

ATC - ATD



The ATAL ATC and ATD portable measurement instruments consist of multi-channel lightweight appliances for measuring temperature, relative humidity, dew point, atmospheric pressure, and the like.

The measurement instruments are battery-operated and are the perfect tool for all kinds of measurement applications in heating, ventilation and refrigeration technology. Their sophisticated design make the meters particular user-friendly. The large double-line LCD screen is easily read and minimizes the likelihood of misreading. Functions such as alarm and saving of minimum and maximum values are easily programmed with the "menu" function key.

General specifications

		
Dimensions:	141 x 71 x 27 mm (h x b x d)	
Housing material:	ABS plastic	
Internal battery:	Lithium 9 Vdc (replaceable)	
Battery life:	2 to 6 months depending on type	
Operating conditions:	-10 to +60 °C	
Clock:	Real time	
Protection category:	IP 2x	
Alarm:	Acoustic; 2 limit alarms per channel	
Resolution:	0.1 °C, 0.1% RH, 0.1 hPa	
Temp. accuracy:	±0.4 °C (from -50 to 100 °C)	
RH accuracy	±2.5% RH (from 5 to 95%)	
Dew point accuracy:	±0.5 °C (from 30 to 95% RH)	
P atm accuracy:	±1 hPa bij 23 °C	

The measurement instruments are supplied complete including 9 VDC battery, manual and wallet (ATC models) or carrying case (ATD models). A battery charger is available as an option.

Properties

- ▶ **Multi-functional instruments with large LCD screen, measure and record up to 4 quantities.**
- ▶ **Acoustic alarm per input when limit level exceeded.**
- ▶ **All settings are menu controlled by the "MENU" function key.**
- ▶ **ATD series is equipped with a recorder capable of storing 16,000 measured values to memory.**
- ▶ **ATD series has three logging variants: manual – "first-in-first-out" – "stop-if-full".**

Applications

- ▶ Horticulture and plant nurseries
- ▶ Underfloor heating technology
- ▶ Building and energy management
- ▶ Indoor climate readings
- ▶ Research and development
- ▶ Refrigeration and cryo technology
- ▶ Legionella checks
- ▶ Laboratories (GLP)
- ▶ Pharmacies (GMP)



Temperature models

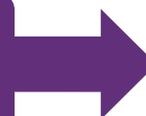
Recording is the trend

The ATD series differs from other measurement instruments through its advanced recording function. The ATD series has a real-time clock and saves measured values into the memory with a date and time notation. Three logging variants can be programmed: manual (the user can place measured values manually into the memory), "first-in-first-out" (oldest measured values are overwritten when the memory is full) and finally "stop-if-full" (a full memory stops the recorder from collecting measured data). The 3.5 mm jack connection allows the ATD meter to be linked to the RS232 port of a PC so that the measured data can be read, processed, analysed and printed in no time at all.

Recorder specifications (ATD series only)

Interval time:	Adjustable by stages of 10 sec. to 24 hours
Memory capacity:	16,000 measured values
Recording methods:	- manual (1000 memory positions) - "first-in-first-out" - "stop-if-full"
Communication with PC:	Serial RS232
System requirements:	Windows®95, 98, NT, 2000, ME and XP 10 Mb disk space and 32 Mb RAM recommended

See pages 28 and 29 for detailed information on associated software



Applications



Legionella prevention with ATD portable meter

The thermocouple models ATC-04, ATC-05, ATD-04 and ATD-05 are ideally suited for measurements for Legionella prevention. In combination with the ATAL thermocouple sensors, the instruments are in fact ideally suited for rapid, accurate measurements of tap water and/or water main temperatures, amongst other things. A feature of the ATAL thermocouple sensors is their rapid response time.

