



**KANOMAX USA, INC.**

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**.NET**

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**2<sup>nd</sup> Edition Rev.2**

## Kanomax Group

Since our inception more than 50 years ago, Kanomax has been the most promising manufacturer of a broad range of precision measuring instruments for fluid mechanics research, environmental, aerosol research, particles measurement, and customized system applications. As a company that prides itself in technology, product quality, and service, we have been enjoying an unsurpassed reputation in the Japanese industrial and academic fields. Japanese customer demand for high quality has driven us to produce the finest manufactured products in the industry. We are pleased to introduce our quality products to the global market. To further benefit our customers worldwide, we have launched our global operations aiming to introduce our dependable technology and to provide our wide range of measuring solutions and services.



Kanomax USA, Inc. (NJ)



Kanomax Holdings, Inc. (NY)



Kanomax Japan, Inc.



Shenyang Kanomax Instrument Co., Ltd. (China)

## Kanomax FEASibility

Kanomax makes your idea feasible and realizes your needs.

<p><b>Fluid Measurement Instruments</b></p>	<p><b>Environmental Measurement Instruments</b></p>
<p>Having established worldwide brand recognition and product loyalty, Kanomax Fluid Measurement Instruments have become the measurement standard in Japan. Our Fluid Velocity Systems have wide-ranging industrial applications to include Elimination of Locomotive Wheel Noise, Research to Increasing Energy Efficiency, Architectural Research and Development, Civil Engineering, Chemistry, and Medical Science Research to name a few.</p>	<p>Ever increasing public awareness for air quality is driving the demand for improved monitoring and control of air temperature, humidity, flow and particulates. Kanomax produces a number of Air Measurement and Control Instruments currently utilized by industry professionals. These devices are vital tools for maintaining Constant Air Quality and Comfort in critical locations that include public and private offices, factories, and medical facilities. Kanomax Anemometers currently enjoy a 67.9% market share among top 10 Japanese subcontractors.</p>
<p><b>Aerosol Measurement Instruments</b></p>	<p><b>System Application</b></p>
<p>Kanomax has developed Particle Measurement Technologies to address a variety of applications from Semiconductor Production Facilities requiring rigorous air cleanliness to general office work environments. Our Particle Measurement Technology is generally divided into three areas, Environmental Comfort Monitoring, Cleanroom Environment Monitoring, and Aerosol Research Instruments.</p>	<p>Kanomax has developed custom Wind Tunnel, Environmental Test and Performance Test systems for a variety of areas that include Aviation, Environmental Assessment, and Automotive. As an example, during the development of an intercontinental rapid transit scramjet engine, Kanomax tested flame stabilization, air inlet shape, and many other effects using Kanomax supersonic wind tunnels.</p>

## Customer Services

Kanomax fully understands service to be an essential part of the total solution provided to our valued customers. Having already established a worldwide service network, we continuously strive to improve our support services.



### NIST (National Institute of Standards and Technology) Traceable Calibration Services

Our Calibration Laboratory in New Jersey maintains the longest and most accurate wind tunnel of its kind. Kanomax provides the highest quality of service available with a quick turnaround time. Our service specialists are well trained and will calibrate your instruments to the highest standards. We recommend that all instruments be calibrated on an annual basis.

## Kanomax Global Calibration Facility

Kanomax's global (Japan and US) calibration facilities are directly traceable to the national standards and ensure the highest precision measurements for our valued customers. We are fully committed to providing the best calibration services possible utilizing our global facilities.

## Kanomax Anemometer Calibration Facility

Calibration Facility	Temperature Variable Wind Tunnel	Low Velocity Wind Tunnel	High Velocity Wind Tunnel	High Temperature Wind Tunnel	Open Jet Wind Tunnel	Humidity Calibrator	Pressure Generator
Type	GÖTTINGEN (closed-circuit)	EIFFEL (open-circuit)	GÖTTINGEN (closed-circuit)	GÖTTINGEN (closed-circuit)	Centrifugal fan	a) Two temperature type b) shunt type	Pump type
Specifications	59 to 9840fpm (0.3 to 50m/s) 41 to 176°F (5 to 80°C)	10 to 492fpm (0.05 to 2.5m/s)	590 to 9840fpm (3 to 50m/s)	Room temperature to 752°F (400°C) 20 to 9840fpm (0.1 to 50m/s)	50 to 6000fpm (0.25 to 30.5m/s)	a) 3 to 100%, 41 to 104°F (5 to 40°C) b) 0 to 100%, 41 to 140°F (5 to 60°C)	±0 to 10kPA
Applications	Temperature compensating calibration	Low velocity range air velocity calibration	High velocity range air velocity calibration	High temperature range air velocity calibration	Anemometers and Pitot tubes calibration	Humidity calibration	Pressure calibration



Standard Particle Generator



Open Jet Wind Tunnel

## Anemometers Selection Guide

Area	Application	A003	A004	A031	A531	A533	A541	A542	A543	6113	6162	6312	1550	1560	1570	6812	6813	6815
Indoor Environment	Air environmental measurement in residence and office buildings	○	○	○	○	○	○	○	○	○						○	○	○
	Air-condition and environmental measurement in buildings and factories	○	○	○	○		○	○		○						○	○	○
Air-conditioning Equipment	Air-conditioning capacity test and maintenance check	○	○	○	○		○	○		○								○
	Air velocity measurement in cleanroom	○	○	○	○	○	○	○	○									
	Performance check for HEPA filter, etc.				○	○	○	○	○			○						
High-temperature Environment	Stack gas and combustion air measurement for incinerator, electric furnace, boiler, etc.										○							
	Hot air measurement for drying air, sterilization, etc										○							
Inspection, Control	Air velocity measurement in tight quarters (e.g. inside PCs) for cooling efficiency, etc.				○		○	○										
	Product performance check for cooling efficiency, drying efficiency, etc.	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	Air velocity control for blowers											○						
Automotive	Automobile velocity measurement	○	○	○	○		○	○										
	Air velocity measurement for engine compartment and vehicle interior	○	○	○	○		○	○			○		○	○	○			
Multipoint measurement	Air velocity distribution measurement in indoor and inside ducts	○	○	○	○		○	○					○	○	○			
	Air velocity monitoring in cleanroom and indoor											○	○	○	○			

### Solution Technologies for Automotive R&D

R&D competition is increasingly keen in the modern day automobile industry. Kanomax continually monitors trends and user needs of collective automobile technologies.

Kanomax designs and produces testing equipment utilizing state of the art technologies. We offer customized engineering systems and products, applying our many competitive technologies. These include fluid mechanics research instruments, particle measurement devices, optical measurement systems and control technology for the automobile, aeronautics, shipbuilding, and architectural industries. Kanomax optimizes system applications to meet each customer's individual needs, drawing on our solid product knowledge, years of experience and many successful engagements.

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Air Velocity, Air Temperature,  
Relative Humidity,  
Differential Pressure

# Anemomaster Model A004

Palm-Size Hot-Wire Anemometer

NIST Traceable



**HVAC Testing**  
**IAQ Investigation**  
**Industrial Hygiene**  
**Cleanrooms**

**Features:**

- Probe Compatibility feature allows utilization of a spare probe
- Detachable probe
- Compact, light-weight, and affordable
- Simple operation
- Wide ranges of measurement
- Built-in temperature compensation circuit

**Benefits:**

- Palm-size and feather-weight main body is hardly noticeable
- Accuracy of +/- 3% is maintained to suit your needs
- Soft keys and large display make it a breeze to conduct measurement
- Temperature compensation maintains accuracy at any temperature in the range

**Specifications**

Model		A004
Air Velocity	Range	20 to 3940 fpm (0.10 to 20.0m/s)
	Accuracy	+/-3% of reading or +/-3 fpm (+/-0.015m/s) whichever is greater
	Response Time	Less than 1second at 196 fpm (1m/sec), 90% response
	Resolution	0 to 9.99 m/sec: 0.01 m/sec (minimum) 10.0 to 20.0 m/sec: 0.1 m/sec
Air Temperature	Range	32 - 122°F (0-50°C)
	Accuracy	+/-0.2°F (1°C)
	Response Time	Less than 30 seconds at 196 fpm (1 m/sec), 90% response
	Resolution	1°F (0.1°C)
Power Supply		4 x 1.5V AA cells Mn battery, alkaline battery, or Ni-Cd battery (An appropriate charger to be used for the Ni-Cd battery)
Battery Life		Approx. 4 hrs. Continuous at air velocity 196 fpm (1 m/s) with Mn batteries
Operating Environment	Main Unit	41 to 104°F (5 to 40°C)
	Probe	32 to 122°F (0 to 50°C)
Storage Environment		14-122°F (-10 to 50°C)
Dimensions		Probe: approx. 0.24" or 0.40" (6 or 10 mm) in diameter x 7.9" (200 mm) in length Probe cable: 0.13" (3.3 mm) in diameter x 59" (1500 mm) in length Main body: 2.4" (60 mm) x 4.7" (120 mm) x 1.2" (30 mm)
Weight		Approx. 0.4lbs (180g) including batteries
Standard Kit		Operation Manual, AA Batteries
Optional Accessories		Spare Probe, Extension Rod (Telescopic 6.5" - 35.8" / 166mm to 909mm)

Air Velocity, Air Temperature,  
Relative Humidity,  
Differential Pressure

# Anemomaster Model A031 Series

NIST Traceable



**HVAC Testing**  
**IAQ Investigations**  
**Filter Face Velocity Measurements**  
**Cleanroom Studies**  
**Industrial Hygiene**

**Features:**

- Single probe capable of measuring air velocity and temperature simultaneously
- Built-in memory allows storage of measured data
- Highly- visible LCD is capable of displaying air velocity and temperature simultaneously
- RS232 and Analog (option) outputs are available



**Benefits:**

- Data can be reviewed on-screen, printed, or downloaded to a computer
- Articulating probe for various applications
- Etched length increments on the telescopic probe make duct traverse measurements easier
- Telescopic probe for hard-to-reach areas and in-duct measurements

