

NEW Thommen Meteo Station

Barometric Pressure, Altitude, Humidity and Temperature

- All can be Displayed Simultaneously
- Data Intervals from 1 Sec to 24 Hr
- Store 900 Measurements
- Optional Second Temperature Sensor
- Dew Point Calculation
- Trend Indication
- RS-232 Interface



HM30MS

Specifications

Parameter	Range	Resolution	Accuracy FS ± 1 digit
Barometric Pressure:	9-30" H ₂ O	0.01" H ₂ O	±0.01"H ₂ O
Humidity:	0-95% RH	0.1% RH	±1.5% RH
Temperature Sensor 1:	-40°C to +60°C	0.1°C	0.3°C
Temperature Sensor 2:	-50°C to +200°C	0.1°C	0.3°C
Altitude	-1500 ft to +30,000 ft	1 ft	±30 ft ±6 ft (Δ≤1500 ft)

Ordering Information

Order #	Mfg #	Description	Price
MPHM30MS	HM30MS	Meteo Station with Standard Sensor	
MPHM30SW	HM30SW	Software for use w/ RS-232 Interface	
MPHM30TP	HM30TP	Optional Insertion Temperature Probe	

NEW Druck Laboratory Environmental Monitor

Ideal for calibration and R&D labs, clean rooms, manufacturing and storage areas and any environmentally sensitive areas requiring continuous monitoring.

- Real-Time Measurement of Barometric Pressure, Temperature, Air Density and RH
- Calculates Air Density Based on Above Measurements
- Windows Based Software to Datalog and Display All Parameters
- Transmit Readings Via RS-232 or RS-485 Interface to a PC
- Log Intervals of 1, 5 or 15 Minutes
- Ideal for Replacing Chart Type Recorders
- Space Saving Design Wall/Table Mount can be Placed Anywhere
- Accuracy to 0.5°C, 0.04 "Hg and 3% RH



LEM

In addition to the software, the LEM is supplied with an AC power supply (115/230 VAC), manual and NIST traceable calibration certificate.

Specifications

Temperature Range:	18 – 28°C (0 – 50°C max) Accuracy: ±1°C (1 year)
Humidity Range:	0 to 100% Accuracy: ±10% RH (1 year)
Pressure Range:	10 to 16 PSI Accuracy: ±2 mmHg (1 year)
Electrical Power	10 – 36 Volt DC: 250mA max
Engineering Units	°C x 100, %RH x 100, kPa x 100, g/m ³ °C, °F, %RH, kPa, mmHg, cmHg, inHg, mbar, PSI, kg/cm ² , kg/m ³ , Lb/in ³
Communication	RS-232 and RS-485/RS-232
Dimensions	3.25" x 5.25" x 1.25"

Ordering Information

Order #	Mfg #	Description	Price
MP2456-LEM	LEM	Laboratory Environmental Monitor	

Alnor Air Velocity/Volume/Temp Meter

- Displays Average Readings
- Articulating 42" Telescopic Probe
- Measures 30 to 9,999 FPM Velocity
- Volume 0.2 to 2,600,000 CFM Measurement
- Temperature Range 14 to 200°F
- Accuracy: Velocity/Volume ±3% Reading
Temperature ±0.5°F

The CompuFlow® 8570 meter measures velocity, volume and temperature easily and quickly.

The meter does not store data over time, but it will display an average of the most recent readings taken. A 42-inch articulated probe and cable are included allowing readings virtually anywhere.

