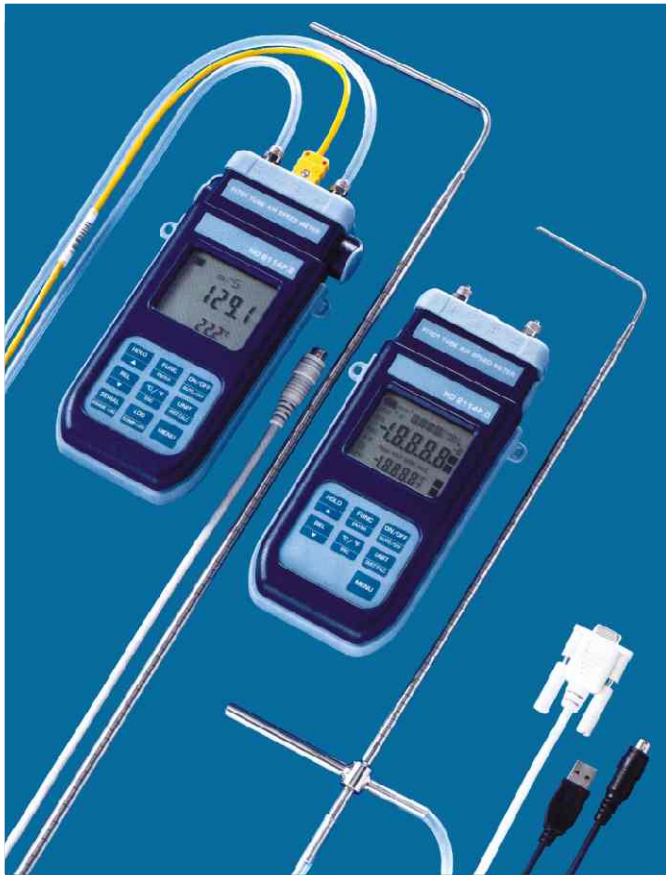


Pitot Tube Thermo Anemometer

**Mod. : HD2114P.0, HD2114P.2
HD2134P.0, HD2134P.2**



The HD2114P.0 and HD2114P.2, HD2134P.0 and HD2134P.2 are portable micro-manometers using Pitot tubes and a large LCD display. They are used to perform measurements in the fields of air conditioning, heating and ventilation. They measure the differential pressure detected by a Pitot tube connected to the instrument inputs acquiring the wind speed and flow rate inside pipelines and vents. They also measure the temperature using a type K thermocouple sensor.

The HD2114P.2 and HD2134P.2 instruments are dataloggers. They memorize up to 36,000 samples which can be transferred from the instrument connected to a PC via the multi-standard RS232C serial port and USB 2.0. The storing interval, printing, and baud rate can be configured using the menu. They are also fitted with an RS232C serial port and can transfer the acquired measurements to a PC or to a portable printer in real time.

Instrument Technical Characteristics

Display	2 × 4½ digits plus symbols
Measuring Units	°C - °F - Pa - mbar - mmH ₂ O - PSI - m/s km/h - ft/m - mph - knot - l/s - m ³ /h - cfm
Dimensions (Length × Width × Height)	185×90×40mm
Pressure inputs	2 quick couplings 5mm
TC type K Temperature input	2-pole female polarized standard miniature connector
Weight	470g (complete with batteries)
Measuring Rang	See Table "A"
Materials	ABS, rubber
Pitot Tube Dimension	See Table "B"
Operating temperature	-5...50°C
Warehouse temperature	-25...65°C
Working relative humidity	0...90%RH without condensation
Protection degree	IP67
Batteries	4 × 1.5V type AA batteries
Autonomy	200 hours with 180mAh alkaline batteries
Power absorbed with instrument off	20 A

Storage Details - models **HD2114P.2** and **HD2134P.2**

Type	2000 pages containing 18 samples each
Quantity	36000 samples
Storage interval	1s...3600s (1 hour)

Serial interface RS232C - models **HD2114P.2** and **HD2134P.2**

Type	RS232C electrically isolated
Baud rate	Can be set from 1200 to 38400 baud
Data bit	8
Parity	None
Stop bit	1
Flow Control	Xon/Xoff
Serial cable length	Max 15m
Immediate print interval	1s...3600S (1hour)