**Specifications**

Air Velocity	Range	20-6000fpm (0.10-30.0m/s)
	Accuracy	+/-2% of reading or +/-3fpm whichever is greater (+/-2% of reading or +/-0.015m/s whichever is greater)
	Resolution	1fpm (0.01m/s from 0 to 9.99m/s, 0.1m/s from 10.0 to 30.3m/s)
Volumetric Flowrate		At 20 fpm: 9031 ft <sup>3</sup> /min, at 6000 fpm: 2,709,360 ft <sup>3</sup> /min (At 0.1m/s: 2,341m <sup>3</sup> /s, At 30 m/s: 702,270 m <sup>3</sup> /s)
Temperature	Range	-4 to 140.0 °F (-20 to 60.0°C)
	Accuracy	+/-1°F (+/-0.3°C)
	Resolution	0.1°F (0.1°C)
Differential Pressure (Option)	Range	-5.00 to + 5.00kPa
	Accuracy	+/- (3% of reading + 0.01)kPa
	Resolution	0.01kPa
Output	Digital	RS 232C (Baud rate 4800, 9600, 19200 and 38400 bps)
	Analog	DC 0-3 V (Select from Air Velocity, Air Temperature and Pressure)
Power Supply		6 x 1.5V AA batteries (AC adaptor: AC90-240V/Optional)
Data Storage		Timed and multipoint average calculation. Total of 800 data for Velocity and Temperature / Volumetric Flowrate and Temperature / Pressure
Probe	Straight Probe Model A031/A041	Length: 39.4 in. (100 cm)- Telescopic / Diameter of Tip: 0.236 in. (6.0mm), Diameter of Base: 0.472 in. (12.0 mm)
	Articulating Probe Model A034/A044	Length: 39.4 in. (100 cm)- Telescopic / Diameter of Tip: 0.236 in. (6.0mm), Diameter of Base: 0.472 in. (12.0 mm) Articulating section length: 3.543 in. (90.0 mm)
Accessories		Carrying case, Operation manual, 6 x AA Batteries, RS-232C cable, Software (for Windows), AC adaptor
Options		Analog output, Printer, AC adaptor (for Printer)

Air Velocity, Air Temperature,  
Relative Humidity,  
Differential Pressure

# Climomaster Series

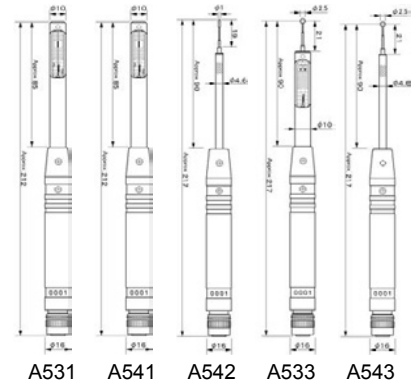
NIST Traceable



## Multi-Function Thermal Anemometer



**Ventilation Testing  
Laboratory Control  
Cleanrooms  
IAQ Investigation  
Industrial Hygiene  
Quality Control**



**Features:**

- Probe Compatibility feature allows utilization of a spare probe
- Detachable probe allows for easy replacement, and for compatibility with multi-function thermo anemometers
- Automatic Flow Rate Calculation function
- RS232C terminal for data logging
- Stores up to 1500 measurement data
- Differential Pressure available as an option

**Benefits:**

- If you have more than one unit, detachable probe allows you to share the main unit or the probe.
- Gives automatic flow rate readings by registering duct sizes (up to 25 duct sizes).
- Well designed software allows you to access the data instantly.
- You can store the data or upload it to your PC via RS232C cable and software (both optional)

**Specifications**

Model		A531	A541	A542	A533	A543
Air Velocity Range		20 to 6000fpm (0.10 to 30.0m/s)			10 to 1000fpm (0.05 to 5.00m/s)	
Air Temperature Range		32.0 to 140.0°F (0.0 to 60.0°C)				
Relative Humidity Range		2.0 to 98.0%RH	--		2.0 to 98.0%RH	--
Differential Pressure (Option)		-5.00 to +5.00kPa				
Accuracy		Velocity: +/-2% of reading or +/-3fpm (+/-0.015m/s) whichever is greater Air Temperature: +/- 1 °F (+/-0.5 °C) Relative Humidity: +/-2.0%RH from 2 to 80%RH, +/-3%RH from 80 to 98%RH Differential Pressure: +/- (3% of reading +0.01)kPa				
Output	Digital	RS-232C (Baud Rate 4800, 9600, 19200 and 39400bps)				
	Analog	DC0-1V (Select from Air Velocity, Air Temperature, Relative Humidity and Pressure)				
Power Supply		6 x 1.5V AA Batteries, AC Adapter (Optional): AC100-240V				
Battery Life		Approx. 10hrs. Continuous at 984fpm (5m/s), 68°F (20°C) with alkaline batteries				
Operating Environment	Main Unit	41 to 104°F (5 to 40°C)				
	Probe	32 to 140°F (0 to 60°C)				
Storage Environment		41-104°F (5 to 40°C)				
Weight		Approx. 0.9lbs (400g)				
Standard Kit		Carrying Case, Operation Manual, AA Batteries, Probe Cable				
Optional Accessories		Spare Probe, Analog Output, Pressure Sensor, Extension Rod, Printer, Printer Cable, Communication Cable, Software (for Windows), AC Adapter: AC100-240V 50/60Hz				

**Selection Guide**

Model	Measuring Range	Probe Type	Directivity	Velocity & Temp.	Relative Humidity
A531	20 - 6,000 fpm	Rod	Mono	○	○
A541	20 - 6,000 fpm	Rod	Mono	○	×
A542	20 - 6,000 fpm	Needle	Omni	○	×
A533	10 - 1,000 fpm	Spherical	Omni	○	○
A543	10 - 1,000 fpm	Spherical	Omni	○	×



Air Velocity, Air Temperature  
Relative Humidity, Differential Pressure

# Anemomaster Model 6812, 6813, 6815

## Rotating Vane Digital Anemometer

NIST Traceable



**HVAC Testing**  
**IAQ Investigations**  
**Industrial Hygiene**  
**Cleanroom Testing**

### Features:

- Display switchable in m/s (MPS) or ft/min (FPM) for air velocity and cubic ft/min (CFM) or cubic meter/hr (CMH) for calculated air volume flow.
- Very high accuracy due to use of microprocessor
- Digital memory for maximum and minimum values
- Average measurements over two or sixteen seconds for air velocity
- Display hold for easy reading of measurements
- Long battery life

### Specifications

Model		6812	6813	6815
Air Velocity	Probe AP275	40 to 7800 FPM (0.2 to 40 m/s)		
	Probe AP100	60 to 6800 FPM (0.3 to 35 m/s)		
	Accuracy	±1.0% of Reading ±1 digit		
	Resolution	1 FPM or 0.01 m/s		
Air Volume Flow		0.0 to 9999 CFM(ft <sup>3</sup> /min) / 0.0 to 9999 m <sup>3</sup> /hr		
Temperature	Air Vel. Probe	-	-22 to 212 F (-30 to 100C)	
	Optional Temp Probe	-	-139 to 392 F (-95 to 200C)	
	Accuracy	-	±0.3°C ±0.2% of Reading in °C	
	Resolution	-	0.1 F or 0.1°C (1 F below -99.9 F)	
Relative Humidity	Range	-	5.0 to 95.0 %RH	
	Accuracy	-	±2.0 %RH	
	Resolution	-	0.1 %RH	
Display		0.5 inch LCD, 4 digits with LED Backlight		
Operating Temperature		Instrument: 32 to 125F (0 to 50C)		
		Probe: -4 to 212F (-20 to 100C)		
Power Supply		3 AA Alkaline Batteries		
Operating Time (Battery)		Approximately 150 hours		
Dimensions	Instrument	W 3.2 x D 1.5 x H 6.5 inches (8.2 x 3.8 x 16.5 cm)		
	Probe AP275	2.75 inch diameter		
	Probe AP100	1.00 inch diameter		
	RH/Temp Probe	-	6 inch x 1 inch diameter	
Standard Accessories		<ul style="list-style-type: none"> <li>• 1 x Rotating Vane Probe Head, your choice of AP275 or AP100</li> <li>• HTP 201 combination RH / Temp Probe (available for 6815)</li> <li>• Extension Rod w/ Handle Grip, Flexible Rod</li> <li>• 3 x AA 1.5V Alkaline Batteries, Operation Manual, Carrying Case</li> </ul>		

※Please contact us for Standard Kit & Optional Accessories for those products

Air Velocity, Air Temperature,  
Relative Humidity,  
Differential Pressure

# Anemomaster Model 6113, 6114

Multi-Function Thermal Anemometer

NIST Traceable



## Built-in Printer (Model 6113)

## Probe Compatibility

## RS-232C Terminal

### Features:

- Probe Compatibility feature allows utilization of a spare probe
- Simultaneously measures air velocity, temperature, and pressure measurements
- Large, easy-to-read LCD

### Benefits:

- Quick printing of measurements at site
- Simple operation with buttons for printing and calculation
- Easily keeps record of measurements
- Suitable for measurements inside ducts

### Specifications

Air Velocity	Range	20 to 9840 fpm (0.10 to 50.0 m/s)
	Accuracy	+/- (3% of reading +20fpm (0.1m/s))
Air Temperature	Range	32 to 212° F (0 to 100° C)
	Accuracy	+/-2.0° F (1.0° C)
Pressure (Option)	Range	-5.00 to +5.00kPa
	Accuracy	+/- (3% of reading +0.01)kPa
Measuring Functions	Settings	Display hold, time constant setting (1, 5, or 10 sec.), remaining battery life (5 steps), measuring unit setting (m/s, fpm, Celsius, Fahrenheit, kPa).
	Data Storage	Instantaneous storage, average (over 60 sec. max.), Storage 100 max.
	Calculation	Maximum and minimum values, averaging, raw data display
	Display	Calendar function, air velocity bar graph display.
Outputs	Digital Output	RS-232C (4800, 9600, 19200, 38400bps) for communication with PC.
	Printer Output	Printing calculation results and measurements.
	Analog Output (Option)	DC 0 to 1V (1ch. Selected from air velocity, temp. and pressure)
Power Supply	6 × 1.5 volt C cells (Mn, alkaline, or Ni-Cd)	
Battery Life	10 hours continuous operation (with alkaline batteries, at 5m/s, 20C, without printer use)	
Operating Environment	Main Body	41 to 104° F (5 to 40° C)
	Probe	32 to 212° F (0 to 100° C)
Storage Environment	41 to 104° F (5 to 40° C)	
Weight (including batteries)	Approx. 2.2 lbs. (Approx. 1000 g)	
Dimensions	7.9" x 5.9" x 3.9" (200 x 150 x 100mm)	
Standard Kit	1 x operation manual, 6 x 1.5V Mn C cells, 1 x probe with 2-meter (6.6-foot) cable, 1 x extension rod, 1 x shoulder strap	
Optional Accessories	Spare Probe, Analog Output, Pressure Measurement, Printer Paper, Communication Cable, Data Management Software (for Windows), AC Adapter	

