# Enlogic – Air Flow Sensor EA9205



# CONNECT AND PROTECT

# Do you know insufficient airflow or cooling in your data centers can lead to an unprecedented downtime?

Air Flow sensors are accessories attached to nVent Enlogic iPDUs that enable remote air flow monitoring. They provide diagnostic information via Web UI, SNMP, CLI/SSH interfaces. The administrators can set remote displays, sensor threshold values, alarms, SNMP traps and email, event log and syslog notifications to monitor the air flow in the data center. Air Flow sensors are used along with many equipment and devices from the industries such as: Medical. Safety, Power, Aviation & Space, Transportation, Nuclear Power.

- Can measure very minute changes in air flow rate.
- Have high dust resistance by its DSS [Dust Segregation Structure] that prevents dust adhering to the sensor.
- Are small in size and can be easily installed inside a ducts.



In the Air Flow sensor, an outside air channel is separated from a core channel by a centrifuge channel. The helical structure's centrifugal force separates the dust, and the gas fed to the sensor chip has no dust, therefore reducing contamination.



## **TECHNICAL SPECIFICATIONS**

Specifications		
Standard Operating Range	0°C - 60°C, 35-85% RH Non-Condensing [32°F - 140°F, 35-85% RH Non-Condensing]	
Operational Voltage	4.2 - 5.5 Volts DC	
Current Draw	30 mA max	
Air Flow Sensor Housing		
Material	ABS, 10% Glass-Filled	
Color	Black	
Flow Sensor		
Material	PPS	
Housing Color	Black	
Interface Plug		
Specifications	RJ45 Compliant	
Housing Material	PC	
Color	Transparent	
Cable Colour	Black	
Workmanship Standard	Harness to be Manufactured to IPC/WHMA-A-620 Class 2 Standards	
Accessory Components	Tap Screws, Qty: (2) Air Flow Sensor Box Magnet Cable Ties, Qty: (5) Adhesive Backed Mount, Qty: (5) Installation Guide, Qty: (1)	

#### **FEATURES & RATINGS**

Parameters	Specifications
Flow Range (See note 1.)	0 to 4 m/s
Calibration Gas (See note 2.)	Air
Electrical Connection	Three-pin connector
Power Supply	10.8 to 26.4 VDC
Current Consumption	15 mA max, with no load, with a Vcc of 12 to 24 VDC, and at 25°C
Output Voltage	1 to 5 VDC (non-linear output, load resistance of 10 $k\Omega)$
Accuracy	±5% FS (25°C characteristic)
Repeatability (See note 3.)	±0.4% FS
Output voltage (Max.)	5.7 VDC (Load resistance: 10 k $\Omega$ )
Output voltage (Min.)	0 VDC (Load resistance: 10 kΩ)
Rated Power Supply Voltage	26.4 VDC
Rated Output Voltage	6 VDC
Case	PPS
Degree of Protection	IEC IP40 (except for flow inlet and outlet)
Operating Temperature (See note 4.)	-10 to 60°C
Operating Humidity (See note 4.)	35% to 85%
Storage Temperature (See note 4.)	-40°C to 80°C
Storage Humidity (See note 4.)	35% to 85%
Temperature Characteristics	$\pm$ 5% FS (25°C characteristic) at an ambient temperature of – 10 to 60°C
Insulation Resistance	Between Sensor outer cover and lead terminals: 20 $M\Omega$ min (at 500 VDC)
Dielectric Strength	Between Sensor outer cover and lead terminals: 500 VAC, 50/60 Hz min. for 1 min (leakage current: 1 mA max.)

NOTE 1: Volumetric flow rate at 25°C, 101.3 kPa.

NOTE 2: Dry gas. (must not contain large particles, e.gg., dust, oil, or mist.)

NOTE 3: Reference (typical)

NOTE 4: With no condensation or icing

### ACCESSORIES

Tap Screw, FS00041





Cable Ties, PL00040



Environmental monitoring and management are integral to a complete energy management of your data center. By collaborating with iPDUs, the airflow sensor probes allow you to obtain temperature and differential pressure information. Simply, specify those upper and lower thresholds for a stress-free IT equipment management system!

Adhesive Backed Mount, PL00038





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