USB interface - models **HD2114P.2** and **HD2134P.2**

Type	1.1 - 2.0 electrically isolated
Serial and USB interface-models HD2114P.2 and HD2134P.2	8-pole MiniDin connector
Mains adapter - models HD2114P.2 and HD2134P.2	2-pole connector (positive at centre)

Mains - models **HD2114P.2** and **HD2134P.2** Output mains adapter 9Vdc / 250mA

Measurement of pressure, wind speed and flow rate calculated by the internal sensor, and temperature measured using thermocouple K.

TABLE - A

	HD2114P0 HD2114P2	HD2134P0 HD2134P2
Measurement Range		
Differential pressure	±20mbar	±200mbar
Speed	2....55m/s	2....180m/s
Temperature using thermocouple K	-200...+1370°C	-200....+1370°C
Temperature using Pitot tube	-200...+600°C	-200...+600°C
Maximum overpressure	±300mbar	±1bar
Resolution		
Differential pressure	0.005bar -0.5Pa	0.01mbar - 1Pa
Speed	0.1m/s - 1 km/h - 1 ft/min - 1 mph - 1 knots	
Flow rate	1 l/s - 0.01.10 ³ m ³ /h - 0.01.10 ³ cfm	
Temperature	0.1°C	
Accuracy		
Differential pressure	±0.4%f.s.	±0.25%f.s
Speed	±(2% reading+0.1 m/s)	±(2% reading + 0.3m/s)
Temperature	± 0.1°C	± 0.1°C
Minimum speed	2 m/s	3 m/s
Automatic air temperature compensation	-200...+ 600°C	
Manual air temperature compensation	-200... + 600°C	
Unit of Measurement		
Differential Pressure	Pa - mbar - mmH ₂ O - PSI	
Speed	m/s – km/h – ft/min – mph – knots	
Flow rate	l/s – m ³ /h – cfm	
Temperature	°C / °F	
Pipeline section for flow rate calculation	0.0001...1.9999 m ²	
Fluid contacting the membrane	non corrosive air and gas	

ORDER CODES

HD2114P0 K : The kit is composed of the HD2114P0 with 20mbar full scale and thermocouple K input, 4 × 1.5V alkaline batteries, operating manual, case The Pitot tubes have to be ordered separately.

HD2114P2 K : The kit is composed of the HD2114P2 datalogger with 20mbar full scale and thermocouple K input, connection cable HD2101/USB, 4 1.5V alkaline batteries, operating manual, case and DeltaLog9 software, The Pitot tubes have to be ordered separately.

HD2134P.0 K : The kit is composed of the HD2134P0 with 200mbar full scale and thermocouple K input, 4×1.5V alkaline batteries, operating manual, case. The Pitot tubes have to be ordered separately.

HD2134P2 K : The kit is composed of the HD2134P2 datalogger with 200mbar full scale and thermocouple K input, connection cable HD2101/USB, 4×1.5V alkaline batteries, operating manual, case and DeltaLog9 software, The Pitot tubes have to be ordered separately.

HD2110CSNM: 8-pole connection cable MinDin - Sub D 9-pole MiniDin.

DeltaLog9 : Software for download and management of the data on PC using Windows 98 to XP operating systems.

PW : Extension with male-female standard miniature connectors to connect the Pitot tube's thermocouple K to the instrument, length 2m.

AF209.60 : Stabilized power supply at 230Vdc-300mA mains voltage.

S'print-BT : On request, portable, serial input, 24 column thermal printer, 58mm paper width.

TABLE - B

	T1-...	T2-...	T3-...	T4-...	
Diameter d (mm)	3	5	8	10	
Length point t (mm)	33	55	88	135	
Length L (mm)	300	400 600	500 800	500 800 1000	
Order Code(*)	T1-300	T2-400 T2-600	T3-500 T3-800TC	T4-500 T4-800 T4-800TC T4-1000 T4-1000TC	

(*) TC = Pitot tubes with thermocouple K

Thermocouple K probes - To be ordered extra.