Air Velocity, Air Temperature,  
Relative Humidity,  
Differential Pressure

# Anemomaster Model 6162

NIST Traceable

## Middle and High Temperature Anemomaster

Probe Model 0203 (Middle temp. Up to 392°F (200°C))    Model 0204 (High temp. Up to 932°F (500°C))



### Features:

- Simultaneous display of air velocity and temperature
- Improved response time by the addition of secondary temperature compensation circuit
- Easy review of time history by graphic display
- Memory function of maximum 999 separate measurement data
- Built-in RS-232 C serial interface for connection to PC. Analog output and remote control terminal also equipped
- Probe Compatibility feature allows you to change the probe easily

### Specifications

Model	Probe Model 0203 (for middle temp.) 32 – 392F (0 – 200 °C)	Probe Model 0204 (for high temp.) 32 – 752F (0 – 400 °C)
Measuring Range	40 – 9840fpm (0.2 – 50m/s): 32 – 212 °F (0 – 100 °C)	
	80 – 9840fpm (0.4 – 50m/s): 212 – 392 °F (100 – 200 °C)	
	--	138 – 9840fpm (0.7 – 50m/s): 392 – 572 °F (200 – 300 °C)
	--	197 – 9840fpm (1.0 – 50m/s): 572 – 752 °F (300 – 400 °C)
Measuring Accuracy	Air velocity: +/-3%F.S. Air temperature: +/--(1%rdg+1 °C)	
Temp. Compensation Accuracy (Air Velocity)	Less than 984fpm (5m/s): +/-10%F.S. 984fpm(5m/s) to 9,840fpm(50m/s): +/-6%F.S.	Less than 984fpm (5m/s): +/-15%F.S. 984fpm(5m/s) to 9,840fpm(50m/s): +/-10%F.S.
Heat-resistance of Cable	Teflon coating (Probe side): 392 °F (200 °C) Vinyl code (Extension cable): 176 °F (80 °C)	
Length of Cable	Teflon coating 4.9ft (1.5m) Vinyl code 16.4ft (5m)	Teflon coating 7.5ft (2.3m) Vinyl code 32.8 (10m)
Extension Rod (Option)	0.65"(MAX)x31.5" (16.5x800mm)	0.87"(MAX)x81.5" (22x2070mm)
Probe Dimensions	Dimension: $\phi$ 0.43"x8.2" (11x208mm)	Dimension: $\phi$ 0.43"x39.4" (11x1000mm)
Display	Digital (simultaneous display of air velocity and temperature)	
Input/output Terminal	Remote terminal:	START/STOP key
	Analog output terminal:	Output voltage 0 – 1 V, Output impedance 47 $\Omega$
	Digital output terminal:	RS-232C (serial interface)
Power Supply	Dry battery drive: US type (1.5V x 6 pcs = 9V), Alkaline battery, Mn battery AC adapter: 12.5V, 450mA (AC100V +/- 10%, 50/60Hz)	
Operating Temp.	41 – 104 °F (5 – 40 °C)	
Battery Life	Approx. 8 hours	
Dimensions	8.7" x 3.3" x 5.9"	220 x 85 x 150 mm
Weight	Main body: Approx. 4.0lbs (1.8kg), Probe Model 0203: 7.1oz(200g), Model 0204: 17.6oz (500g)	

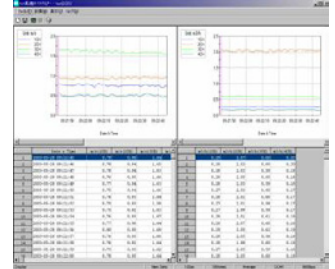
Air Velocity, Air Temperature,  
Relative Humidity,  
Differential Pressure

# 4 Channel Anemomaster Model 1570

NIST Traceable



**Product Efficiency Control  
Ventilation Testing  
IAQ Investigation  
Cleanroom**



**Features:**

- 4CH simultaneous measurement in a compact body.
- Wide probe selection available for various applications.
- Capable of taking measurements at high-time-resolution (0.1 sec)
- RS232C terminal for data logging.

**Benefits:**

- Each channel display can be easily switched over by the touch of a button
- Probe compatibility saves your downtime and shipping cost
- Windows software gives you simultaneous measurement on air velocity and flow rate
- Measurement data saved in text format for easy processing using other software such as Excel

**Main Body Specifications:**

Display	LCD display	
Data Transfer	Burst Mode	Transfers data of all channels
	Channel Mode	Transfers data of specific channel only
Software Function	Instant Mode	Displays instantaneous values every specified sampling time
	Average Mode	Displays average values of a specified sampling time
Output	Digital	RS 232C (Baud rate 9600bps fixed)
	Analog	0-5 V
Main Body Operation Temperature	41-104 °F (5-40 °C)	
External Dimensions	7.8" x 10.2" x 2.8" (200 x 260 x 70mm)	
Weight	5.7 lbs (Approx. 2.6 kg)	
Power Supply	AC 85V – 276V 50Hz/60Hz	
Standard Kit	RS-232 cable, Power cable, 2xFuse, Data Processing Software	

**Probe Specifications:**

Model	0962-00 / 0963-00	0964-01 / 0964-02	0965-00/01/03/04/07/08
Measuring Range & Accuracy	20-1000fpm: +/-20fpm (0.1-4.99m/s: +/-0.1m/s) 1000-2000fpm: +/-40fpm (5.00-9.99m/s: +/-0.2m/s) 2000-5000fpm: +/-100fpm (10.0-24.9m/s: +/-0.5m/s) 5000-10000fpm:m+/-200fpm (25.0-50.0m/s: +/-1.0m/s)	20-1000fpm: +/-30fpm (0.1-4.99m/s: +/-0.15m/s) 1000-2000fpm: +/-60fpm (5.00-9.99m/s: +/-0.3m/s) 2000-5000fpm: +/-150fpm (10.0-24.9m/s: +/-0.75m/s) 5000-10000fpm:m+/-300fpm (25.0-50.0m/s: +/-1.5m/s)	20-1000fpm: +/-30fpm (0.1-4.99m/s: +/-0.15m/s) 1000-2000fpm: +/-60fpm (5.00-9.99m/s: +/-0.3m/s) 2000-5000fpm: +/-120fpm (10.0-25.0m/s: +/-0.6m/s)
Temperature Compensation	41 – 176 °F (5 – 80 °C)		
Response Time (1 m/s, 90% response)	Approx. 1 sec	Approx. 3 sec	Approx. 7 sec

Air Velocity, Air Temperature,  
Relative Humidity,  
Differential Pressure

# Multi-Channel Anemomaster Model 1550 & 1560

Real-Time Air Quality Monitoring System

NIST Traceable



**Features:**

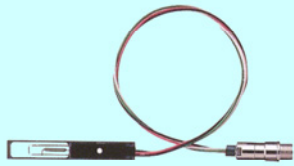
- Main Unit Features: One unit of Model 1550 has 64 Channels for air velocity.
- For a larger system, connect up to 5 units in a cascade and add a computer for control.
- Up to 320 channels of measuring points.
- Flexibility in system configuration means greater freedom, simplicity, and efficiency in measurement.

**Specifications:**

Model	1550	1560
Display	LCD (with backlight) Simultaneously displays on a module basis	
	MAN: Select modules by operating the UP/DOWN switches	
	AUTO: Automatically selects modules every 2 seconds to display data	
Functions	Burst Mode: Transfers data of all channels at high speed	
	Channel Mode: Transfers data of the specific channel only	
	Data Selection: Outputs instantaneous values every specified sampling time, and outputs the average	
Interface	Data transfer: RS232C (standard), Extended RS232C (optional) GP-IB (optional)	
	Baud Rate: 300, 600, 1200, 2400, 4800, 9600, 19200bps (selectable)	
	Printer output: Centronics	
Dimensions	16.9" x 19.6" x 5.5" (430 x 500 x 140 mm)	8.9" x 12.8" x 5.5" (226 x 325 x 140mm)
Weight	Approx. 22lbs (Approx. 10kg)	Approx. 11lbs (Approx. 5kg)

**Probes:**

**Velocity**



**Model 0962-00** Caramel  
V: 20 – 9840 fpm (0.1 – 50 m/s)



**Model 0965-00/01** Spherical  
V: 20 – 4,920 fpm (0.1 – 25 m/s)



**Model 0965-03/04** Miniature with Built-in Temperature Compensation  
V: 20 – 4920 fpm (0.1 – 25 m/s)



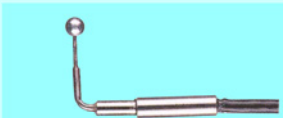
**Model 0965-07/08** Miniature with Independent Temperature Compensation  
V: 20 – 4920 fpm (0.1 – 25 m/s)



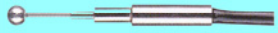
**Model 0963-00** A-200 (Rod)  
V: 20 – 9840 fpm (0.1 – 50 m/s)



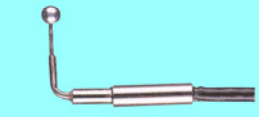
**Model 0962-21** Caramel  
V: 20 – 9840 fpm (0.1 – 50 m/s)  
T: 32 – 212°F (0 – 100°C)



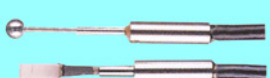
L-Shaped (04)



I-Shaped (03)



L-Shaped (08)



I-Shaped (07)

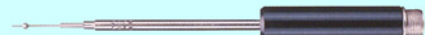
**Velocity & Temperature**



**Model 0963-21** A-200 Rod  
V: 20 – 9840 fpm (0.1 – 50 m/s)  
T: 32 – 212°F (0 – 100°C)



**Model 0965-21** Spherical  
V: 20 – 4920 fpm (0.1 – 25 m/s)  
T: 32 – 212°F (0 – 100°C)



**Model 0963-31** A-200 Rod  
V: 20 – 9840 fpm (0.1 – 50 m/s)  
T: 32 – 140°F (0 – 60°C), H: 5 – 95%RH

**Velocity, Temperature, & Humidity**



**Model 0965-31** Spherical  
V: 20 – 9840 fpm (0.1 – 50 m/s)  
T: 32 – 140°F (0 – 60°C), H: 5 – 95%RH



**Model 0964-01/02** Omni-directional  
V: 20 – 4920 fpm (0.1 – 25 m/s)

**Modules**



**Model 1504**  
V Module 4 ch.



**Model 1511**  
VT Module 2 ch.



**Model 1512**  
TVH Module 1 ch.



**Model 1503**  
Pressure Module 2 ch.



**Model 1510**  
Analog Output Module

**Module Features:**

Five types of modules add more freedom to system configuration.

