

Data**loggers**



Data applications

ATAL dataloggers are designed for measuring physical and electrical quantities. Measured values are stored in non volatile memory. Alarm limits can be configured for each measured variable and when these limits are exceeded, the unit evaluates the situation as critical and activates the alarm.

Measurement and monitoring

ATAL dataloggers measure **temperature, humidity, dew point, barometric pressure, CO₂, current, voltage, pulses and events**. Models with analog inputs for DC current or DC voltage allow additional physical quantities to be measured using third party sensors. ATAL also offers two state recorders for monitoring machine functions, engine operation, door open/closed states and other process activities. These versions can also be combined with pulse inputs for monitoring **water, gas and electricity consumption**.

The measuring interval can be set from **1 s to 24 h**, and the LCD display shows both the current value and **MIN/MAX** values.



Datalogger

Recording can be configured as **non cyclic**, **cyclic (FIFO)**, **continuous** or **alarm only**.

Data can be logged at intervals from 1 s to 24 h.

In non cyclic mode, logging stops when the memory is full. In cyclic mode, the oldest data is overwritten once memory is full. Up to **500,000 values** can be stored, and MIN/MAX values can also be recorded.

Alarm indication

Alarm indication is available for **limit exceedance**, device failure, battery status, memory level and external power failure. Upper and lower limits can be set for each channel. When exceeded, alarms are indicated on the display, by LED or by acoustic signal. Models with a built in GSM modem can send **SMS alarm messages**, including information on device failure, battery and memory status and power loss. Latched alarms are supported, keeping alarm states active until manual confirmation.

Data transfer to OnlineSensor

Data can be downloaded easily via USB cable. Dataloggers with a built in battery powered GSM modem also support SMS alarm indication, heartbeat messages and data transfer to **OnlineSensor** or database software via GSM.

Data can be sent at intervals from **5 minutes**, and a buffering function reduces GSM activity to save battery life. Heartbeat text messages can be configured to periodically report the device's current status.



Premium dataloggers

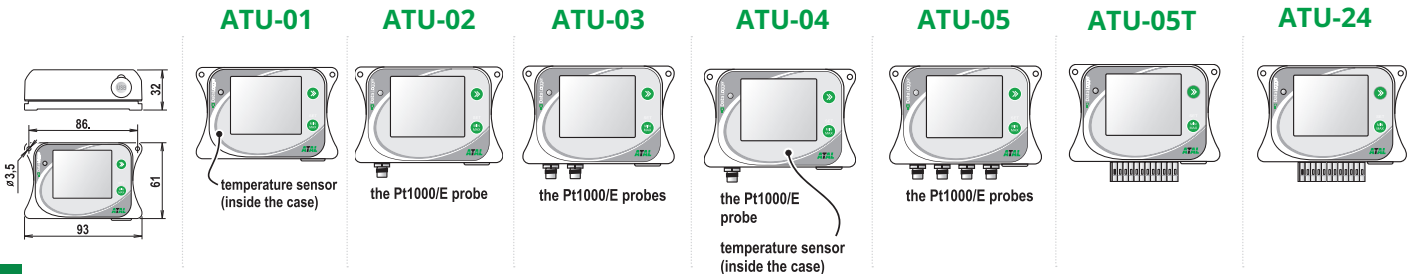
Temperature dataloggers

The premium datalogger series is designed for accurate temperature monitoring, with a strong focus on measurement precision, long lifetime, water resistance and flexible alarm functions.

The dataloggers are available in several versions: models with an internal temperature sensor and versions equipped with inputs for connecting up to **four external temperature probes**, suitable for measurements in the range **-90 °C to +260 °C**.



