

Go Beyond Airflow Measurements

Extech's compact thermo-anemometers and multi-function environmental meters couple all-in-one versatility with accurate diagnostics. From solving HVAC problems to ensuring workplace safety compliance, Extech helps you get results with fewer tools.



ACCESSORIES

45116	Mini Impeller (2pk) for 45118
45156	Mini Impeller (2pk) for 45158
TR100	Tripod
CA895	Small Vinyl Pouch Case for 45118, 45158
UA100-240	100-240V AC Adaptor with 3 plugs (US, EU, UK)



45118 Mini Thermo-Anemometer

Waterproof pocket size with Air Velocity, Temperature and Windchill

- Display Air Velocity and Temperature or Windchill
- Adjustable averaging function of 5, 10, or 13 second intervals
- Fold up protective housing extends to 9" (229mm) for better reach
- Tripod mount (optional TR100 Tripod — sold separately)
- Data Hold with Auto power off
- Water resistant housing floats
- Replaceable plastic vane 45116
- Complete with CR2032 lithium battery and 43" (1.09m) lanyard



45158 Mini Thermo-Anemometer+ Humidity

Waterproof pocket size with Air Velocity, Temperature, %RH, Dew Point & Windchill

- Display air velocity and either Relative Humidity, Dew Point, Temperature or Windchill
- Adjustable averaging function of 5, 10, or 13 second intervals
- Fold up housing extends to 9" (229mm) for better reach
- Tripod mount (optional TR100 Tripod — sold separately)
- Data Hold with Auto power off
- Water resistant housing floats
- Replaceable plastic vane 45156
- Complete with CR2032 lithium battery and 43" (1.09m) lanyard

SPECIFICATIONS	45118	45158
ft/min (res.)	100 to 5500 (20)	100 to 5500 (20)
m/s (res.)	0.5 to 28 (0.1)	0.5 to 28 (0.1)
km/h (res.)	1.8 to 100.6 (0.7)	1.8 to 100.6 (0.7)
MPH (res.)	1.1 to 62.5 (0.2)	1.1 to 62.5 (0.2)
knots (res.)	1.0 to 54.3 (0.3)	1.0 to 54.3 (0.3)
Beaufort Force (res.)	1 to 17 (1)	1 to 17 (1)
Temperature & Windchill °F/°C	0 to 122°F (0.1°), -18 to 50°C (0.1°)	0 to 122°F (0.1°), -18 to 50°C (0.1°)
Relative Humidity (res.)	—	10% to 95% (1%)
Foot Candles/Lux (res.)	—	—
Sound Level (res.) - A weighting	—	—
Basic Accuracy		
Airflow	±3% of reading	±3% of reading
Temperature	±1.8°F, ±1°C	±1.8°F, ±1°C
Relative Humidity	—	±5%RH
Light	—	—
Sound	—	—
PC Interface	—	—
CE approved	Yes	Yes
Dimensions/Weight	5.25x2.75x0.75" (133x70x19mm)/ 3oz (95g)	5.25x2.75x0.75" (133x70x19mm)/ 3oz (95g)
	Vane: 1" (26mm)D	Vane: 1" (26mm)D
Warranty	1 year	1 year



45160/45170 Environmental Meters

Measures Humidity, Temperature, and Airflow plus Light Level

- Built-in low friction vane wheel improves air velocity accuracy
- Type K input (Probe sold separately - see p. 40, 41, & 74)
- MAX/MIN and Data hold
- Thin-film capacitance humidity sensor for fast response
- Complete with wrist strap and 9V battery

45170 Additional Features

- Utilizes precision photo diode and spectral response filter for Cosine and color corrected measurement
- Auto-rotating display depending on function



EN300 Environmental Meter

Measures Humidity, Temperature, Air Velocity, Light, and Sound

- Auto-rotating display depending on function
- Built-in low friction vane wheel improves air velocity accuracy
- Thin-film capacitance humidity sensor built-in for fast response
- Thermistor for ambient temperature and Type K input for taking surface temperature
- Utilizes precision photo diode and correction filter
- Sound Level measurement meets IEC 61672 class 2
- MAX/MIN and Data hold
- Complete with 6 AAA batteries; Optional AC adaptor UA100-240