- 4-channel air velocity module Model 1504
- 2-channel air velocity and temperature module Model 1511
- 1-channel air velocity, temperature, and humidity module Model 1512
- Static pressure module Model 1503
- Analog output module Model 1510

\* Combine these modules and design a multi-channel system freely. More modules can be added whenever necessary

Air Velocity, Air Temperature,  
Relative Humidity,  
Differential Pressure

# Tabmaster



## Features:

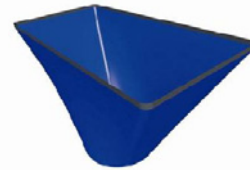
- Designed For Maximum Contractor Productivity
- 30 hour battery life
- Largest selection of hoods in the industry
- Displays air volume flow, velocity and temperature in metric or imperial measurements
- Self-averaging, measuring sensor complies with ISO 3966
- Detachable meter can be used with optional 4" rotating vane kit for face velocity measurements
- Optional 4" vane head and Aircone Hood Kit
- Display indicates supply or exhaust flow-Memory, avg/max/min/sum, communication to Windows® via RS232 serial port
- Folding hood frame, no onsite assembly required
- 4 handle locations available (2 handles included)
- Measurements down to 50 cfm without a low flow screen
- Durable rubber grill seal outlasts typical foam seals.
- True ambient readout. Displays flow in actual or standard CFM with onboard conversion via user input of temperature and pressure



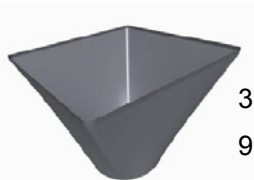
2' x 2'  
610 x 634 mm



16" x 16"  
410 x 434 mm



2' x 4'  
610 x 1234mm



3' x 3'  
910 x 934 mm



1' x 4'  
310 x 1234 mm



1' x 5'  
310 x 1534 mm

## Specifications

Volume Flow	50-2400 cfm, 85-4078 m3/hr., 24-1133 l/s
Velocity Range (using 100 mm head)	50-6000 ft/min, 0.25-30 m/sec
Display Resolution Volume	1 CFM, 1m3/hr, 1 l/sec
Temperature	1°F, 0.1°C
Weight (Instrument and 2'x2' hood)	9.7 lbs., 4.4kg
Memory Locations	99
Output	RS232
Battery Type/Life	4xAA Alkaline 35 hours
Standard	Volume flow kit with 2x2 foot hood, soft case
Options	Fabric Hood (Red, Yellow, Orange, Blue, Gray) Carrying Case, 4" vane kit

Air Velocity, Air Temperature,  
Relative Humidity,  
Differential Pressure

# Airflow Transducer Model 6332 & 6332D

## Features:

- 10 interchangeable probe options
- Probes quickly and easily attach/detach
- Digital Display Option (model 6332D)
- Selectable Output (Output can be set to either voltage: 0 to 5V or current: 4 to 20mA)



Model 6332 (without display)

## Main Unit Specifications

Measuring Object	Clean air and compatible, non-combustible gases				
Measuring Range	Maximum range 0.1 ~ 50 m/s (Range dependant on probe type*)				
Measuring Accuracy	± (3% of reading + 0.1) m/s				
Temperature Compensation Range		0.1-4.99m/s	5.00-9.99m/s	10.0-24.9m/s	25.0-50.0m/s
	5~40°C	±0.25m/s	±0.50m/s	±1.25m/s	±2.50m/s
	40~80°C	±0.35m/s	±0.70m/s	±1.75m/s	±3.50m/s
Selectable Output Option	(Set via onboard Dipswitch). Current output: DC 4~20mA (Max. load resistance: 250Ω) Voltage output: DC 0~5V				
Selectable Range Option	(Rotary Switch selectable). 0~2, 0~5, 0~10, 0~25, or 0~50 m/s				
Display Resolution (Model 6332D only)	Velocity Range: 0~2, 0~5, 0~10 m/s → Display Resolution: 0.01m/s Velocity Range: 0~25, 0~50 m/s → Display Resolution: 0.1m/s				
Power Supply	DC 12~24V				
Power Consumption (Reference Value)	Approx. 2.0W (Under the following conditions - power supply: 12V, air velocity: approx. 10m/s, using a unit with a display with probe model 0965-03.) Power consumption rate is subject to change according to conditions such as air velocity, probe type and use of display.				
Connection Wire Size	0.5 ~ 1.5 mm <sup>2</sup>				
Temp Range	Operating Temp: 41 to 104°F (5 to 40°C), Storage Temp: 14 to 122°F (-10 to 50°C)				
Dimensions	Approx. 5" x 3.1" x 1.2" (128 x 78 x 30 mm)				
Weight	Approx. 11oz (320g)				
Standard Accessories	Operation Manual : 1, Main Unit Case: 1				
Optional Accessories	Probe Cable (33ft (10m), 66ft (20m), 98ft (30m)), Display Unit (Supplied with a case with a display window and 2 installation screws.), Dedicated AC Adapter (DC12V)				

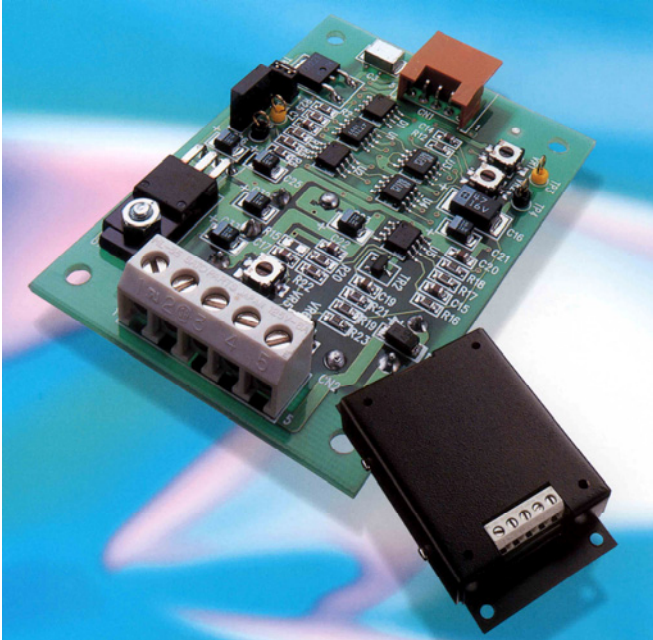
## Probe Specifications

MODEL	Measuring Range	Sensor Type
0962-00, 0963-00	0.1~50.0m/s	Uni-directional
0964-01, 0964-02		Omni-directional (Needle)
0965-00, 0965-01	0.1~25.0m/s	Omni-directional (Spherical)
0965-03, 0965-04	0.1~25.0m/s	Mini-temperature-compensation-sensor integrated type Omni-directional (Spherical)
0965-07, 0965-08		Mini-temperature-compensation-sensor independent type Omni-directional (Spherical)



Air Velocity, Air Temperature,  
Relative Humidity,  
Differential Pressure

# Airflow Transducer Model 6312

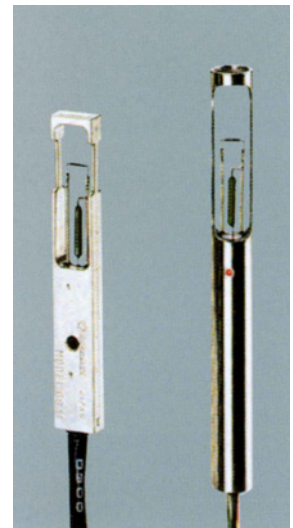


## Features:

- Keep high quality of products by airflow control
- Maintain cleanliness by airflow control
- For creation of comfortable environment
- Optimal for various air-conditioning (air velocity and airflow rate) control equipment
- Space saving design
- Traceable certificate available
- Current output range is 4 to 20mA

## Main Unit Specifications

Air Velocity Measuring Range	20 – 394 fpm (0.1 – 2.0 m/s)
	Accuracy: +/-30fpm (0.15m/s)
Temp. Compensation	64 – 82°F (18 – 28°C)
Signal Output	4 – 20mA
Power Supply	DC 24V
Operational Conditions	Clean airflow with normal temperature and humidity
Accessories	Probe Cable: 16 feet (5m)



## Probe Specifications

Model	0941	0942
Dimensions	0.2" x 0.4" x 3.0" (5.5 x 11 x 75mm)	φ 0.4" x 4.3" (φ 11 x 108mm)
Quality of material	Molded Resin	SUS

Thermohygrometer,  
Sounds / Noise  
Measurement

# Thermohygrometer Model 6841

## Indoor Environmental Measurement Products Quality Control



### Features:

- Ultra light and palm-size
- Easy to use  
(Select temperature, humidity, or power on/off)



### Specifications

Measuring Object		Clean airflow
Measuring range	Temperature	-4 to 113°F (-20 to 45°C)
	Humidity	5 to 95%RH
Display resolution	Temperature	0.1°F or 0.1°C
	Humidity	0.1%RH
Accuracy	Temperature	+/-0.9°F (+/-0.5°C)
	Humidity	+/-3%RH
Responsiveness		30 sec
Measuring Function		Conversion between °F and °C
Dimensions	Main Unit	Approx. 2.4" x 4.7" x 1.3" (60 x 120 x 34mm)
	Probe	Approx. $\phi$ 19 x 170mm
	Cable	Approx. $\phi$ 3.3 x 1.5m
Power Supply		AAA Battery x 4 (Mn, Alkaline, or Ni-Cd)
Operating Environment	Main Unit	41 to 104°F (5 to 40°C)
	Probe	-4 to 113°F (-20 to 45°C)
	Storage Temperature	14 to 122°F (-10 to 50°C)
Weight (including batteries)		Approx. 6.3oz (180g)
Accessories		AAA Mn batteries x 4

IAQ Monitor,  
Gas Monitor

# Indoor Air Quality Monitor Model 2211

## Multi-Parameter Indoor Air Quality Monitor



### IAQ Investigation Environmental Health and General Safety Thermal Comfort Measurements

#### Features:

- Simultaneously measure and log data with multiple parameters such as CO, CO<sup>2</sup>, Temperature, Relative Humidity, to monitor indoor air quality conditions
- Calculates Dew Point, Wet Bulb Temperature, Absolute Humidity, Humidity Ratio and % Outside Air
- Built-in memory allows user to store multiple point measurements

#### Benefits:

- Easy user calibration with built-in calibration function
- Capable to continuously monitor parameters via PC
- Large LCD shows multiple parameters at a glance