Ordering Information

Order #	Mfg #	Description	Price
MP634.857.000	634.857.000	Thermo-anemometer Kit (8570)	



634.857.000

NEW Hart Scientific Environmental Monitor

The "DewK" monitors temperature, RH, dew point, heat index, and rates of change

- Two Channels Measure Ambient Temperature to $\pm 0.25^{\circ}\text{C}$ and % RH to $\pm 2\%$
- Probes Measure Via Cables to Locations up to 50 Feet Away (One Probe can be Directly Mounted)
- Summary Statistics for Min/Max/Maximum Rates of Change Stores Most Recent Sixty Days
- Alarm Settings are Visual and Aural, Quickly Set for Temperature and RH, PLUS Rate of Change for Temperature and RH and Instrument Fault Conditions
- Collect Data in User-Selectable Intervals from Every Second to Every Hour
- Stored Data can be Uploaded into the DewK Via PC Card for Statistical and Graphical Analysis
- On-Board Memory Holds up to 400,000 Time/Date-Stamped Readings PC Card Holds Millions More!
- Store Up to Sixteen Different Display Setups for Recall at the Touch of a Button
- Detachable Probes Contain their own Calibration Data for Easy Recalibrations
- Optional LogWare III Software Logs Real-Time or Shows PC Card Graphical/Statistical Data
- RS-232 and IrDa Communications Ports



Test Instruments — Miscellaneous

H

Specifications

Temperature Range	0°C to 50°C
Temperature Accuracy	15°C to 35°C: $\pm 0.25^{\circ}\text{C}$ (calibrated); 0°C to 15°C, 35°C to 50°C: $\pm 0.5^{\circ}\text{C}$ (typical)
Temperature Resolution	User selectable up to 0.001°C
RH Range	0% to 100% RH
RH Accuracy	20% to 70% RH: $\pm 2\%$ RH (calibrated); 0% to 20% RH, 70% to 100% RH: $\pm 3\%$ RH (uncalibrated, typical)
RH Resolution	User selectable up to 0.01%
Inputs	Two sensors, each measuring temperature and relative humidity;
Display	240 x 128 graphics LCD, displays data graphically, numerically, and statistically
Memory	400,000 typical individual time-stamped readings (excluding PC card storage)
Alarms	Visual and audio for temperature, temperature rate, RH, RH rate, and fault conditions
Communications	RS-232 and IrDA
Enclosure	The DewK may be wall-mounted (hardware included) or set on a bench-top
Power	12V DC from external 100-240 VAC power supply
Operating Range	0°C to 50°C
Size/ Weight	4.9" H x 8.3" W x 2.0" D (125 x 211 x 51 mm)/1.5 lb. (0.7 kg)

Each Unit (1620-S) Includes: Standard-accuracy DewK probe, wall mount bracket, Certificate of NIST-traceable 3-point temperature and humidity calibration and RS-232 cable

Each Spare Probe Kit (2627-S) Includes: Standard-accuracy DewK probe, probe case, probe wall mount bracket, and 25-foot [7.6 m] extension cable

Ordering Information

Order #	Mfg #	Description	Price
MP1620-S-115	1620-S-115	The DewK Thermo- Hygrometer 115V	
MP1620-S-230	1620-S-230	The DewK Thermo- Hygrometer 230V	
MP2626-S	2626-S	Spare Probe, 1620-S DewK	
MP2627-S	2627-S	Spare Probe Kit, 1620-S	
MP2628	2628	Cable, 25-foot (7.6 m) extension cable	
MP2629	2629	Cable, 50-foot (15.2 m) extension cable	
MP2632-64MB	2632-64MB	PC Card (PCMCIA), 64 MB	
MP2607	2607	Protective Case for Spare Probe	
MP9328	9328	Protective Case for 1620, two probes, PC Card, RS-232 cable, power cord	
MP9936-S	9936-S	LogWare III, single-PC license	
MPLIC-9936	LIC-9936	LogWare III License (for additional PCs)	

Alnor Air Velocity Meters

- Two Dual-Range Meters
- 4 x 3 x 1½" HWD/8 Ounces
- Direct Reading

Each Unit Includes: Leather carrying case and instructions.