Measured values			Temperature						
Datalogger models			ATU-01	ATU-02	ATU-03	ATU-04	ATU-05	ATU-05T	ATU-24
Temperature	Internal	Range	-30 to +70 °C	-	-30 to +70 °C	-	-30 to +60 °C		
		Accuracy	± 0.4°C	-	± 0.4 °C	-	± 0.4 °C		
	External PT100	Range	-	-90 to +260 °C					
		Accuracy*	-	± 0.2 °C					
	External thermo-couple	Range	-					-200 to +1700 °C * *	
		Accuracy	-					**	
Typical battery life			6 years						
Class of protection of case with electronics			IP67					IP20	

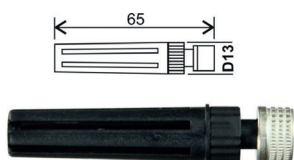


External temperature probes

External temperature probes are designed for measuring temperature in specific applications. The probes are available with cable lengths of **1, 2, 5 and 10 meters**. To maintain high measurement accuracy, it is **not recommended** to use probes with cable lengths longer of more than **20 meters**. Unless stated otherwise, all probes are manufactured in **Class A accuracy**.

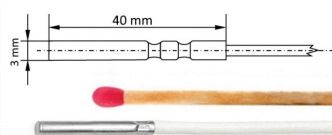
TEP-101B

(-30 °C to +80 °C)
Fast accurate air probe with fast response time without protection against moisture.



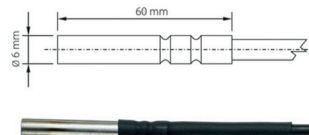
TG3QB-40-Pt1000A

(-50 °C to +200 °C)
Ultra thin temperature probe.



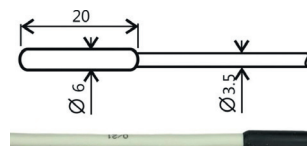
TEP-102B-WP

(-80 °C to +200 °C)
Universal temperature watertight probe with IP68 for long-term monitoring of temperature in the liquid.



TEPW-102B

(-30 °C to +80 °C)
Inexpensive probe with plastic housing, slow response and with IP67.



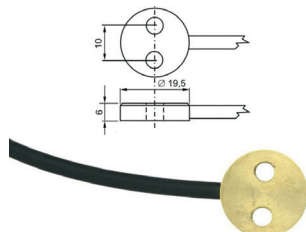
TEP-104B

(-30 °C to +130 °C)
Strap-on probe for pipe mounting and flat surfaces. Class of protection - IP65.



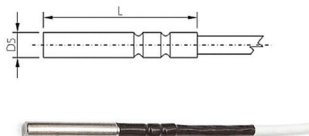
TEP-103B

(-30 °C to +200 °C)
Brass probe for surface temperature measurements. Probe is not resistant to moisture.



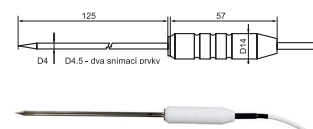
TEP-102B-CRYO

(-190 °C to +150 °C)
Cryogenic temperature probe.



TEP-108B

(-30 °C to +200 °C)
Hand-held pointed tip probe for food industry with teflon handle and silicon cable. Class of protection - IP67.