#### Specifications

CO	Range	0 – 500PPM
	Accuracy	+/-3% of reading or 3PPM whichever is greater
CO <sup>2</sup>	Range	0 – 5000PPM
	Accuracy	+/-3% of reading or +/-50PPM whichever is greater
Temperature	Range	-4 – 140° F (-20 – 60° C)
	Accuracy	+/- 1° F (+/-0.5° C)
Relative Humidity	Range	2 – 98%RH
	Accuracy	2 – 80%RH: +/-2%RH, 80 – 98%RH: +/-3%RH
Functions	Normal Mode	Normal measuring: Relative humidity, CO, CO <sup>2</sup> , Dew point, Wet bulb temperature, Absolute humidity, and Humidity Ratio
	Calculation Mode	Store the data, and calculate the maximum, minimum and average value
	% OA Mode	Measure ventilation ratio
	Data Output Mode	Perform re-calculation of stored data and output of data to PC and Printer.
	Calibration Mode	Perform the calibration of CO and CO <sub>2</sub> .
Outputs	Digital	RS-232C (Baud rates:4800,9600,19200,38400bps)
	Analog (Option)	DC0~1V (Select 1 ch among CO, CO <sub>2</sub> , temperature, and relative humidity)
Power Supply		AA Battery×6 (Alkaline or Ni-Cd), AC adapter:AC100~240V (50/60Hz)(Optional)
Battery Life		Approximately 10 hours (at 77° F (25° C) with alkaline batteries, without RS232C)
Operating Environment	Main Body	41-104° F (5~40° C)
	Probe	- 4 - 140° F (-20~60° C)
Storage Environment		- 4- 140° F (-20~60° C)
Standard Kit		Mn Battery × 6, Calibration cap, Connection tube
Optional Accessories		Analog Output, Serial Printer, Communication Cable (For Computer and Printer), AC Adapter

IAQ Monitor,  
Gas Monitor

# Aeroqual Series 200

## Multi-Sensor Handheld Gas Monitor



The Series 200 can be hand held or fixed in position. It is a simple, easy-to-use, low-cost monitor that displays the gas concentration. The monitor is compatible with the full range of Aeroqual gas sensors



Sensor Head

### Monitor Base Specification

Measurement units	ppm
Power supply	12 VDC, 800 mA
Rechargeable battery pack (2 x options)	Standard 9.6V (940mA/hr Ni-Cd) Long Life 9.6V (2100mA/hr Ni-MH )
Permanently fixable	Screw fix
Enclosure rating	IP20 & NEMA 1 equivalent
Size (with sensor head)	7.6 x 4.8 x 2.1 (in); 195 x 122 x 54 (mm)
Weight (with sensor head and battery)	< 16 oz; < 460 g
Functions	Remote sensor capability , Removable / replaceable sensor head, Low battery indication, Sensor condition status, Standby mode
Approvals	Part 15 of FCC Rules, EN 50082-1: 1997, EN50081-1: 1992

### Sensor Head Specification

	Ozone			VOC*	Ammonia	CO
	Low	High	Leak			
Measurement range	0.000 - 0.500 ppm	0.50 - 20.00 ppm	0.00 - 50.00 ppm	0 to 400 ppm toluene	0 to 1000 ppm	0 to 2000 ppm carbon monoxide
Accuracy	< 0.008 ppm (0 - 0.100 ppm) ±10% (0.100 - 0.500 ppm)	±10% (0.20 - 2.00 ppm) ±15% (2.00 - 20.00 ppm)	±20%, 15 seconds after Reset	< ±10 ppm (0 - 200 ppm); < ±10% (> 200 ppm)	< ±5 ppm (0 - 100 ppm); < ±10% (100 - 1000 ppm)	< ±10 ppm in the range 0 to 400 ppm
T90 response	< 60 seconds (T90)	< 35 seconds (T90)	< 10 seconds	< 60 s	< 60 s	< 150s
Sensor type	Gas-sensitive semiconductor			Gas-sensitive semiconductor	Gas-sensitive semiconductor	Gas-sensitive semiconductor
Operating temperature range	23°F to 122°F ; -5°C to 50°C (sensor head and base unit)			-4°F to 140°F; -20°C to 60°C	-4°F to 140°F ; -20°C to 60°C	32°F to 158°F; 0°C to 70°C
Operating relative humidity range	95% maximum (sensor head and base unit)			5 to 95% non-condensating	5 to 95% non-condensating	5 to 95% non-condensating
Approvals	---	---	---	---	---	UL 2034, BS 7860

\* Specific Calibrations to other VOC's available – contact Kanomax Sales

**IAQ Monitor,  
Gas Monitor**

**Aeroqual Series 300 & 500**  
**Multi-Sensor Handheld Gas Monitor**



- The Series 300 can be hand held or fixed in position and provides a high level of functionality & monitoring capability.
- The Series 500 includes the same features and functionality of the Series 300 with the added feature of onboard and PC data logging.



Sensor Head

**Monitor Base Specification**

Measurement units	ppm or mg/m3
External signal for alarms & control	Transistor output, 150 mA max
External signal functions	Low Alarm, High Alarm & Control
Analog output	0 - 5 V
Power supply	12 VDC, 800 mA
Rechargeable battery pack (optional)	9.6V Ni-MH (5 hours operation)
Permanently fixable	Screw fix
Enclosure rating	IP20 & NEMA 1 equivalent
Data interface with PC (Series 500 only)	Serial RS232
On Board Data Logging (Series 500 only)	8,000 data points
Size (with sensor head)	7.6 x 4.8 x 2.1 (in); 195 x 122 x 54 (mm)
Weight (with sensor head and battery)	< 16 oz; < 460 g
Functions	Remote sensor capability, Removable / replaceable sensor head, On-board alarm, Alarm status displayed, Low battery indication, Alarm mute function, Sensor condition status, Standby mode  (Series 500 only): Data logging independent of PC, Data logging direct to PC, On-board real-time clock, Data logging software supplied
Approvals	Part 15 of FCC Rules, EN 50082-1: 1997, EN50081-1: 1992

**Sensor Head Specification**

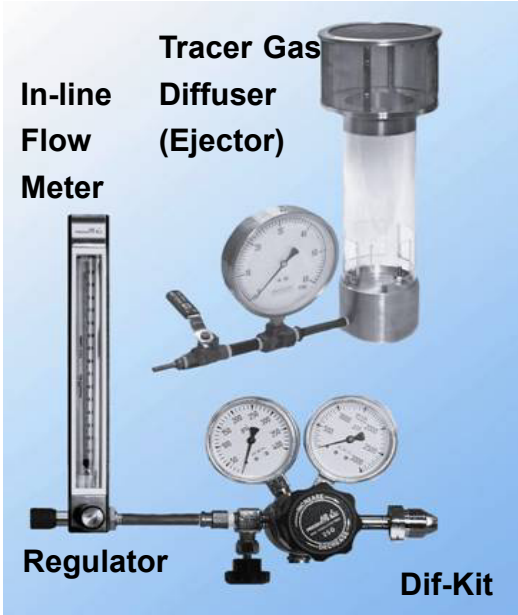
	Ozone			VOC*	Ammonia	CO
	Low	High	Leak			
Measurement range	0.000 - 0.500 ppm	0.50 - 20.00 ppm	0.00 - 50.00 ppm	0 to 400 ppm toluene	0 to 1000 ppm	0 to 2000 ppm carbon monoxide
Accuracy	< 0.008 ppm (0 - 0.100 ppm) ±10% (0.100 - 0.500 ppm)	±10% (0.20 - 2.00 ppm) ±15% (2.00 - 20.00 ppm)	±20%, 15 seconds after Reset	< ±10 ppm (0 - 200 ppm); < ±10% (> 200 ppm)	< ±5 ppm (0 - 100 ppm); < ±10% (100 - 1000 ppm)	< ±10 ppm in the range 0 to 400 ppm
T90 response	< 60 seconds (T90)	< 35 seconds (T90)	< 10 seconds	< 60 s	< 60 s	< 150s
Sensor type	Gas-sensitive semiconductor			Gas-sensitive semiconductor	Gas-sensitive semiconductor	Gas-sensitive semiconductor
Operating temperature range	23°F to 122°F ; -5°C to 50°C (sensor head and base unit)			-4°F to 140°F; -20°C to 60°C	-4°F to 140°F ; -20°C to 60°C	32°F to 158°F; 0°C to 70°C
Operating relative humidity range	95% maximum (sensor head and base unit)			5 to 95% non-condensating	5 to 95% non-condensating	5 to 95% non-condensating
Approvals	---	---	---	---	---	UL 2034, BS 7860

\* Specific Calibrations to other VOC's available- contact Kanomax Sales

IAQ Monitor,  
Gas Monitor

# Tracer Gas Hardware

As Per ANSI/ASHRAE Standard 110-1995



## IAQ Investigation Industrial Hygiene Quality Control

### Features:

The Kanomax tracer gas diffuser is for use in performing the Tracer Gas test in accordance with ANSI/ASHRAE Standard 110-1995. Our diffuser is an improved design and meets the specifications of Standard drawing #110-83M. The diffuser is placed in the fume hood and sulfur hexafluoride gas is injected at a supply pressure of 30 psig. The internal critical orifice ensures a flow rate of 4 liters per minute. Other orifice sizes can be inserted. Also available is the Kanomax model **Dif-Kit**.

The Dif-Kit supplies all the required hardware from the cylinder regulator to the diffuser. This includes the diffuser, tank regulator, in-line flow meter, shut-off valve, pressure gage, and 25 ft. of tubing. The in-line flow meter provides a secondary verification of flow rate to the critical orifice, as required by the Standard, so as to alert the user to any clogging or wear of the orifice. The orifice and other components are serviceable by Kanomax.