Ordering Information

Order #	Mfg #	Description	Price
MP7585F-28	8100-200&800FPM	Air Velocity Meter, 0–200/0–800 FPM	
MP7585F-416	8100-400&1600FPM	Air Velocity Meter, 0–400/0–1600 FPM	

8100-200&800FPM ▶



Alnor Air Velocity Meters

- 5 Velocity, 2 Static Ranges
- Exclusive Pitot Probe
- Ideal for HVAC Balancing and Process, OSHA Compliance, Energy Audits, and Hood Monitoring Drying Systems
- Five velocity ranges of 0–300, 0–1250, 0–2500, and 0–10,000 FPM accurate to ±2% FS
- Two static ranges of 0–1.0 and 0–10.0 "H₂O accurate to ±5%.

Size/Weight: 6 x 6½ x 2½- 10 oz

Each Unit Includes: Range selectors, five probes, case, and instructions.

Ordering Information

Order #	Mfg #	Description	Price
MP7590F	6000AP	Air Velocity Measuring Kit	
MP7591F	6060P-24	24" Pitot Probe	
MP7592F	6060P-36	36" Pitot Probe	



◀ **6000AP**

Extech Mini-Vane Thermo-Anemometers

Mini-Vane on Telescoping Probe Fits into High Temperature Air Ducts

- Displays Air Flow (Ft³/m³) or Air Velocity Plus Temperature on Dual Display
- 20 Point Averaging for Airflow
- Vane Wheel 2.83" Diameter; Telescoping Mini-Vane ½" Diameter
- Record MIN, MAX with RECALL Function and Data Hold
- RS-232 Output with Optional Software Allows Storing Readings on a PC
- Includes 9V Battery and Protective Holster

Ordering Information

Mfg#	407114	407117
Air Velocity Ranges	80 to 4921ft/min 0.9 to 55.9MPH 0.8 to 48.6knots 0.40 to 25.00m/s 1.4 to 90.0km/h	160 to 2358ft/min 1.8 to 26.8MPH 1.6 to 23.3knots 0.8 to 12.00m/s 2.8 to 43.2km/h
Basic Accuracy	±2%	
Air Volume Ranges	0 to 999,900 (feet ³ /minute) 0 to 999,900 (meters ³ /minute)	
Temperature	32.0 to 122°F (0 to 50.0°C) 32.0 to 176°F (0 to 80.0°C)	
Accuracy	±1.5°F/0.8°C	
Order #	MP407114	MP407117
Price		



◀ **407117**

407114 ▶

Accessories

Order #	Mfg #	Description	Price
MP407001	407001	Data Acquisition Software and Cable	
MP156119	156119	117 VAC Adapter	
MP140001	140001	Hard Vinyl Case with Handle	

Airflow Air Velocity Meter

- 4" /100 mm Head Size
- 6000 ft/min or 30 m/sec Ranges
- Metric and English Calibrations
- 5084VA-1 Allows Direct cfm Readings

Each Unit Includes:
9V alkaline battery, carrying case, and instructions.

Ordering Information

Mfg#	LCA6000-FT/MIN	J71952803
Measuring Range:	50 to 6000 ft/min or 0.2 to 39 m/sec, averaged over 6 sec	50 to 6000 ft/min or 0.2 to 39 m/sec, averaged over 6 sec
Variable Time Base:	N/A	1500 ft/min (7.5 m/sec) @ 2 minutes 6000 ft/min (30.0 m/sec) @ 30 sec
Direct CFM Readings:	N/A	4-999,999 cfm (0.002-3000 m ³ /S)
Accuracy:	Better than ±2% FS, (1% rdg +3 ft/min below 200 ft/min)	
Oper Environment:	-10 to 50°C/14 to 122°F; 500 mBAR to 2 BAR/15 "Hg to 60 "Hg	
Size/Weight:	10.4 x 4.3 x 1.6" HWD/0.62 lb	
Order #	MP5082VA	MP5084VA-1
Price		