Premium dataloggers

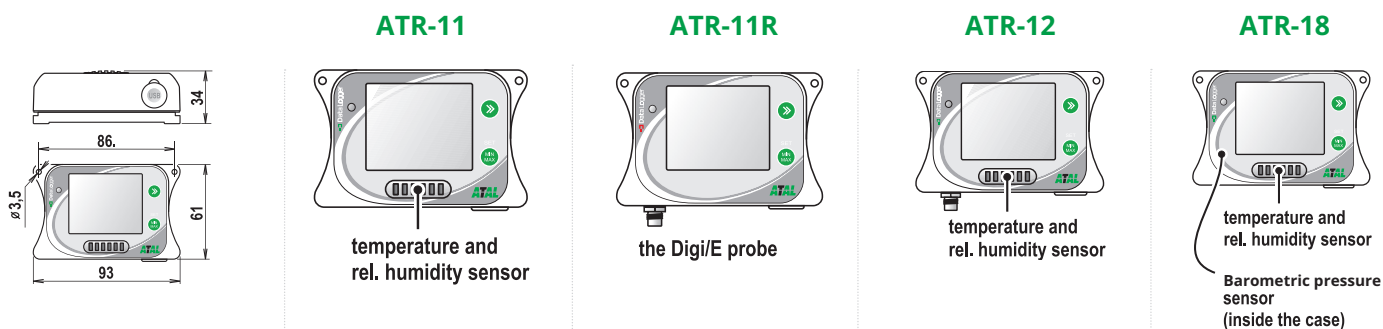
Temperature and humidity dataloggers

1, 2, 5, 10 and 15 metres. These instruments are designed for measuring and recording ambient temperature, relative humidity, dew point and barometric pressure. The temperature and humidity sensors are either integrated into the device housing or supplied as external cable probes. The external probes are fully interchangeable and do not require recalibration for a specific device, regardless of the cable length. Available cable lengths are 1, 2, 5, 10 and 15 meters.



Measured values			Temperature, relative humidity			Temperature, relative humidity, barometric pressure	
Datalogger models			ATU- 11	ATU- 11R	ATU- 12	ATU- 18	
Temperature	Internal	Range	-30 to +70 °C	-	-30 to +70 °C		
		Accuracy	± 0.4 °C	-	± 0.4 °C		
	External	Range	-		-		
		Accuracy*	-		-		
Relative humidity **		Range	0 to 100 % RH	According to the probe	0 to 100 % RH		
		Accuracy***	± 1.8 % RH	According to the probe	±1.8 % RH		
Dew point accuracy ****		Accuracy	± 1.5 °C	According to the probe	±1.5 °C		
Barometric pressure		Range	-			600 to 1100 hPa	
		Accuracy	-			± 1.3 hPa	
Typical battery life			6 years				
Class of protection of case with electronics			IP67				

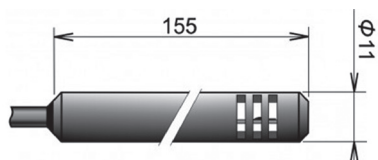
* Accuracy of device w/o probe in measuring range of -90 to 100 °C (in range +100 to +260 °C is accuracy ± 0,2 % of measured value)
** From 0 to 90 % RH at 23 °C
*** Accuracy of sensing element
**** At ambient temperature T<25 °C and RH> 30 %



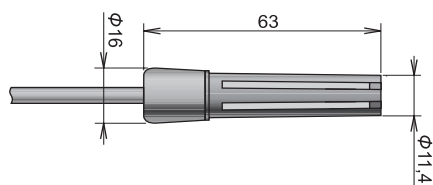
External temperature and humidity probes

The probe is interchangeable and supplied with a calibration certificate. The cable length should not exceed **30 metres**. The accuracy of the external sensing element is **±1.8 % RH**.

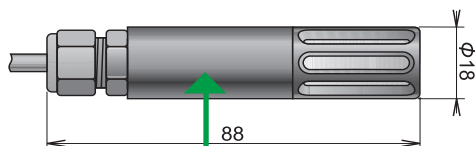
- **TRHD-104E:** Ultra thin digital probe.
(-10 to +60 °C; 0 to 100 % RH)



- **TRHD-103E:** Low cost probe without filter mesh.
(-10 to +60 °C; 0 to 95 % RH)



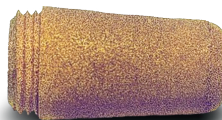
- **TRHD-102E:** Probe with interchangeable protection filter.
(-30 to +105 °C; 0 to 100 % RH)



Sensor covers for external probes



ATS-AC12P - Teflon (PTFE) sensor cover (white colour), with increased resistance against splashing water, non-absorbent surface, does not rust. Porous size 25 µm. Temperature range -40 °C to +125 °C.



ATXV-AC19 - sintered bronze sensor cover for moderate aggressive environments. Filtering ability 0.025 mm.



ATS-AC12B - sensor cover with filter from stainless steel mesh, suitable for moderately dusty environment. Filtering ability 0.025 mm.

