



Air Monitor

Precision Airflow Measurement
An ONICON Brand

DCAS Data Center Aisle Sentry

The DCAS provides accurate and reliable differential pressure measurement that can be combined with multiple static pressure sensors to control and optimize aisle pressurization.

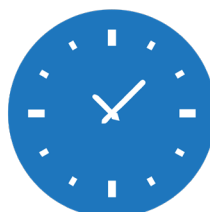


DCAS	
Channel	DP Value (inH2O)
1	0.00001
2	-0.00004

ENT - Main Menu



FACTORY CONFIGURED



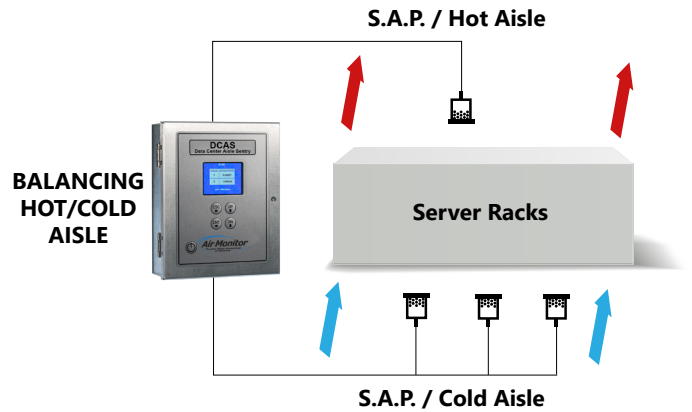
ON TIME DELIVERY



BEST CUSTOMER SERVICE



TYPICAL INSTALLATION LAYOUT



DESCRIPTION

The DCAS is a dual-channel transmitter specifically designed for data center aisle pressurization. Typical data center aisles are controlled at 0.1 inch w.c. between the hot and cold aisles to prevent cross contamination for optimal energy efficiency.

The DCAS uses an application specific tailored array of precision transducers to provide the best turndown and accuracy needed for these low and near zero pressure measurements. This unique dual stacked transducer design helps maintain accurate readings near zero without the reading fluctuating significantly impacting your airflow control.

FEATURES

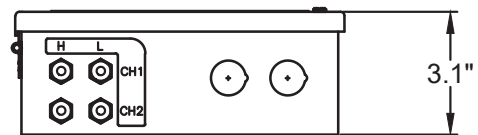
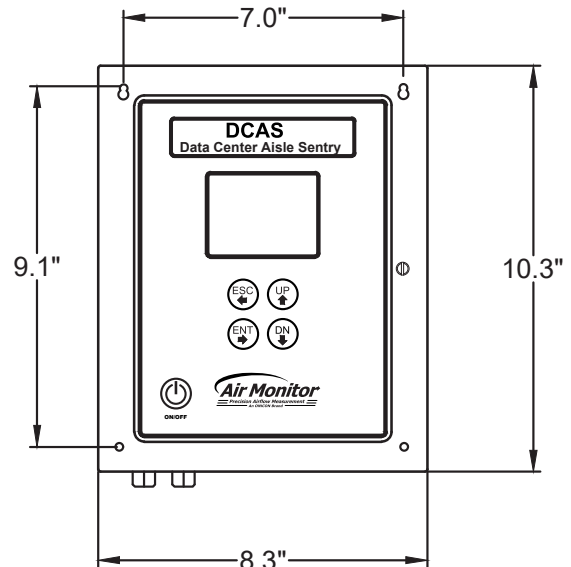
Extended Flow Range Capability - The dual transducer technology maximizes the turndown ratio to ensure optimal performance at low differential pressure conditions.

Superior Resolution - The Graphic Display interface shows pressure resolution to the hundred thousandths (Ex 0.00005).

±0.75% of Reading Measurement Accuracy - The transmitter will have an accuracy of ±0.75% of reading within the 40:1 pressure turndown ratio.

Paired with Air Monitor Static Air Probes - These probes are unimpacted by airflows up to 1,000 FPM from a 360 radial source while reading the static pressure in the proximity of the device to ±1% of actual pressure.

DIMENSIONS



NEMA 1 Enclosure



S.A.P. - Static Air Probe

SPECIFICATIONS*

DCAS TRANSMITTER		
PERFORMANCE	SYSTEM ACCURACY	DP pressure of $\pm 0.75\%$ of reading with 40:1 turndown ratio
OPERATING CONDITIONS	AMBIENT TEMPERATURE	-20°F to 180°F (storage) 0°F to 120°F
	FLUID TEMPERATURE	-40°F to 120°F
	HUMIDITY	0 to 99% RH, non-condensing
INPUT POWER	24 VAC	15 VA @ 24 VAC
	24 VDC	10 W @ 24 VDC
I/O SIGNALS	ANALOG OUTPUTS	Two (2) analog outputs, selectable based on configuration
ELECTRONICS ENCLOSURE	AVAILABLE OPTIONS	• Aluminum, NEMA 1
	DISPLAY	3.5" diagonal color graphical FTF LCD, Display resolution to the hundred thousandths
PROGRAMMING	Menu driven user interface via four (4) push buttons	
ELECTRICAL CONNECTIONS	POWER	Removable terminal block for use with 16 to 24 gauge wire
	I/O	Removable terminal block for use with 16 to 24 gauge wire
PROCESS CONNECTIONS	AVAILABLE OPTIONS	<ul style="list-style-type: none"> • 1/8" FNPT, both high and low signal connections • 1/4" compression, both high and low signal connections • 3/16" hose barb, both high and low signal connections
APPROVALS	FCC	Part 15 Subpart B, Class A device

DCAS PRESSURE SENSOR		
FLOW SENSOR DESIGN	S.A.P.	Static Air Probes
MATERIALS OF CONSTRUCTION	316 SS	
OPERATING CONDITIONS	HUMIDITY	0 to 100% RH, condensing
	ENVIRONMENT	Impervious to airborne dirt, debris, and moisture
PROCESS CONNECTIONS	AVAILABLE OPTIONS	<ul style="list-style-type: none"> • 1/8" FNPT, both high and low signal connections • 1/4" compression, both high and low signal connections • 3/16" hose barb, both high and low signal connections

* Specifications subject to change without notice.

MODEL SELECTION GUIDE

Model Number Coding - DCAS-ABCD

A = Model Configurations

- 1 = Single Channel
- 2 = Dual Channel

B = Enclosure

- 1 = NEMA 1 aluminum enclosure

C = Feature Set (Based on model configuration)

- 2 = 24V AC/DC power, two (2) analog outputs

D = Process Connection

- 1 = 1/8" FNPT
- 2 = 1/8" FNPT x 1/4" compression
- 3 = 1/8" FNPT x 3/16" hose barb