### Specifications

Critical Orifice	4 or 8 Liter Per Minute (4Lpm Standard)
Regulator	Dual Stage, Specialty Gas
Flow Meter	Calibrated 150mm/200psi, Glass Tube
Pressure Gage	Large Dial, 0 to 60psi
Options	Rebuild Kit (includes new Critical Orifice, washers, Bronze Sinter Filter) 8Lpm Swappable Ejector Base

Particle / Dust  
Monitor

# Piezobalance Dust Monitor Model 3521

## Respirable Aerosol Mass Monitor

NIST Traceable



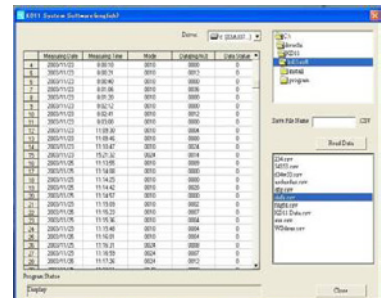
**IAQ Investigations**  
**Environmental Measurements**  
**Product Quality Control**  
**Laboratory Research**

**Features:**

- Data logging ability allows user to log 500 samples
- Simple cleaning mechanism for easy maintenance
- RS232C port available as standard
- Back-lit display is easy to read in poor lighting conditions

**Benefits:**

- While conventional dust meters “count” particulates, the Piezobalance dust meter “weighs” mass concentration of particulates
- Data can be reviewed on-screen, printed or downloaded to a computer
- Software included for easy data download and processing
- Easy operation requires no special training



**Specifications**

Measuring Object	Airborne Particulate Matter < $\phi$ 10 $\mu$ m
Measuring Range	0.02-10mg/m <sup>3</sup>
Sampling Flow Rate	1liter/min
Measuring Time	Preset: 120 sec or 24 sec Manual: 10sec to 3600sec
Accuracy	+/-10% of rdg +/-1 digit (0 to 5mg / m <sup>3</sup> ) +/-20% of rdg +/-1 digit (5 to 10mg / m <sup>3</sup> )
Cleaning Frequency	Cleaning is required after every 10-20 measurements. "CLEANING" will appear on the display when it needs to be cleaned.
Data Logging	Max 500 date and time stamped samples
Digital Output (To PC or printer)	RS232C (Baud Rates 4800, 9600, and 19200)
Power Supply	AC (85V-240V) or DC Ni-MH battery
Dimensions	2.6" x 5.9" x 7.1" (65 x 150 x 180mm)
Weight	Approx. 4.4lbs. (Approx. 2kg)

Particle / Dust  
Monitor

# Digital Aerosol Monitor Model 3431

## Compact Dust/Aerosol Monitor

NIST Traceable



**Indoor Air Quality Investigation**  
**Industrial Hygiene**  
**Health & Safety Applications**  
**Exposure Monitoring**  
**Manufacturing Process Control**

**Features:**

- State-of-the-art components based on advanced light-scattering technology
- Compact and Light Weight
- Easy operation

**Benefits:**

- Accuracy is ensured to meet the latest needs of dust measuring in extremely clean indoor environments
- All measurements can be made with a touch of a button on the front panel.
- Allows the user to pre-enter the known concentration conversion value and let the unit automatically convert the dust count into mass concentration

**Specifications**

Measuring Method	Light Scattering Method
Measuring Object	Aerosol particles, $\phi$ 10 $\mu$ m or smaller
Measuring Range	0.001 – 3.999mg/m <sup>3</sup> (1 – 9999cpm, 1cpm=0.001mg/m <sup>3</sup> for $\phi$ 0.3 $\mu$ m stearic acid particles)
Accuracy	+/-10% of reading +/-1cpm (or 0.001mg/m <sup>3</sup> )
Linear Characteristics	+/- 5% of reading
Measuring Time	1 minute / 3 minutes / 10 minutes with built-in timer, and continuous mode
Light Source	Laser diode
Detector	Photo diode
Operating Environment	35 – 104° F (5 – 40° C) under 85%RH
Display	4-digit LCD, dust count value (cpm), relative mass concentration value
Indicators	Cleaning, measuring mode, battery status, concentration conversion operation, zero point confirmation
Output	Analog output, 0 – 10,000cpm = 0 – 4V
Power Supply	AC 100V adapter and dry cell batteries (6 x AA batteries)
Dimensions	6.4" x 2.4" x 3.9" (162 x 62 x 100mm) not including the nozzles
Weight	2.2 Lbs. (1kg) not including batteries
Accessories	AC adapter, micro-screwdriver, alkaline dry cell batteries (6 x AA) shoulder strap
Options	Carrying case, Soft case, Analog output cable



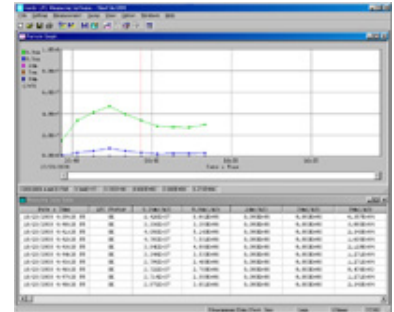
Particle / Dust  
Monitor

# Handheld Laser Particle Counter MODEL 3887

NIST Traceable



Cleanroom certification  
IAQ investigations  
Food Industry  
Filter Testing  
Aerospace  
Hospital Surgical Rooms  
Paint Spray Booths



**Features:**

- Displays 3 particle sizes simultaneously (0.3, 0.5, 5.0 um) in cf or m<sup>3</sup>
- Built-in flow sensor (0.1 CFM +/- 10%)
- User can log up to 8,000 measurements with easy transmission to PC or Printer.
- Fits in your palm

**Benefits:**

- Batteries can be altered with regular AA alkaline batteries
- Comes with a network capable of up to 8 units using optional Windows software as a standard accessory

**Specifications**

Measuring Particle Size	0.3, 0.5, 5.0um
Light Source	Laser Diode
Counting Efficiency	50% @ 0.3 um; 100% for particles > 0.45 um (per JIS B9921: 1997)
Zero Count	≤1 count / 5 minutes (per JIS B9921: 1997)
Coincidence Loss	<5% @ 2,000,000 particles/cf
Flow Rate	0.1 cfm (2.83l/min)
Sampling Time	1 sec to 99 minutes 59 sec (1 sec increments)
Sampling Frequency	1 to 99 times or Continuous
Count Alarm	1 - 70,000,000 counts
Mode of Measurements	Single / Repeat / Continuous / Calculation / Remote / ISO <C4
Display	20 letters, 4 lines
Error	Max. concentration, Laser Power, Flow Rate and Battery
Interface	RS232C or RS485
Baud Rate	9600bps
Buffer Memory	8000 measurements
Power Supply	4 x AA NiMH battery or Alkaline, AC Adapter (100 - 240V)
Operating Hours	Approximately 3 hours (NiMH)
Dimensions	4.3" x 7.7" x 2.7" (108 x 196 x 68 mm)
Weight	1.5 lbs (680g)
Operating Conditions	50 - 95 °F (10 - 35 °C)
Accessories	AC Adapter, Zero Filter, Software, Communication Cable, 4xAA NiMH, Battery Charger
Options	Printer, Printer Cable, Carrying Case, Tripod

Particle / Dust  
Monitor

# Handheld Laser Particle Counter MODEL 3886 GEO- $\alpha$

NIST Traceable



**Cleanroom certification**  
**IAQ investigations**  
**Food Industry**  
**Filter Testing**  
**Aerospace**  
**Hospital Surgical Rooms**  
**Paint Spray Booths**

**Features:**

- Measures 5 particle sizes simultaneously (0.3, 0.5, 1.0, 3.0 and 5.0 um) in cf or m<sup>3</sup>, displaying 2 channels
- Built-in flow sensor (0.1 CFM +/- 10%)
- Temp./RH and Air Velocity probes available as an option
- Capable of measuring up to 4 parameters in one instrument.

**Specifications**

5 Size Channels	0.3 um; 0.5 um; 1.0 um; 3.0 um; 5.0um	
Flow Rate	0.1 cfm (2.83 l/min)	
Light Source	Laser Diode	
Calibration	PSL particles in air	
Counting Efficiency	50% @ 0.3 um; 100% for particles > 0.45 um (per JIS B9921: 1997)	
Zero Count	≤1 count / 5 minutes (per JIS B9921: 1997)	
Coincidental Loss	<5% @ 2,000,000 particles/cf	
Sampling Time	1 sec - 99 min 59 sec, 1 second increment	
Sampling Frequency	1 - 99 or continuous	
Count Modes	Single, Repeat, Continuous, Calculation and Remote	
Display	20 letters, 4 line LCD	
Interface	RS232C or RS485	
Baud Rate	9600 bps	
Buffer Memory	500 sample records	
Power	AC Adapter	5VDC at 2.5A, 100 - 240VAC, 50 to 60 Hz
	Rechargeable Battery	4 x AA NiMH 3.5 hrs with 1600mAh batteries
Vacuum Source	Internal pump, flow controlled	
Dimensions	4.5" x 2.8" x 8.5" (115 mm x 70 mm x 211 mm)	
Weight	2.2 lbs (1 kg)	
Accessories	AC Adapter, Zero Filter	
Options	Isokinetic Probe, Air Velocity Probe, Thermal Printer, Temperature/Relative Humidity Probe, Carrying Case	

Particle / Dust  
Monitor

# Airborne Particle Counter Model 3900

Portable Laser Particle Counter

NIST Traceable



Monitor and verify cleanrooms  
Pharmaceutical, Food Industry, Semiconductor  
Filter testing  
Facility certification

### Features:

- 28.3 L/min (1.0 cfm) flow rate
- 0.3 micron minimum sensitivity
- Store up to 5000 measurements
- All stainless body
- Large touch screen
- Multi-function: Measuring particle, airflow, temperature relative humidity, and differential pressure

## Specifications

Light Source	Laser Diode
Channel Sizes ( $\mu\text{m}$ )	0.3, 0.5, 1.0, 3.0, 5.0, 10.0
Flow Rate	28.3 lpm (1.0 cfm)
Zero Count Level	1 count or less in 5 minutes
Counting Efficiency	50 $\pm$ 20%
Spurious Count	0.3 count/cf or less
Max Detectable Concentration	500,000 counts/cf (17,667.8 counts/L)
Sample Time	1 second to 23 hrs 59 min 59 sec
Delay Time	0 second to 23 hrs 59 min 59 sec
Sampling Cycles	1 - 9,999 while in repeat mode
Location Labels	0 - 999 appears on display and printout
Display	6.4 inch color touch screen
Data Storage	5,000 samples (when using standard 512MB CF card)
Printer	Built in (compatible with Dust-free Paper)
Hardware Interface	Ethernet
Operating Time (Battery)	4 hours continuous operation
Battery Type	Removable Li-ion
Charging Time	6 hours
Power	AC 100 - 240V, 50 to 60Hz
Dimensions	W 8.3 x D 8.6 x H 12.5 inches (21 x 22 x 32 cm)
Weight	17.5 lbs (8 kg)
Enclosure Material	Stainless Steel
Operating Environment	50 to 104°F (10 to 40°C)
Warranty	1 year (Instrument) / 2 years (Laser Diode)
Standard Accessories	Operation Manual, Isokinetic Probe, Power Cable, Battery & Charger Printer Paper (2 rolls), Zero Filter, USB Cable, Data Download Software (Windows)
Optional Accessories	Carrying Case, Spare Battery, Battery Charge, Temperature and Humidity Probe Air Velocity Probe, Differential Pressure Sensor