ATC-ATD

Temperature models (Pt1000/Ni1000)

ATD-12

1-channel temperature (Pt1000/Ni1000)



ATD-12

With recorder

Weight:	140 gr.
Sensor type:	RTD Pt1000
Range:	-200 to 500 °C
Accuracy:	
	-50 to +100 °C ±0.3 °C
	+100 to +500 °C ±0.3% of measured value
	-200 to -50 °C ±0.6% of measured value

ATD-13

2-channel temperature (Pt1000/Ni1000)



ATD-13

With recorder

Weight:	150 gr.
Sensor type:	RTD Pt1000
Range:	-200 to 500 °C
Accuracy:	
	-50 to +100 °C ±0.3 °C
	+100 to +500 °C ±0.3% of measured value
	-200 to -50 °C ±0.6% of measured value

ATD-14

4-channel temperature (Pt1000/Ni1000)



ATD-14

With recorder

Weight:	160 gr.
Sensor type:	RTD Pt1000
Range:	-200 to 500 °C
Accuracy:	
	-50 to +100 °C ±0.3 °C
	+100 to +500 °C ±0.3% of measured value
	-200 to -50 °C ±0.6% of measured value

See page 30 of this catalogue for detailed information on Pt1000 sensors >>>

Temperature models (thermocouples types J, K & S)

ATC-04/ATD-04 1-channel temperature (thermocouple)



ATC-04	ATD-04
Without recorder	With recorder
Sensor type:	Thermocouple, J, K & S
Range J:	-200 to 750 °C
Range K:	-70 to 1300 °C
Range S:	0 to 1700 °C
Resolution and accuracy differ from general specifications	

ATC-05/ATD-05 2-channel temperature (thermocouple)



ATC-05	ATD-05
Without recorder	With recorder
Sensor type:	Thermocouple, J, K & S
Range J:	-200 to 750 °C
Range K:	-70 to 1300 °C
Range S:	0 to 1700 °C
Resolution and accuracy differ from general specifications	

Several thermocouple sensors that can be used with these instruments are described on page 31

Temperature, relative humidity (RH), dew point and atmospheric pressure models

ATC-06/ATD-06 Temperature/RH/dew point



ATC-06	ATD-06
Without recorder	With
No. of channels:	2
Weight:	150 gr.
Temperature range int.:	-10 to +60 °C
RH range int.:	5 to 95% RH

ATC-07/ATD-07 Temperature/RH/dew point



ATC-07	ATD-07
Without recorder	With recorder
No. of channels:	2
Weight:	220 gr.
Temperature range ext.:	-30 to +105 °C
RH range ext.:	0 to 100% RH
Probe dimensions:	135 x 18 mm (diam.)
Cable length:	1 m (2 m or 4 m optional)

ATC-08/ATD-08 Temperature/RH/dew point



ATC-08	ATD-08
Without recorder	With recorder
No. of channels:	3
Weight:	150 gr.
Temperature range int.:	-10 to +60 °C
RH range int.:	5 to 95% RH
Temperature range ext.:	-50 to 250 °C (RTD Ni1000)

ATC-09/ATD-09 Temperature/RH/dew point



ATC-09	ATD-09
Without recorder	With recorder
No. of channels:	3
Weight:	160 gr.
Temperature range int.:	-10 to +60 °C
RH range int.:	5 to 95% RH
Range P atm:	800 tot 1100 hPa

ATC-10/ATD-10 Temperature/RH/dew point/P atm



ATC-10	ATD-10
Without recorder	With recorder
No. of channels	4
Weight	170 gr.
Temperature range int.:	-10 to +60 °C
Range P atm:	800 to 1100 hPa
Temp. range ext.:	-30 to +10 °C
RH range ext.:	0 to 100% RH.
Probe dimensions:	135 x 18 mm (diam.)
Cable length:	1 m (2 m or 4 m optional)

ATC-11/ATD-11 Temperature/RH/dew point



ATC-11	ATD-11
Without recorder	With recorder
No. of channels	3
Temperature range surface:	-10 to +60 °C
RH range int.:	5 to 95% RH
Temperature range int.:	-10 to +60 °C

Temperature, RH and dew point meter developed for the coatings industry. Provided on the reverse with magnetic surface temperature sensor for fitting against metal wall. Meter determines difference in temperature between surface temperature and dew point temperature.