Premium dataloggers

CO₂ dataloggers

These dataloggers are designed for measuring carbon dioxide concentration in indoor environments. In addition to CO₂, they can also measure temperature, relative humidity or barometric pressure, depending on the model. CO₂ concentration is measured using a dual wavelength NDIR sensor with multi point adjustment. This dual wavelength technology compensates for sensor aging, ensuring maintenance free operation and excellent long term stability.

Applications

CO₂ dataloggers are ideal for monitoring indoor air quality in offices, classrooms, hospitals and public buildings. They provide CO₂ measurements that support the evaluation of ventilation performance in HVAC systems, help maintain climate stability in laboratories, museums and archives, and can be used in greenhouses or controlled atmosphere environments. By continuously monitoring CO₂ levels, these instruments help maintain healthy, efficient and well ventilated indoor spaces.



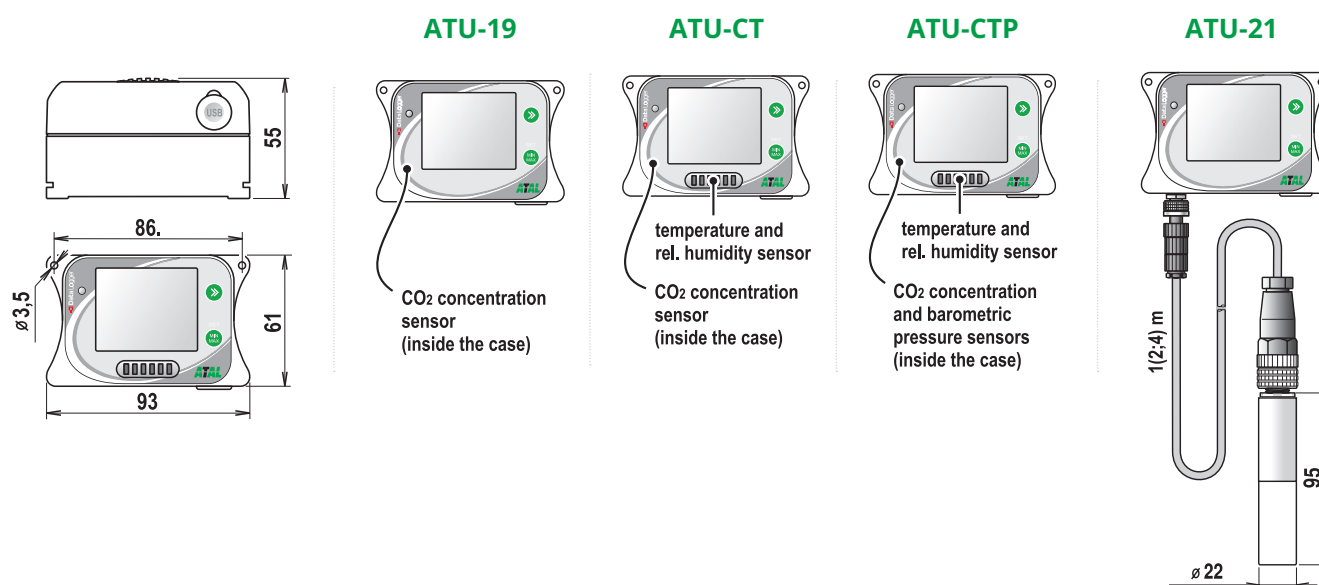
Measured values		Temperature, relative humidity			Temperature, relative humidity, barometric pressure
Datalogger models		ATU-19	ATU-CT	ATU-CTP	ATU-21
Temperature	Range	-	-20 to +60 °C		-
	Accuracy	-	± 0.4 °C		-
Relative humidity *	Range	-	0 to 100 % RH		-
	Accuracy **	-	±1.8 % RH		-
Dew point accuracy	Accuracy***	-	±1.5 °C		
CO ₂	Range****	0 to 5000 ppm			According to the probe, length 1,2,4 m
	Accuracy	± (50ppm+2 % MV)			According to the probe, length 1,2,4 m
Barometric pressure	Range	-		600 to 1100 hPa	
	Accuracy at 23 °C	-		± 1.3 hPa	
Typical battery life		Up to 1 year			
Class of protection of case with electronics		IP20			IP54