Particle / Dust  
Monitor

Cleanroom Facility  
Monitoring

# Condensation Nucleus Counter MODEL 3855

NIST Traceable



## Cleanroom Monitoring IC Production HDD Testing MEMS

### Features:

- Condensation Nucleus Counter for continuous multi-point monitoring in cleanroom.
- 0.01  $\mu$  m sensitivity.
- Less downtime by less alcohol replacement.
- Easy checking of the current status on the LEDs

### Benefits:

- Ideal for ultrafine particle detection
- Easy maintenance
- No more headaches in cleanroom using Propylene Glycol

### Specifications

Type	Sensor-Counter Isolated Type
Principle	Vapor/Air Mixing Type Condensation Particle Counting
Maximum Concentration	3×10 <sup>6</sup> Particles / cf (100 Particles/cc)
Sensitivity	0.01 $\mu$ m (50% Counting Efficiency)
Measuring Accuracy	0.02 $\mu$ m: 100% $\pm$ 10%
Coincidence Loss	Less than 5% at 3,000,000 Particles/cf
Sampling Flow Rate	0.1CFM (2.83L/min) $\pm$ 10%
Flow Rate	4.2 $\pm$ 0.4L/min (Requires external vacuum source)
Alcohol	Propylene Glycol
Indicators	Ready, Liquid Level, Flow, Optics, Particle
Interface	RS - 232C and RS - 485
Output	Output for M/P or Analog Output
Operating Environment	Temperature: 20~30°C (68~86°F) Clean Air Environments (e.g. Clean Rooms)
Dimensions	9.8" x 9.8" x 11" (250 x 250 x 280mm) ( Excludes alcohol bottle )
Weight	Approx. 22lbs (10Kg)
Power Supply	AC100 ~ 240 V
Accessories	AC Cable, Operation Manual, Alcohol Bottle ( 200cc ), Bottle Holder
Options	Alcohol Bottle ( 1000cc ), Bottle Holder ( for 1000cc )

Particle / Dust  
Monitor

Cleanroom Facility  
Monitoring

# Facility Monitoring Laser Particle Sensor MODEL 3792

NIST Traceable



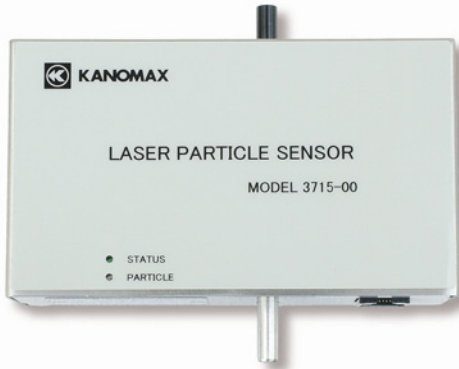
**Cleanroom monitoring**  
**Pharmaceutical, Aerospace/ Defense**  
**Electronics, MEMS, Semiconductor**  
**Food processing**  
**Medical / Hospitals**

### Features:

- 0.2um/0.3um sensitivity
- Built-in sonic nozzle for accurate and consistent flow
- Built-in LEDs for sensor status at a glance
- Compact stainless body
- Temperature/Relative Humidity sensors available as option
- Status LED shows Particle, LD Status, and Flow

### Specifications

Model		3792-01	3792-03
Sampling Air Flow		2.83 l/min	1 l/min
Sensitivity		0.2 $\mu$ m, 0.3 $\mu$ m	0.2 $\mu$ m, 0.3 $\mu$ m
Condensation Range		1,000,000 pieces/cf	3,000,000 pieces/cf
Output	Type A	RS-485 Output Connector Type RS-485 IN    Modular Connector 8-pin (rear panel) RS-485 OUT    Modular Connector 8-pin (rear panel) Transmission Setting:    DIP switch 8-pin (front panel) Address Setting(0-999):    Rotary DIP switch, 10 positions x 3 (front panel) Multiplexer Output Connector Type:    BNC Connector	
	Type B	4-20mA Output Output:    Data for 2 particle size ranges and Sensor Status Connector Type:    D-sub Connector 9-pin (rear panel) Indicative Resolution:    1/1000 of the full scale Full Scale:    3 levels (100, 10,000, 1,000,000 pieces / cf) Full Scale Selection:    Sliding DIP switch 8-pin (front panel) Multiplexer Output Connector type: BNC Connector	
Display		5-Digit LCD Optional Display unit available (needs to be exchanged with the supporting casing) Condensation Display (Running Average for pre-set time) SIZE key gives selection of Particle size range to monitor	
Status LED		PARTICLE: Turns Red when picking the signal of the particle STATUS:    Steady Green when Optics is operating normally. FLOW:    Turns to Green when Sampling Flow rate is normal	
Power Supply		AC 100V – 240V	
Dimensions		4.6" x 5.3" x 6.7"    (118 x 135 x 170 mm) (Excluding sampling air nozzle on the upper surface and other interface outfit. Also excludes rubber feet.)	
Weight		Approx. 6.6lbs (Approx. 3kg)	



## Cleanroom Facility Monitoring

- Pharmaceutical
- Aerospace/ Defense
- Electronics
- Semiconductor
- Food Processing
- Medical / Hospitals

### Features:

- 0.3um/0.5um for Model 3714 & 0.5 um /5.0 um for Model 3715 sensitivity
- Built-in sonic nozzle for accurate and consistent flow
- Built-in LEDs for sensor status at a glance

### Benefits:

- Compact stainless body
- Temperature/Relative Humidity sensors available as option
- Status LED shows Particle, Status (LD), and Flow (Optional)

## Specifications

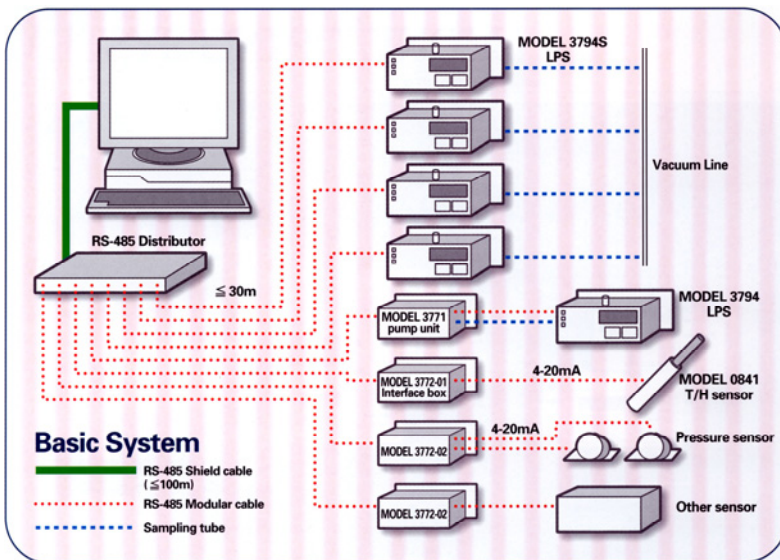
Model	3714	3715
Particle Sizes	0.3um/0.5um	0.5um/5.0um
Flow Rate	0.1CMF ( 2.83 L/ min )	
Concentration Range	0~1,000,000 particles / cf	
Flow Control	Sonic nozzle ( Requires external vacuum source )	
Light Collection	Laser-light-scattering, wide-range light collection by side mirror	
Light Source	780nm Laser diode ( LD )	
Light Detector	Photodiode	
Status LED	PARTICLE, STATUS (LD), FLOW (Optional)	
Measuring Accuracy	+/-10% of reading	
Interface	RS-485	
Connector Type	RJ45 connector	
Power Supply	Supplied from the Distributor or Power Unit	
Dimensions	2.8" x 5.0" x 1.6" (72 x 126 x 40mm)	
Weight	Approx. 2.2lbs (Approx. 1kg)	

## Cleanroom Facility Monitoring

# Cleanroom Monitoring System

### Features:

- On-site monitoring of condensation by built-in LCD
- Light and compact body does not require large space
- CPU loaded and RS485 output
- Steel stand and attachment plate for various installation needs
- Quick connect cabling via modular connection
- Simple vacuum tubing/pressure connected



- Compact laser particle sensor (LPS) with built-in LCD for continuous monitoring of aerosol level
- Multi-function, use-friendly monitoring software
- Reduced piping & wiring using a single compact pump for entire system
- Interface unit for environmental sensors such as temperature, relative humidity, differential pressure, etc.

### Distributor (Model 3770)



Supplies power to a maximum of 8 sensors or interface units.

Input	8 channel RS-485
Interface	Baud: 4800/9600/19200bps
Power	AC 85-132V/170-264V
Dimensions	11.8" x 3.9" x 7.9" (300 x 100 x 200mm)
Weight	Approx. 6.6lbs (Approx. 3kg)

# Hand-held Condensation Particle Counter Model 3800

NIST Traceable



**Indoor Air Quality Investigation**  
**Aerosol Research**  
**Filter Tests**  
**Environmental Monitoring for**

- **Electronics**
- **Food Processing**
- **Pharmaceutical**
- **Medical / Hospital, etc.**

**Features:**

- 0.015  $\mu\text{m}$  sensitivity
- Concentration range of 0 to 100,000 particles/cm<sup>3</sup>
- Programmable data-logging capabilities
- Power Supply can be selected from alkaline/Ni-MH battery or AC adapter
- Simple to download the data to your computer via USB

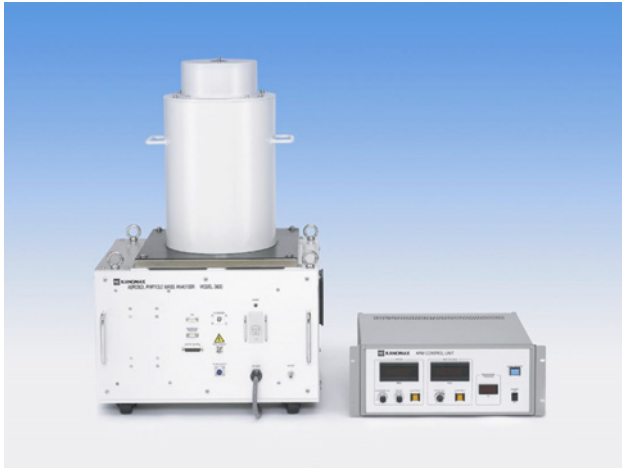
**Specifications**

Measuring Particle Size		0.015 to > 1 $\mu\text{m}$
Concentration Range		0 to 100,000 particles/cm <sup>3</sup>
Counting Efficiency		50nm: 100 $\pm$ 20% (15nm: More than 50%)
Zero Count		Less than 1 particle/ cm <sup>3</sup>
Flow Rate		Aerosol Flow: 100cc/min Total Flow: 700cc/min
Alcohol Supply	Type	100% reagent-grade isopropyl alcohol
	Hours per Fill	Approx. 5 hours at 23°C (73° F)
Absolute Pressure Sensor		150 to 1150 hPa
Mode of Measurements		Repeat / Program / Counter
Display		Built-in LCD ( 128 x 64 dots)
Interface		USB
Buffer Memory		Max. 10,000 measurements
Power Supply	Type	6 pieces of AA-size Alkaline / Ni-MH battery or AC adapter (Input 100 – 240V)
	Operating hours	Approx. 5 hours ( By Alkaline batteries ); Approx. 8 hours ( By Ni-MH batteries )
Environmental Operating Condition		Ambient temperature range: 10 to 35°C ( 50 to 95° F)
Dimensions		4.7"(W) x 11"(H) x 5.1"(D) (120 x 280 x 130mm)
Weight		Approx. 3.3lbs (1.5kg) ( without batteries )
Standard Accessories		AC adapter, Zero filter , Alkaline battery $\times$ 6, Operation manual, Software(for Windows), PC Communication Cable, Carrying Case
Options		Ni-MH battery (1.2V-2500mA) x 6, Charger x 2, Printer, Printer cable, Printer AC adapter