AN400 Cup Thermo-Anemometer

Rotating cups provide accurate air velocity measurements from any direction

- Wide range air velocity measures m/s, ft/min, km/hr, and knots
- Dual LCD digital display of Air Velocity and Temperature
- Record MAX/MIN values
- Record up to 100 readings
- Water resistant housing (IP65)
- Complete with four AAA batteries

■ 45160 ▲ 45170	EN300	AN400	SPECIFICATIONS
80 to 5910 (10)	80 to 5910 (1)	144 to 6895 (1)	ft/min (res.)
0.4 to 30 (0.1)	0.4 to 30 (0.1)	0.9 to 35.0 (0.1)	m/s (res.)
1.4 to 108.0 (0.1)	1.4 to 108.0 (0.1)	2.5 to 126.0 (0.1)	km/h (res.)
0.9 to 67.0 (0.1)	0.9 to 67.0 (0.1)	1.6 to 78.2 (0.1)	MPH (res.)
0.8 to 58.3 (0.1)	0.8 to 58.3 (0.1)	1.4 to 68.0 (0.1)	knots (res.)
—	—	—	Beaufort Force (res.)
32 to 122°F (0.1°), 0 to 50°C (0.1°)	32 to 122°F (0.1°), 0 to 50°C (0.1°)	32 to 122°F (0.1°), 0 to 50°C (0.1°)	Temperature & Windchill °F/°C
10 to 95% (0.1%)	10 to 95% (0.1%)	—	Relative Humidity (res.)
■ No ▲ 0 to 1860Fc (0.1Fc)/0 to 20,000Lux (1Lux)	0 to 1860Fc (0.1Fc)/ 0 to 20,000Lux (1Lux)	—	Foot Candles/Lux (res.)
—	35 to 130dB (0.1dB)	—	Sound Level (res) - A weighting
±3% FS	±3% FS	Basic Accuracy	Basic Accuracy
±2.5°F, ±1.2°C	±2.5°F, ±1.2°C	±2% of reading	Airflow
±4%RH	±4%RH	±1.5°F, ±0.8°C	Temperature
■ No ▲ ±5% of reading	±5% of reading	—	Relative Humidity
—	±1.4dB	—	Light
—	Optional 407001 Software (see p. 106)	—	Sound
Yes	Yes	Yes	PC Interface
6.1x2.4x1.3" (156x60x33mm)/ 5oz (160g)	6.1x2.4x1.3" (156x60x33mm)/ 5oz (160g)	7.5x1.6x1.3" (190x40x32mm)/ 6.3oz (181g)	CE approved
Vane: 1.2" (30.5mm)D	Vane: 1.2" (30.5mm)D	Vane: 2.9" (70mm)D	Dimensions/Weight
1 year	1 year	1 year	Warranty

Versatile and Durable Tools for HVAC/R

Extech equips HVAC/R professionals with rugged, accurate tools for measuring airflow, air velocity and air/surface temperatures. Extech's thermo-anemometers are available with vane/propeller probes as well as telescoping, hot-wire probes for small openings or hard-to-reach areas.



AN100/AN200 CFM/CMM Thermo-Anemometers

Large backlit display of Airflow or Air Velocity plus model with built-in InfraRed Thermometer

- Simultaneous display of Ambient Temperature and Air Flow or Air Velocity
- Up to 8 easy to set Area dimensions stored in internal memory (ft² or m²)
- 20 point AVG for Air Flow
- Low friction 2.83"D (72mm) ball bearing vane wheel
- Data Hold, MIN/MAX, Auto off
- Complete with vane sensor on 3.9ft (120cm) cable, 9V battery, protective rubber holster, and case
- **Model AN200** also features built-in IR Thermometer



HD300 CFM/CMM Thermo-Anemometer + IR Thermometer

Built-in IR Thermometer for quick troubleshooting of ceiling vents, duct work, and other remote surfaces