LCA6000-FT/MIN ▶



Alnor Rotating Vane Air Velocity Meter

- Measures Air Velocity in FPM or MPH
- Measures Air Volume in CFM
- Ideal for Grilles or Exhaust Flow Measurements
- Test Laboratory and Clean Room Fume Hoods
- 4" Head Swivels to 90°, 180°, or 270°, Allowing it to Face the Operator
- One Touch or Continuous Average Measurements

Specifications

Velocity:	50 to 6000 FPM (0.25 to 30.0 m/s)		
Temperature:	32 to 140°F (0-60°C)		
Volumetric Flow Rate:	Up to 5400 x 1000 CFM (9174 x 1000 m ³ /hr)		
Resolution:	Velocity: 1 fpm (0.01 m/s)	Temp:	1°F or 1°C
Accuracy:	Velocity: ±(1% Rdg + 4 fpm); ±(1% Rdg + 0.02 m/s)	Temp:	±2°F; ±1°C
Power:	Four (4) Alkaline or NiCd Batteries		

Ordering Information

Order #	Mfg #	Description	Price
MP634.150.210	RVA+	Rotating Vane Air Velocity Meter (RVA+)	

RVA+ ▶



TSI VelociCalc® Plus Multi-Parameter Air Velocity Meters

- Free Computer Download Software
- Discrete or Continuous Datalogging
- Simultaneously Measures Velocity, Temperature, Volumetric Flow Rate, and More
- Automatically Converts to Actual or Standard Flows
- Three Models are Supplied with an Articulating Probe
- Statistics, Review Data and Density Correction

Each Unit Includes: Air velocity meter, probe, carrying case, computer cable, downloading software, (4) AA alkaline batteries, operation and service manual, and NIST certificate of calibration.

Models 8385 and 8386 Also Include: Static pressure tip and rubber tubing.

Specifications

Mfg#	Model 8384A	Model 8385A	Model 8386A	Range	Typical Accuracy
Velocity:	X	X	X	0-9999 ft/min	± 3% of reading
Temperature:	0-200° F	0-200° F	0-140° F	See Chart	± 0.5 degrees
F Differential Pressure:		X	X	-5 to 15 "H ₂ O	± 1% of reading
Thermal/Pitot:		X	X	250-15,500 ft/min	± 1.5% @ 2000 ft/min
Humidity:			X	0 to 95%	± 3% RH
Dew Point:			X	5 to 120° F	± 0.5°F
Wet Bulb Temp.:			X	40 to 140° F	± 0.5°F
Heat Flow Calculations:			X		
Variable Time Constant:	X	X	X	1, 2, 4, 10, 15, or 20 sec.	
Size/Weight (Meter):	4.2 x 7.2 x 1.5"/1.2 lbs Probe: 40 x 0.276 x 0.395"				
Order #	MP24546A-A	MP24547A-A	MP24548A-A		
Price					



8384A ▲

Pacer Vane Anemometer

- High Accuracy $\pm 1\%$ of Reading ± 1 Digit
- Resolution 1 FPM or 0.01 MPS
- Probe Ranges:
 - AP275 40 to 7800 FPM (0.2 to 40.00 MPS)
Probe: 2.75" Diameter
 - AP100 60 to 6800 FPM (0.3 to 35.00 MPS)
Probe: 1" Diameter
- Displays Min/Max Values per Session
- Display Hold or Reset
- Averaging Over 2 or 16 Seconds
- Switchable Between MPS or FPM
- Powered by Two AA Alkaline Batteries
- Size/Weight: 7.1 x 3 x 0.8" and 8 Ounces

Ordering Information

Order #	Mfg #	Description	Price
MPA40-AP275	A40-AP275	Vane Anemometer with 2.75" Probe	
MPA40-AP100	A40-AP100	Vane Anemometer with 1" Probe	

Digital Manometers are located on
pages D4-D8



▲ DA40-AP275

Alnor Air Balancing System

- Direct Reading to 2000 CFM
- Analog and Digital Models
- Lightweight and Very Portable

These two systems are designed to measure and balance air intake and outflow at ceiling, wall, or floor diffusers. Ideal for factories, production facilities, pharmaceutical applications, clean rooms, and HVAC applications. The 4911F Series provides direct reading of air flow measurement on the 4½-digit LCD. Readout in CFM, cubic meters/hour, or liters/second are switch selectable. The meter accepts optional dual-purpose probes, allowing you to measure temperature and air velocity or humidity.