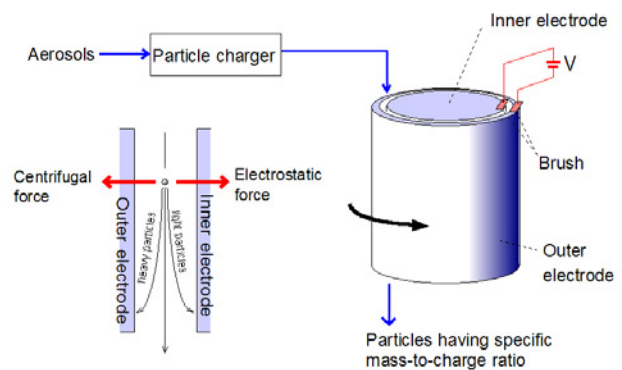


# Aerosol Particle Mass Analyzer Model APM-3600

This analyzer classifies the mass of a single aerosol based on the balance between centrifugal force and electrostatic power



**Diesel Exhaust Aerosol Research  
Nano-Particle Aerosol Research  
Atmospheric Aerosol Research  
Bio-Chemical Applications**



## Features:

The APM-3600 classifies particles for each particle size, based on the aerodynamic movement of the particles. This analyzer uses our own rotating mechanism and seal technologies, as well as taking into consideration the static effects and flow of the fluid.

## Main Body Specifications

Classifying method	Classification is based on the balance between centrifugal force and static power.
Classifying mass range	Approx. 0.01 ~ 100 Femto-gram (For particle concentration of 1g/cm <sup>3</sup> approx. 40nm~500nm, classification accuracy is within ±30% regarding center mass)
Double cylinder rotating	~8,000rpm
Double cylinder high voltage	~3,000V
Double cylinder dimensions	Inner cylinder diameter: 3.9" (100mm), Outer cylinder diameter: 4.1" (104mm), Cylinder length: 9.8" (250mm)
Sampling Flowrate	Above 1L/min
Dimensions	15.7" x 15.7" x 47.2" (400mm x 400mm x 1200mm)
Weight	Approx. 165lbs (75kg)

## Control, Display

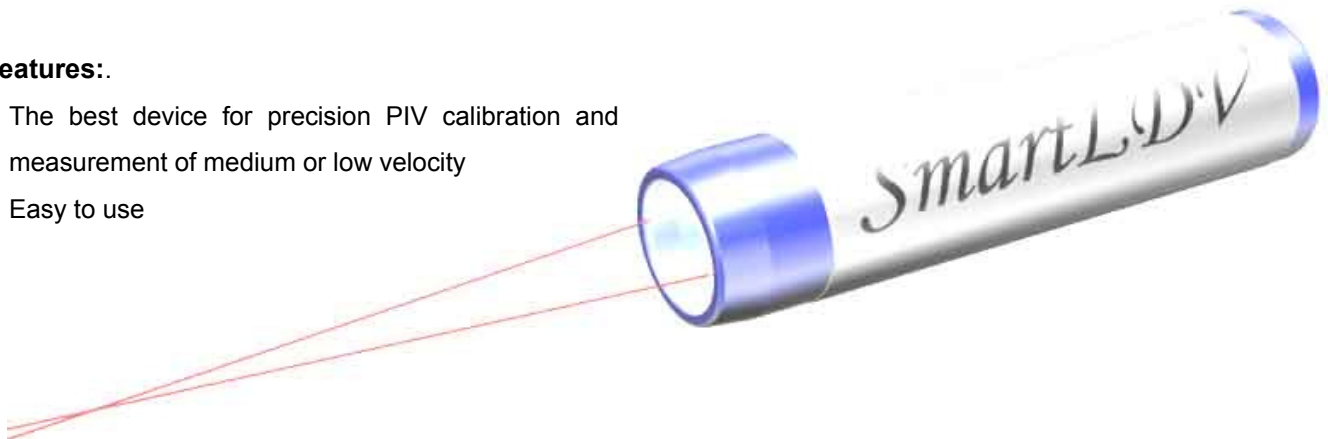
Control function	Rotation rate and applied voltage
Display function	Applied voltage / Rotation rate / Differential pressure (Panel display)
Control Method	Control by panel, Control by PC (By Manual / Remote Switch)
Dimensions	16.9" x 16.9" x 11.8" (430mm x 430mm x 300mm)
Weight	Approx. 55lbs (25kg)
Power supply	AC100V、50/60Hz

# Smart LDV System

## High Quality and Compact LDV System

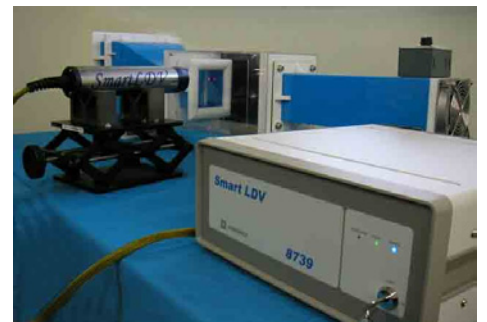
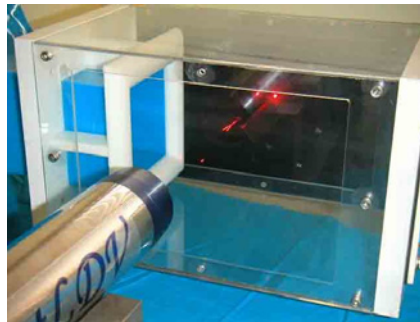
### Features:

- The best device for precision PIV calibration and measurement of medium or low velocity
- Easy to use



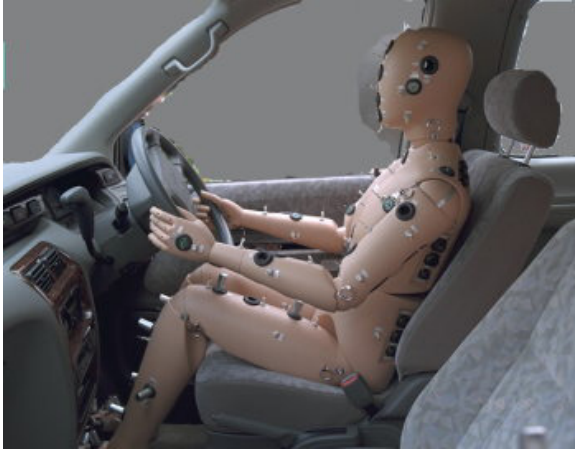
### Specifications

Available velocity		-10m/s~30m/s (Please contact us of the application to over 30 m/s.)
Optics	Laser	Laser Diode, $\lambda = 635\text{nm}$ , 10mW
	Focal Distance	150mm (Options : 170mm, 200mm, 250mm)
	Measurement Volume	0.09mm $\times$ 0.7mm
	Measurement Method	Back Scattering/Forward Scattering (A retro reflector mirror is used with a standard model to obtain high signal quality)
	Probe Size	60mm $\phi$ $\times$ 300mm
	Shift frequency	0.01 – 10MHz (1-2-5step)
Signal Processor	Signal Processing	8-bit FFT (512,256,128 points)
	Frequency Range	1kHz~40MHz (8 ranges)
	Max. Data Rate	8000 Data/sec
	Effective Judgment	Burst spectrum ratio
	Computer	IBM PC Compatible
Software	Max. Number of Data	99,000
	Realtime Monitor	Burst signal, Burst spectrum, Velocity histogram
	Data Processing	Mean velocity, Turbulence intensity, Skewness factor, Flatness factor, Velocity histogram, Time history
	Data Output	CSV Format



# Amenity Manikin

For Automotive Interior Environmental Measurement



## R&D Design Engineering

### Features:

The life sized Manikin is designed to accurately emulate the positioning of a driver or passengers torso, arms and legs while seated in the vehicle passenger compartment. Placement and positioning is simple and data collection can be started immediately. The Manikin deploys over 120 sensors that can be custom configured by the end-user on-sight. There are 4 sensor types to choose from that include Air Velocity, Air Temperature, Relative Humidity and Radiant Heat. The system components include the Manikin with built-in data processor, Sensors, Power and Data Transfer Unit, PC Interface, Monitoring PC and Data-Logging Software. Up to 2 Manikins can be linked to a single monitoring PC.

### Manikin Specifications

Height	Approx 5'7" (Approx. 170cm)
Weight	88lbs (40kg) including data processor
Material	Plastic (FRP)

### Sensor allocations (example)

	Air Velocity	Temperature	Relative Humidity	Radiant Heat
Head	4	12	1	3
Upper Torso	12	33	0	5
Lower Torso	20	33	1	4
Total	36	45	2	12

### Sensors Specifications

Air Velocity	Range	20 – 984fpm (0.1 - 5 m/s)	
	Accuracy	20 – 394fpm (0.1-2m/s)	± 10fpm (0.05m/s)
		394 - 984fpm (2-5m/s)	± 20fpm (0.10m/s)
Temperature	Range	-22 – 212F (-30 - 100°C)	
	Accuracy	± 4.6F (3°C)	
Humidity	Range	3-95%RH	
	Accuracy	3-30%RH	± 3%RH
		30-75%RH	± 2%RH
75-95%RH	± 3%RH		
Radiant Heat	Wavelength	0.3-40µm	
	Range	0-1Kw/m2	
	Accuracy	± 7%	