- IR Thermometer has 30:1 distance to target ratio and Laser pointer
- Simultaneous display of Air Flow in CFM/CMM or Air Velocity Plus Ambient Temperature
- Up to 8 easy to set Area dimensions stored in memory
- Large backlit LCD
- Air Flow displayed in 2 modes as an instantaneous value or up to 20 point average
- USB port includes PC software
- Includes PC software, cable, vane sensor on 3.9ft (120cm) cable, built-in stand, case, and 9V battery

SPECIFICATIONS	■ AN100 N ▲ AN200 N	HD300 N
Air Velocity (Max Res.)		
ft/min	80 to 5900 (1)	80 to 5900 (1)
m/sec	0.4 to 30.00 (0.01)	0.4 to 30.00 (0.01)
km/h	1.4 to 108.0 (0.1)	1.4 to 108.0 (0.1)
MPH	0.9 to 67.0 (0.1)	0.9 to 67 (0.1)
knots	0.8 to 58.0 (0.1)	0.8 to 58.0 (0.1)
Temperature (Max Res.)	14 to 140°F/ -10 to 60°C (0.1°)	14 to 140°F/-10 to 60°C (0.1°)
Temperature (IR)	■ No ▲ -58 to 500°F/ -50 to 500°C (0.1°/1°)	-58 to 932°F/-50 to 500°C (0.1°/1°)
Air Flow (CFM = ft ³ /min)	■ 0 to 9999CFM (1) ▲ 0 to 999,999CFM (0.1)	0 to 999,900CFM (0.001)
Air Flow (CMM = m ³ /min)	■ 0 to 9999CMM (1) ▲ 0 to 999,999CMM (0.1)	0 to 999,900CMM (0.001)
Basic Accuracy	±3%rdg; ±2°F (±1°C)	±3%rdg; ±4°F (2°C)
PC Interface	—	Yes
Datalogger	—	Directly to PC using software
CE approved	Yes	Yes
Dimensions/Weight	7x2.9x1.3" (178x74x33mm)/1.6lbs (700g)	8x3x1.9" (203x75x50mm)/12.2oz (350g)
Warranty	1 year	3 years



407113 High Temperature CFM Metal Vane Anemometer

Withstands temperatures to 175°F (80°C) and airspeed to 6890ft/min

- Display Air Flow (CFM) or Air Velocity plus Temperature
- Air Flow displayed in 3 modes: Instantaneous value, Up to 20 point average, or 2/3 flow value
- Record and Recall MIN/MAX
- Data Hold plus Auto power off
- Built-in PC Interface
- Optional Data Acquisition software 407001 and Datalogger 380340 - see details on p. 106
- Includes metal vane sensor with 3.9ft (120cm) cable, 9V battery, holster with stand, and hard case; Optional 117V (156119) or 220V (156221) AC adaptors (see p.106 for ordering).



407123 Heavy Duty Hot Wire Thermo-Anemometer

Telescoping probe is designed to fit into small openings and measure airflow down to 40ft/min

- Telescoping probe is ideal for measuring in HVAC ducts and other small vents; extends up to 7ft (2.1m) maximum length with cable and vane is 0.5" (13mm) in diameter
 - Large 1.4" (36mm) dual LCD display
 - MAX/MIN, Data Hold
 - Optional Data Acquisition software 407001 and Datalogger 380340 - see details on p. 106
 - Complete with telescoping probe with cable, six AAA batteries and protective holster
- NOTE: AC Adaptor not available for this model



407119 Hot Wire CFM Anemometer

Accurately measures Air Flow (CFM/ CMM) or Air velocity plus Temperature

- Air velocity measurements as low as 40ft/min
- Telescoping probe extends up to 3ft (940mm) long
- Measures air volume in CFM (ft³/min) and CMM (m³/min) plus Temperature simultaneously
- Air Flow displayed in 2 modes as an instantaneous value or up to 20 point average
- Record and Recall MIN/MAX
- Data Hold plus Auto power off
- Optional Data Acquisition software 407001 and Datalogger 380340 - see details on p. 106
- Complete with telescoping probe with 5.5ft (167.6cm) cable, and four AA batteries