Specifications

Ranges:	50–2000 CFM
Accuracy:	$\pm 3\%$ of rdg ± 7 CFM
Operating Temperature:	32 to 122°F (0–50°C)
Resolution:	1 CFM or better below 2000 CFM
Power Supply:	Three AA 1.5V alkaline batteries
Size:	40" height, base 17 x 11"
Weight:	8.6 lbs with 2' x 2' hood

Ordering Information

Order #	Mfg #	Description	Price
MP4911F-1	634-593-410	Electronic Balometer Kit, One Hood	
MP4911F-3	634-593-411	Electronic Balometer Kit, Three Hoods	
MP4911F-5	634-593-412	Electronic Balometer Kit, Five Hoods	
MP4390F	634.431.023	Air Velocity and Temperature Probe	
MP4392F	633.220.110	Humidity and Temperature Probe	



▲ 634-593-410 with optional probes

Each Unit Includes: Base with meter, three 1.5V AA alkaline batteries, hoods (one—2' x 2'; three—2' x 2', 2' x 4', 1' x 4'; five—2' x 2', 2' x 4', 1' x 4', 1' x 5', 3' x 3'), carrying case, and instructions.

Alnor Air Velocity/Volume/Temperature/RH

- Airflow Measurements
- HVAC Service and Installation
- Building Maintenance
- 5 Selectable Engineering Units

Engineering units including ft/min, meters/sec, ft/sec, mph, and km/hr cross sectional area of ducts can be entered enabling calculation and display of volumetric data (CFM, l/s, etc.). They can measure temperature and relative humidity when coupled with the optional probes. Both units have onboard memory and can store readings for printout for download to a PC with the optional interface cable.

8585

With the 8585-KIT there is a large backlit LCD that simultaneously displays temperature and velocity or relative humidity. This advanced thermoanemometer measures velocity, volume, temperature, humidity, dew point, and wet bulb using one permanently attached 42" telescopic/articulated probe. The unit is powered by three "C" alkaline batteries, and can store up to 1500 readings. It also features a datalog mode in which readings are taken at present intervals (2 sec. to 60 min.) and logged to memory. The 8585 is capable of downloading stored information to a computer using CompuDat software and interface cable which are included.

Ordering Information

Order #	Mfg #	Description	Price
MP8585-KIT	634-858-500	Air Velocity/Temperature Meter Kit	
MP4392F	633.220.110	Temperature/Relative Humidity Probe (220B)	
MP21215A	634.493.404	Serial Interface Cable	

NOTE: 220V battery charger is available; contact Transcat for details.

634-858-500



8585-Kit Includes: Deluxe articulated probe (42"), insulated duct sleeve, battery eliminator, CompuDat software, cable, carrying case, and instructions.

Test Instruments — Miscellaneous

Alnor Air Velocity Meter/Micromanometer

The AXD562 is an air velocity meter kit that uses a Pitot tube as its sensor to measure differential pressure and calculate airflow. Velocity range is from 253 to 17910 fpm, differential pressure range is .4 to 20 "H₂O with .002" resolution below 1"! By entering duct cross sectional areas, the unit can also calculate volumetric flow (cfm, l/sec, etc.). The unit has built-in memory and can store up to 100 volume, pressure, or velocity readings, and compute an average. Stored data can be downloaded to a PC via the unit's RS-232-C port.