External probe for ATU-21



PRB-CO2-10K
- CO₂ external probe, range 0-10.000 ppm; accuracy 100 ppm + 5 % from MV

- * From 0 to 90 % RH at 23 °C
 ** Accuracy of sensing element
 *** At ambient temperature T < 25 °C and RH > 30 %
 **** Optional measuring range 10 000 ppm



Premium dataloggers

Dataloggers for current, voltage, events, pulses and temperature

Dataloggers for current, voltage, events, pulses and temperature. These premium dataloggers are designed for reliable measurement and recording of electrical signals and event states. They can measure and log signals from up to **three current inputs (0–20 mA)** or **three voltage inputs (0–10 V)**, while simultaneously recording the status of binary (two state) signals.

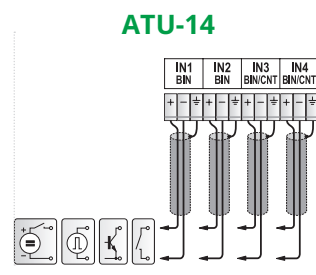
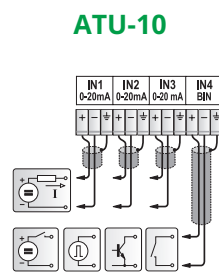
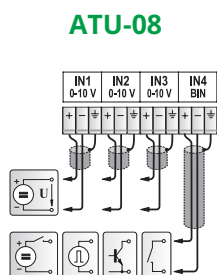
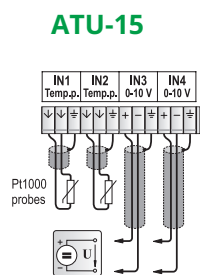
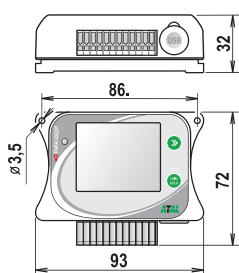
The datalogger can also be activated or stopped by an external binary signal. Measured current and voltage inputs can be scaled to represent engineering units such as pressure, flow, power or other process variables. Certain models, such as the **ATU-15**, can record **two voltage signals and two temperature channels**, allowing combined electrical and temperature monitoring in a single device.

Models like the **ATU-14** are designed for monitoring **pulses and two state signals**, making them suitable for applications such as machine status logging, engine runtime monitoring, door open/closed indication and process control verification. Up to four two state signals can be monitored, or two of these inputs can be dedicated to pulse counting. Pulse values can be scaled to engineering units, such as **kWh, litres, m³** or **counts per interval**, enabling clear interpretation of consumption or event frequency.



Measured values		Temperature/ two-state	DC voltage/ Two-state	DC current/ Two-state	Two-state Counter
Datalogger models		ATU-15	ATU-08	ATU-10	ATU-14
Temperature	Range	-90 to +260 °C	-		
	Accuracy *	± 0.2 °C	-		
Voltage	Range	0 to 10 V		-	
	Accuracy	± 10 mV		-	
Current	Range	-		0 to 20 mA	
	Accuracy	-		± 20 uA	
Two state input	Dry contact	-	Voltage at open contact 3 V		
	Voltage signal	-	Input voltage range 0 to 30 V		
Counter maximum pulse frequency	Dry contact	-			200 Hz
	Voltage signal	-			5 khz
Typical battery life		Up to 6 years (regarding to datalogger setting)			
Class of protection of case with electronics		IP 20			

* Accuracy of device w/o probe in measuring range of -90 to 100 °C (in range +100 to +260 °C is accuracy ± 0.2 % of measured value)



Mobile dataloggers

Premium mobile dataloggers with integrated 4G modem

This series of battery powered dataloggers is equipped with a built in 4G modem and offers three key functions in one device:

- **Stand alone datalogger** – configure the device, place it on site and retrieve the recorded data later.
- **SMS alarm unit** – receive immediate SMS notifications when a limit value is exceeded or when a device condition requires attention.
- **Online measurement unit** – automatically transmit measurement data to the OnlineSensor cloud platform for 24/7 monitoring, analysis, alarming and reporting.