407113 N

100 to 6890 (1)
0.5 to 35 (0.1)
1.8 to 126.0 (0.1)
1.1 to 78.3 (0.1)
1.0 to 68.0 (0.1)
32 to 175°F (0.1°)/ 0 to 80°C (0.1°)
—
0 to 999,900CFM (0.001)
0 to 999,900CMM (0.001)
±2%rdg; ±1.5°F (±0.8°C)
Optional 407001 Software (see p. 106)
Optional 380340 Datalogger (see p. 106)
Yes
7x2.9x1.3" (178x74x33mm)/1.35lbs (612g)
3 years

407123 N

40 to 3940 (10)
0.2 to 20 (0.1)
0.7 to 72.0 (0.1)
0.5 to 45 (0.1)
1.0 to 31 (0.1)
32 to 122°F (0.1°)/ 0 to 50°C (0.1°)
—
—
—
±3%rdg or ±(1%+1d)FS; ±1.5°F (±0.8°C)
Optional 407001 Software (see p. 106)
Optional 380340 Datalogger (see p. 106)
Yes
7x2.9x1.3" (178x74x32mm)/1.1lbs (482g)
3 years

407119 N

40 to 3346 (1)
0.2 to 17 (0.1)
0.7 to 61.2 (0.1)
0.9 to 38.0 (0.1)
0.4 to 33.0 (0.1)
32 to 122°F (0.1°)/ 0 to 50°C (0.1°)
—
0 to 999,900CFM (0.001)
0 to 999,900CMM (0.001)
±2%rdg; ±1.5°F (±0.8°C)
Optional 407001 Software (see p. 106)
Optional 380340 Datalogger (see p. 106)
Yes
7x2.9x1.3" (178x74x32mm)/1.1lbs (482g)
3 years

SPECIFICATIONS

Air Velocity (Max Res.)
ft/min
m/sec
km/h
MPH
knots
Temperature (°F/°C)
Temperature (IR)
Air Flow (CFM = ft³/min)
Air Flow (CMM = m³/min)
Basic Accuracy
PC Interface
Datalogger
CE approved
Dimensions/Weight
Warranty

Datalogging Made Easy

Extech is fast becoming the go-to source for compact datalogging test equipment. Now, Extech introduces the new SDL series of HVAC datalogging meters. For accurately measuring airflow and temperature, the SDL series offers flexible options including a high temperature metal vane propeller or a compact hot-wire probe. And for powerful datalogging, readings are stored directly on an SD card in Excel® format, making it easier than ever to track trends and perform extended diagnostics.



ACCESSORIES (FOR SDL300, SDL310, & SDL350)

153117	117V AC Adaptor
UA100-240	100-240V AC Adaptor with 3 plugs (US, EU, UK)

Vane Versus Hot Wire

HVAC and mechanical contractors often contact us to ask whether they should purchase a vane (propeller) or hot wire anemometer. For many technicians, it is ultimately a matter of preference but there are some distinguishing factors to keep in mind. Vane anemometers are very useful for fast, accurate measurements of air velocity. The ultra compact size of a hot wire anemometer probe makes it easy to access small openings such as louvered vents. Telescoping hot wire probes are also useful for reaching high locations.

SPECIFICATIONS

ft/min
m/sec
km/h
MPH
knots
Air Flow (CFM = ft³/min)
Air Flow (CMM = m³/min)
Temperature (air)
Temperature (Type J/K)
Basic Accuracy
PC Interface
Datalogging
CE approved
Dimensions/Weight
Warranty



SDL300 Metal Vane Thermo-Anemometer/Datalogger

Metal Vane withstands temperatures to 158°F (70°C) and air velocity to 6900ft/min

