

PC62 & 62V

Digital Relative Humidity & Temperature Probe with Digital or Analog Output



The PC series offers a comprehensive range of relative humidity probes for accurate, stable and repeatable measurements. Available with analog or digital output signals, the PC series can be installed in a wide variety of applications.

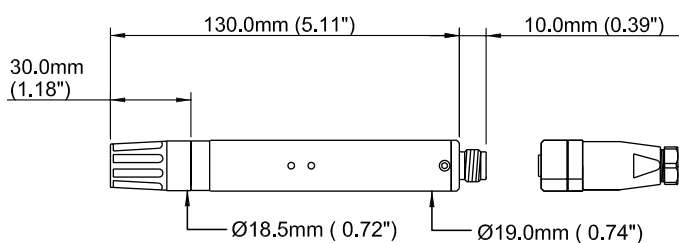
Highlights

- PC62 is designed for high accurate measurements in precision manufacturing applications
- Digital or analog output possible on the PC62
- PC62 available with calculated absolute humidity, dew point or wet bulb temperature output

Technical Specifications

Performance	
Measurement range (RH)	0–100% RH
Measurement range (T)	-20 to +80°C (-4 to +176°F)
Accuracy at 23°C (73°F) Humidity	<±2% RH (10–90% RH)
Accuracy at 23°C (73°F) Temperature	±0.2°C (±0.36°F)
Stability – RH Sensor	±1% RH/year
Response time – RH Sensor	<10 sec typical (for 90% of the step change)
Electrical output/input	
Output signal	0–1, 0–5, 0–10 V, RS232, RS485
Supply voltage	14–30 V DC, 5–30 V DC (0–1 V & mA output)
Operating conditions	
Operating humidity Probe, Housing, Storage	5-95% RH
Operating temperature Probe, Housing Storage	-30 to +85°C (-22 to +185°F) -40 to +85°C (-40 to +185°F)
Mechanical specification	
Ingress protection	IP65 (NEMA 4 level)
Housing material	Molded polymer or stainless steel (ordering option)
Dimensions	L=130mm, ø19mm (L=5.11", ø0.74")
Weight	30g (1.06oz) (molded polymer) without cable
Electrical connections	M12

Dimensions



Accessories and Spare Parts

19mm (0.75") Slotted protection cap black	A000002
19mm (0.75") PVDF filter	A000014
19mm (0.75") PVDF filter with protection cap black	A000015
19mm (0.75") Mesh filter with protection cap black	A000021
19mm (0.75") Arrow SS sintered filter 5µm / 10µm / 20µm	A000025/26/27
19mm (0.75") Connector, no cable, with screw terminals	A000030
19mm (0.75") Connector, with cable (customer spec length)	A000030XM
19mm (0.75") Connector with 2m (6.5') cable	A000031
19mm (0.75") Connector with 5m (16') cable	A000032
19mm (0.75") Foil filter 2µm with protection cap black	A000040
Oleophobic foil filter 0.7µm with protection cap black	A000042
19mm (0.75") Foil filter 1.5µm w/protection cap black	A000044
3/4" NPT SS adj. fitting for SS probes	A000100
Al mounting flange for ø19.0mm (ø0.75") SS probe	A000110
Mini flange for ø19.0mm (ø0.75") molded polymer probe	A000150
You can check your hygrometer with the Control Kit HKC which is based on the principle of non-saturated salt solutions. Refer to technical data sheet CONTROL KIT	Control Kit HKC

Electrical Connections

Voltage output		
Cable	Connector	
White	Pin 1	Power Supply V +
Green	Pin 4	Output RH +
Yellow	Pin 2	Output temperature +
Brown	Pin 3	Common ground

Cable	Connector	RS232	RS485
White	Pin 1	Power supply V +	Power Supply V +
Green	Pin 4	TX	TX/RX +
Yellow	Pin 2	RX	RX/TX -
Brown	Pin 3	Ground	Ground

Ordering Example

PC62V-BASE-4-XX-T1-TD-CA-02

Relative humidity and temperature probe PC62V, 0-5 V output, molded polymer, temp range -20 to +80°C (-4 to +176°F) with calculated dew-point temperature and temperature output, no cable, 19mm slotted protection cap, black

Order Codes

PC62 - Digital Relative Humidity & Temperature Probe with 2% accuracy and RS232 or RS485 output		
Feature	Item	Description
Base Model	PC62-BASE	Base unit
Sig Output	PC62-0	RS232
	PC62-1	RS485
Body	PC62-SX	Stainless steel
	PC62-XX	Molded polymer
Temp	PC62-TC	Digital output in °C
	PC62-TF	Digital output in °F
Cable	PC62-CA	No cable
	PC62-CB	19mm (0.75") Connector, no cable, with screw terminals
	PC62-CC	19mm (0.75") Connector with 2m (6.5') cable
	PC62-CD	19mm (0.75") Connector with 5m (16') cable
Filter	PC62-02	19mm (0.75") slotted protection cap black
	PC62-15	19mm (0.75") PVDF filter with protection cap black
	PC62-21	19mm (0.75") Mesh filter with protection cap, black
	PC62-25	19mm (0.75") Arrow SS sintered filter 5µm
	PC62-26	19mm (0.75") Arrow SS sintered filter 10µm
	PC62-27	19mm (0.75") Arrow SS sintered filter 20µm
	PC62-40	19mm (0.75") Foil filter 2µm with protection cap black
	PC62-42	Oleophobic foil filter 0.7µm with protection cap black
PC62-44	19mm (0.75") Foil filter 1.5µm w/protection cap black	

PC62V - Digital Relative Humidity and Temperature Probe with 2% accuracy and voltage output		
Feature	Item	Description
Base Model	PC62V-BASE	Base unit
Sig Output	PC62V-3	0-10 V
	PC62V-4	0-5 V
	PC62V-5	0-1 V
Body	PC62V-SX	Stainless steel
	PC62V-XX	Molded polymer
Temp	PC62V-T1	-20 to +80°C (-4 to +176°F)
	PC62V-TX	Other output scaling available on request
Moist. Sig	PC62V-RH	RH
	PC62V-TA	Abs 0-200g/m ³ , T= -20 to +80°C, Calc range output (Calculated absolute humidity and temp output - only available with -20 to +80°C (-4 to +176°F) default range)
	PC62V-TD	Td -40 to +60°C T= -20 to +80°C Calc range output (Calculated dew-point temp and temp output - only available with -20 to +80°C (-4 to +176°F) default range)
	PC62V-TW	Tw -40 to +60°C Calc Range output (Calculated wetbulb temp and temp volt output - only available with -20 to +80°C (-4 to +176°F) default range)
Cable	PC62V-CA	No cable
	PC62V-CB	19mm (0.75") Connector, no cable, with screw terminals
	PC62V-CC	19mm (0.75") Connector with 2m (6.5') cable
	PC62V-CD	19mm (0.75") Connector with 5m (16') cable
Filter	PC62V-02	19mm (0.75") slotted protection cap black
	PC62V-15	19mm (0.75") PVDF filter with protection cap black
	PC62V-21	19mm (0.75") Mesh filter with protection cap, black
	PC62V-25	19mm (0.75") Arrow SS sintered filter 5µm
	PC62V-26	19mm (0.75") Arrow SS sintered filter 10µm
	PC62V-27	19mm (0.75") Arrow SS sintered filter 20µm
	PC62V-40	19mm (0.75") Foil filter 2µm with protection cap black
	PC62V-42	Oleophobic foil filter 0.7µm with protection cap black
PC62V-44	19mm (0.75") Foil filter 1.5µm w/protection cap black	