The integrated modem enables efficient wireless data transmission. Measurements can be uploaded as frequently as every **5 minutes**. To extend battery lifetime, the modem uses **data buffering** and a **sleep mode**, activating only when data needs to be sent. Users can also configure **periodic status messages**, providing regular updates on the device's operation even when no alarms occur.

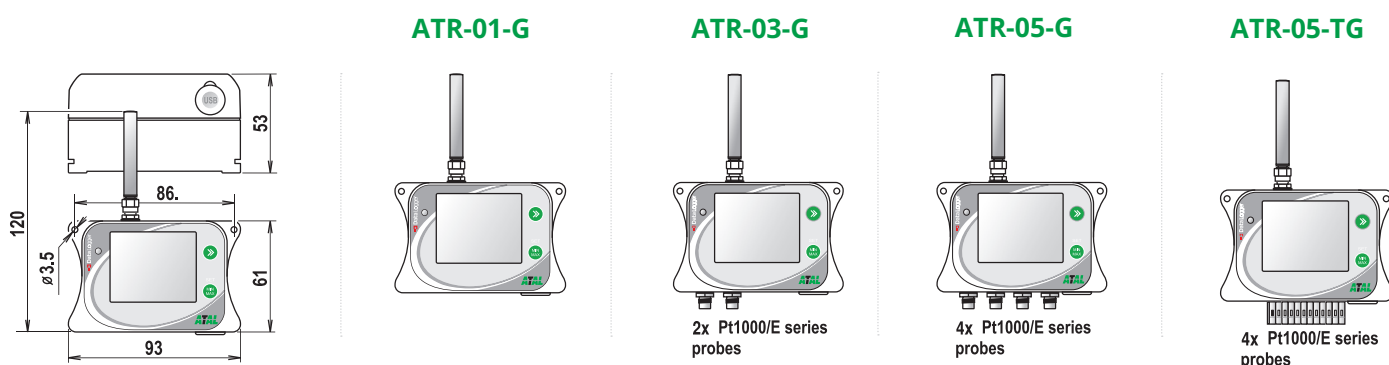
Data transmission via 4G

- Alarm notification via SMS
- Periodic status SMS messages
- Automatic data transfer to OnlineSensor or database software via 4G/GSM



Measured values			Temperature			
Datalogger models			ATR-01-G	ATR-03-G	ATR-05-G	ATR-05-TG
Temperature	Internal	Range	-20 to +60 °C	-		
		Accuracy	± 0.4 °C	-		
	External	Range	-	-90 to +260 °C		
		Accuracy **	-	± 0.2 °C		
Typical battery life			> 6 months to several years, according to the device setting and number of messages sent			
Class of protection of case with electronics			IP67			IP20

* Accuracy of device w/o probe in measuring range of -90 to 100 °C (in range +100 to +260 °C is accuracy ± 0.2 % of measured value)



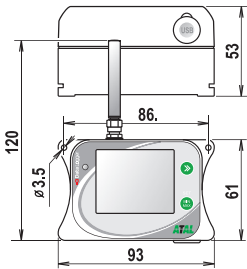
OnlineSensor

Measurement data from connected sensors and dataloggers is stored securely online and can be viewed anytime through a web browser. Users log in to their personal account, where devices can be organised by location, sensor groups and user groups, with flexible access rights. The platform offers unlimited data storage, clear dashboards, automated reports and easy data export. Alarm notifications are sent by email or optionally by SMS when limits are exceeded or when connection or measurement faults occur. OnlineSensor also allows remote device configuration, making it simple to manage settings and alarm thresholds from any location.