- 2% velocity accuracy via low friction ball bearing vane wheel on 39" (1m) cable
- Datalogger date/time stamps and stores readings on an SD card in Excel® format for easy transfer to a PC
- Selectable data sampling rate: 1 to 3600 seconds (1 hour)
- Manually store/recall up to 99 readings
- Type K/J Thermocouple input for high temperature measurements
- Large (9999 count) LCD displays Air Velocity and Temperature simultaneously
- Record/Recall MIN, MAX readings
- Data Hold plus Auto power off with disable function
- Built-in PC interface
- Complete with 6 x AA batteries, SD card, metal vane sensor with 3.9ft (120cm) cable, and hard carrying case; (See p. 40, 41, and 74 for optional Type K and J Thermocouple probes)



SDL310 Vane Thermo-Anemometer/Datalogger

Measures Air Temperature to 122°F (50°C) and air velocity to 4930ft/min

- 2% velocity accuracy via low friction ball bearing vane wheel on 39" (1m) cable
- Datalogger date/time stamps and stores readings on an SD card in Excel® format for easy transfer to a PC
- Selectable data sampling rate: 1 to 3600 seconds (1 hour)
- Manually store/recall up to 99 readings
- Type K/J Thermocouple input for high temperature measurements
- Large (9999 count) LCD displays Air Velocity and Temperature simultaneously
- Record/Recall MIN, MAX readings
- Data Hold plus Auto power off with disable function
- Built-in PC interface
- Complete with 6 x AA batteries, SD card, vane sensor with 3.9ft (120cm) cable, and hard carrying case; (See p. 40, 41, and 74 for optional Type K and J Thermocouple probes)



SDL350 Hot Wire CFM Thermo-Anemometer/Datalogger

Air Velocity meter with telescoping probe designed to fit into HVAC ducts and other small openings and can read down to 40ft/min

- Probe extends up to 4.9ft (150cm) maximum length with cable
- Datalogger date/time stamps and stores readings on an SD card in Excel® format for easy transfer to a PC
- Selectable data sampling rate: 1 to 3600 seconds (1 hour)
- Manually store/recall up to 99 readings
- Type K/J Thermocouple input for high temperature measurements
- Large (9999 count) LCD displays Air Velocity and Temperature simultaneously
- Record/Recall MIN, MAX readings
- Data Hold plus Auto power off with disable function
- Built-in PC interface
- Complete with 6 x AA batteries, SD card, telescoping probe with cable, and hard case; (See p. 40, 41, and 74 for optional Type K and J Thermocouple probes)

SDL300 N

60 to 6900ft/min
0.3 to 35m/s
1.0 to 1265km/h
0.7 to 78.2MPH
0.6 to 68knots
—
—
32 to 175°F (0 to 80°C)
J: -148 to 2192°F (-100 to 1200°C)
K: -148 to 2372°F (-100 to 1300°C)
2%rdg
Optional 407001 Software (see p. 106)
20M readings using 2G SD memory card
Yes
7.2x2.9x1.9" (182X73X48mm)/17.2oz (487g)
3 years

SDL310 N

80 to 4930ft/min
0.4 to 25m/s
1.4 to 90.0km/h
0.9 to 55.9MPH
0.8 to 48.6knots
—
—
32 to 122°F (0 to 50°C)
J: -148 to 2192°F (-100 to 1200°C)
K: -148 to 2372°F (-100 to 1300°C)
2%rdg
Optional 407001 Software (see p. 106)
20M readings using 2G SD memory card
Yes
7.2x2.9x1.9" (182X73X48mm)/16.9oz (480g)
3 years

SDL350 N

40 to 3940ft/min
0.2 to 25m/s
0.7 to 72km/h
0.5 to 45MPH
1 to 31knots
0 to 1,907,000CFM
0 to 54,000CMM
32 to 122°F (0 to 50°C)
J: -148 to 2192°F (-100 to 1200°C)
K: -148 to 2372°F (-100 to 1300°C)
5%rdg
Optional 407001 Software (see p. 106)
20M readings using 2G SD memory card
Yes
7.2x2.9x1.9" (182X73X48mm)/23.1oz (655g)
3 years