easy access to batteries Disposable or rechargeable can be used. AC power adapter available.
- Durable housing Impact resistant. Lightweight. Designed for everyday use.
- Probe attachment
   3-function %RH/temperature/airspeed
   probe can be fixed to side of instrument.
- Large pushbutton operation
- Reporting and analytical software GrayWolf's highly advanced, easy-to-use WolfSense® PC data reporting software is included with the Zephyr II+ (on CD-ROM and USB key) for analysis of logged data. Optional WolfSense ARG software automates Report generation.



EMAIL:

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## Specifications

	Zephyr II	Zephyr II+
Use:	Differential Pressure. Multi-function, designed for use with GrayWolf's 2300 AHTS 3-function probes, K type thermocouple temperature probes and with pitot tubes.	
Inputs available:	Auto-zeroing micro-manometer (built-in) K-type thermocouple 3-function %RH, Temperature, (hotwire) Air Velocity probe	
Power Requirements:	3 x C size disposable alkaline batteries Optional AC adapter 100 to 240 V ac 50/60 Hz Rechargeable batteries and separate charger may be used	
Typical battery life:	130 hours (subject to type of probes connected)	
Pressure range:	+/-7000 Pa, +/-29 inH2O, +/-700 mmH2O, +/-70 mbar, +/-49 mmHg	
Pressure resolution:	0.1 Pa, 0.001 inH <sub>2</sub> O, 0.01 mmH <sub>2</sub> O, 0.001 mbar, 0.001 mmHg	
Pressure accuracy:	+/- 1% rdg +/- 0.4Pa (0.002 inH <sub>2</sub> O)	
Operating range:	0°C to 50°C (32°F to 122°F), 0 to 90% RH	
Material:	Impact resistant ABS, water resistant to IP54	
Dimensions:	265 mm x 135 mm x 42 mm (10½" x 5¼" x 1½")	
Weight:	0.9 kg (2 lbs)	
Manual (snapshop) data capture and review:	No	Yes
Averaging facility for duct traversing:	Yes	Yes
Trend (timed) data logging:	No	Yes
Data download to PC:	No	Yes
Optional Interface to mobile PCs via GrayWolf WolfSense Software:	Yes	Yes

#### **Standard Zephyr Kits:**

Part Number	CLK-Zephyr II	CLK-Zephyr II-plus
Contents	Zephyr II instrument	Zephyr II+ instrument
	Carrying case	Carrying case
	6ft of dual tubing	6ft of dual tubing
		PC interface cable, USB
		WolfSense PC Data Transfer Software

GrayWolf Sensing Solutions advanced environmental instrumentation

www.GrayWolfSensing.com

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GrayWolf reserves the right to change specifications without notice.