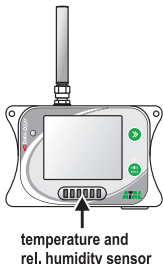
- 24/7 cloud monitoring & data storage
- Secure web access via personal account
- Manage devices, locations & user rights
- Email alarms for limits & faults
- Automatic reports & clear dashboards
- Easy data export (CSV/Excel)

OnlineSensor

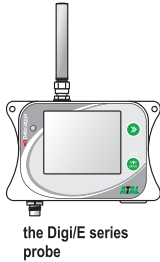
Measured values			Temperature, relative humidity			
Datalogger model			ATR-11-G	ATR-11R-G	ATR-12-G	
Temperature	Internal	Range	-20 to +60 °C	-	-20 to +60 °C	
		Accuracy	± 0.4 °C	-	± 0.4 °C	
	External	Range	-	According the probe	-90 to +260 °C	
		Accuracy*	-	According the probe	± 0.2 °C	
Relative humidity**		Range	0 to 100 % RH	According the probe	0 to 100 % RH	
		Accuracy***	± 1.8 % RH	According the probe	± 1.8 % RH	
Dew point accuracy		Accuracy****	± 1,5 °C	-	± 1,5 °C	
CO2 *****		Range	-			
		Accuracy	-			± 0.1 °C
Barometric pressure		Range	-			
		Accuracy	-			
Current (3x input)		Range				
		Accuracy				
Voltage (3x input)		Range				
		Accuracy				
Two-state inputs / (counter)			-			
Typical battery life						> 6 months to
IP protection class						



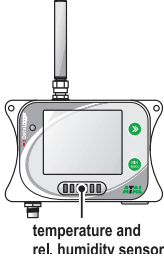
ATR-11-G



ATR-11R-G



ATR-12-G

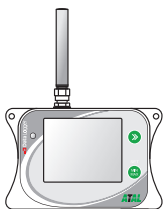


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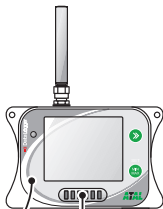
Accuracy of device w/o probe in measuring range of -90 to 100 °C (in range +100 to +260 °C is accuracy of ± 0,2 % of measured value)
Accuracy of sensing element
From 0 to 90 % RH at 23 °C
At ambient temperature T<25 °C and RH> 30 %

CO2	Temp., humidity, CO2, barometric pressure	Temperature, two-state input	Two-state inputs, counters	Current	Voltage
ATR-19-G	ATR-CTP-G	ATR-06-G	ATR-14-G	ATR-10-G	ATR-08-G
-	-20 to +60 °C	-			
-	± 0.4 °C	-			
		-90 to +260 °C			
		± 0.2 °C			
-	0 to 100 % RH		-		
-	± 1.8 % RH		-		
-	± 1,5 °C	-			
0 to 5000 ppm	0 to 5000 ppm	-			
± (50 ppm+3 % MV)	± (50 ppm + 3 % MV)	-			
600 to 1100 hPa	600 to 1100 hPa	-			
± 1,3 hPa	± 1,3 hPa	-			
-				0 - 20 mA	-
-				± 20 uA	-
-					0 to 10 V
-					± 10 mV
		2	4	1	1
several years, according to the device setting and number of messages sent					
IP20					

ATR-19-G

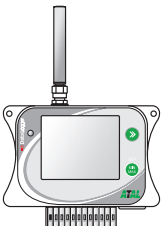


ATR-CTP-G

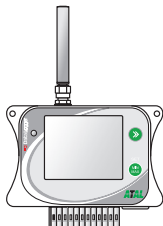


temperature and
rel. humidity sensor
CO2 concentration
and barometric
pressure sensors
(inside the case)

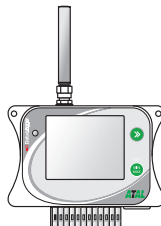
ATR-06-G



ATR-14-G

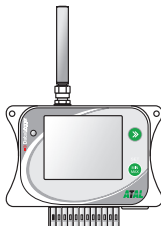


ATR-10-G



4x Pt1000/E series
probes

ATR-08-G





Your distributor

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