Each Kit Includes: AXD560 Unit, 18" static Pitot tube, hoses, carrying case, 8528 printer, three AA alkaline batteries, manufacturer's calibration data sheet, duct plugs and instructions.

Ordering Information

Order #	Mfg #	Description	Price
MPAXD562	AXD560	Air Velocity/Micromanometer Kit	
MP21215A	634.493.404	Serial Interface Cable	



AXD560

H

NEW Epsilon PT3 Hand Held Flow Master

- All Parameters for Surveys, Profiles, and Traverse Studies of Duct Gas Flows
- Simultaneously Display, Graph, Log, and Download (up to 2900 Points)
- Velocity, Mass and Volumetric Flow, Gas and Ambient Temperatures, Static and Differential Pressure
- Mass Flow Readings can be Wet or Dry and Corrected to (User Selectable) Standards
- Integrated Pitot Probe, Temperature, Static Pressure and Log Trigger
- Multi-Parameter S Type Pitot Tube Required by EPA for 40CFR60 Method 2
- Probe Allows One-Handed Operation
- Powerful Tool for use by Performance and Environmental Engineers

Specifications

Measured Ambient Temperature:	
Measurement Range:	-5 to 160°F (-20 to 70°C)
Accuracy:	± 1°F (+/- 0.5°C)
Measured Process Gas Temperature:	
Element:	Type K Thermocouple
Measurement Range:	-40 to 2200°F (-40 to 1200°C)
Resolution:	0.2°F (0.1°C)
Accuracy:	0.3 % of FSD
Measured Differential Pressure:	
Range:	± 1 "H ₂ O, ± 5 "H ₂ O, ± 10 "H ₂ O (specify at time of order)
Repeatability:	0.2% FSD
Span Drift:	0.5% FSD at 32 to 120°F (0 to 50°C)
Zero Drift:	0.5% FSD at 32 to 120°F (0 to 50°C)
Units:	mBAR or Inches Water Gauge
Note: Normally zeroed before each measurement	
Measured Pressure Input:	
Input Range:	0 to 15 PSIA, suitable for Barometric pressure 0 to 5 PSIG specify range at time of order 0 to 10 PSIG specify range at time of order
Repeatability:	0.25 %
Span Drift:	0.5% FSD at 32 to 120°F (0 to 50°C)
Zero Drift:	0.5% FSD at 32 to 120°F (0 to 50°C)
Units:	mBAR, PSI
Velocity:	
Range:	10 to 60 ft/s (3 to 18 m/s) 13 to 130 ft/s (4 to 40 m/s) 16 to 200 ft/s (5 to 60 m/s) Dependent on which differential pressure transducer selected
Resolution:	0.33 ft/s (0.1 m/s)
Units:	feet/sec, m/sec
Mass Flow:	
Mass Flow is dependent on the velocity range, duct size, temperature and absolute pressure and the molecular weight of the gas	
Units:	kg/s, kg/h, lb/s, lb/h
Instrument Ambient Operating Temperature:	
Standard:	32 to 120°F (0 to 50°C)
Extended:	-5 to 160°F (-20 to 70°C)
Instrument Process Gas Operating Temperature:	
Continuous:	up to 1100°F (up to 600°C)
Intermittent:	up to 1475°F (up to 800°C)
Current Loop Input:	
Range:	0 to 100 mA, Resolution: 100 µA
Accuracy:	0.3% FSD
Current Loop Output:	
Range:	10 mA fixed, Resistance: 1200 Ohms, Voltage: 12V

Ordering Information

Order #	Mfg #	Description	Price
MPPT3-18-ET	PT3	Flow Master with a 18" Probe	
MPPT3-36-ET	PT3	Flow Master with a 36" Probe with Standard	



Each Unit Includes: Hose Assembly, Probe, PC Display Software and Carrying Case for PT3

Flowmeters for liquids are located on pages D45-D48