

Technical Datasheet

WiFi / GSM / ETHERNET DATALOGGER POLWAX CLIMA



Touch



WiFi



GSM



USB



SMS



ETHERNET

POLWAX CLIMA

The highlights of POLWAX CLIMA Connect include wireless connection, high autonomy, and flexibility for different types of sensors. The value addition is completed by the large display, portability, and simple installation. Mobile device configuration and data downloading are also possible. Temperature and humidity are accurately recorded by the WiFi data loggers at customizable intervals, and the measurement values are sent directly via wireless LAN to the Polwax CloudDASH360.

A WiFi data logger is instruments which allows measuring and storing the values of certain physical quantities, such as temperature, humidity, pressure, solar radiation, etc.



Features

- Set able logging Interval
- Wi-Fi / GSM / ETHERNET data communication
- 3.5" Touch Screen Display
- High speed Sampling
- Polwax CloudDASH360 cloud dashboard
- Warranty : 2 Years (Against manufacturing defects only)

Quick and easy installation:

as it is not necessary the laying of cables and conduits, a wireless system is installed much more easily and quickly than a wired system, especially when the components are at a great distance from one another.

Reduction of installation costs:

the absence of cables allows a considerable saving in cost of material and labour.

Flexibility of the system: the absence of fixed links between the various parts allows moving the system components at any time without problems.

Low Maintenance:

the cables are subject to deterioration over time, the absence of cables reduces the maintenance costs of the system.

Immediate alarms

The POLWAX CLIMA... series wireless data logger immediately signals the exceeding of the threshold values of the measures in the following ways:

By highlighting the measures with errors on the PC monitor through Polwax Cloud Dashboard .

Sending alarm by SMS

Sending alarm by E-mail

The system allows setting two alarm thresholds for each measured variable (lower threshold and upper threshold). The alarm is signalled if the measured value falls below the lower threshold or rises above the upper threshold. The alarm hysteresis and delay can be configured for each variable.



Data Logger Technical Specifications

Channels	1 / 2 / 4
Inputs	Temp+RH / RTD pt100 / Thermocouple / 4-20mA / 0-20mA / 0-10V / 0-5V / 0-1V / Digital
Measuring Range	Temperature : -40 to +70 °C Humidity : 0 - 100% RH
Accuracy	Temperature : ±0.3°C / Humidity : ±2% (at 5-95%)
Ethernet Communications	Webserver / FTP / email
Password Protection	Access to configuration is allowed only after the user has entered a password
Language	English
Display	TFT color 3.5" touch screen display
Filename	Name tag, prexed with date/time
Thermocouple Types	K, J, N, R, S, T
Resistance Thermometer	Pt100
Sensor Filter	ABS (standard) / Ceramic / SS (optional)
Mounting	Wall Mount / Table Mount
Display Type	Color
Communications	Wi-Fi / GSM / Ethernet
Power Supply	24V DC (Adaptor)
Operating Temperature	-10 to 60 °C
Storage Temperature	-10 to +60 °C
Data Monitoring Desktop Software	POLWAX_P-View (Suitable for Win10 / Win10Pro)
Report Format	.PDF / .csv / .xlsx
Cloud Dashboard	POLWAX CloudDASH360 - Web App
Mobile App	Android + iOS
Protection Class	IP65
Dimension & Weight	110X40X150 & Aprox. 200g

* Suitable for any third party Sensors / Transmitters

Cloud Dashboard Service Details

Basic Service		Advance Service	
Data Frequency	10 min to 24 h	Data Frequency	1 min to 24 h
Reports	.pdf / .csv / .xlsx	Reports	.pdf / .csv / .xlsx
Data Storage	Max 3 months	Data Storage	1 / 2 / 3 years (Optional)
Users	2	Users	1- 10
Assign data loggers per account	Unlimited	Assign data loggers per account	Unlimited
Email alarm	Available	Email alarm	Available
SMS alarm	Not Available	SMS alarm	Available (Optional)
Call Alert	Not Available	Call Alert	Available (Optional)
Mobile App	Android & IOS	Mobile App	Android & IOS
Widgets	2	Widgets	10
21 CFR part 11 compliance Licence*			

How to generate a model?

Example:	Product series							
CLIMA-W-ES2-D-W-TH-SS-200	CLIMA	Datalogger						
		Communication						
	W	WiFi						
	G	GSM						
	E	Ethernet						
		Power Supply						
		24 VDC Adapter						
		Sensor						
	IS	Internal Sensor						
	ES2/5	External Sensor Cable Length 2m. / 5m.						
		Display						
	D	-With display						
	WoD	-Without display						
		Mounting						
	WM	Wall mount						
	TM	Table mount						
		Fixed Inputs						
	TP	Temperature pt100						
	TC	Temperature TC						
	TH	Temperature & Humidity						
	42	4-20mA						
	10	0-10V						
		Filter						
	AS	ABS (Standard)						
	SC	Sintered Ceramic						
	SS	SS						
		No. of Input Channels						
		100	1 Channel					
		200	2 Channel					
		400	4 Channel					

CLIMA-W-ES2-D-W-TH-SS-200

Model	CLIMA	W	ES2	D	WM	TH	SS	200
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Standard Delivery Scope :

CLIMA Datalogger, 24VDC Adapter, Antenna, Test Certificate, Warranty Card, User Manual,

Wifi / GSM / ETHERNET Datalogger

Unlimited Applications

Typical application fields of the Polwax CLIMA Data loggers

- Food services (refrigerated containers, cold storage, production and carriage of food)
- Health (storage of medicines, vaccines, blood, monitoring of incubators and operating rooms)
- Greenhouses and agriculture
- Environmental analyses (Air quality, meteorology and hydrology)
- Monitoring of solar panels
- Museums and document archives
- Transportation of perishable goods
- Air conditioning
- Clean rooms
- Laboratories
- Industrial processes
- Buildings, offices, schools

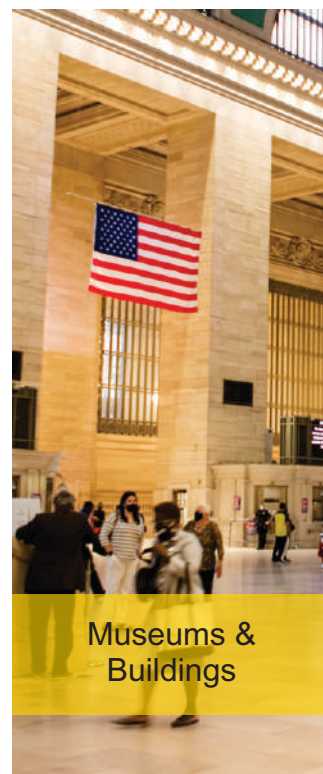
Agriculture & Greenhouses



Storage & Warehouse



Food & Hotels



Museums & Buildings



Other Industries

Product Information Polwax CLIMA data loggers

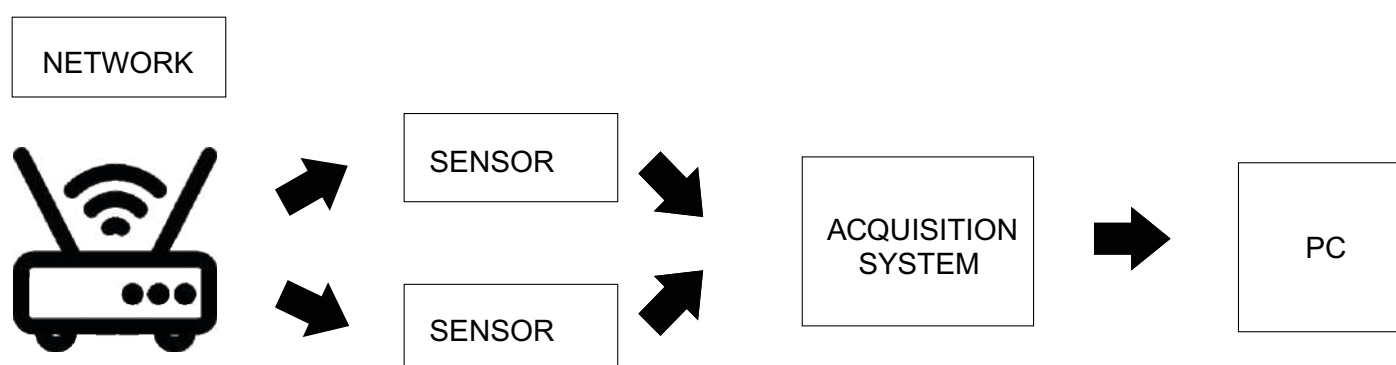
A data recording system is a set of instruments which allows measuring and storing the values of certain physical quantities, such as temperature, humidity, pressure, solar radiation, etc.

A data recording system is generally made of:

Sensors: they are placed at the measuring points and convert the values of the physical quantities into electrical analog or digital signals.

Acquisition system: it reads and logs the electrical signals outgoing from the sensors. If the acquisition system is digital, the acquired values are kept in the system's internal memory until the memory is full.

PC: the transfer of data from a digital acquisition system to a PC allows storing the measured values even after the internal memory of the acquisition system is full. The PC also allows processing and analysing the acquired values.



Advantages of the wireless connection :

Quick and easy installation: as it is not necessary the laying of cables and conduits, a wireless system is installed much more easily and quickly than a wired system, especially when the components are at a great distance from one another.

Reduction of installation costs: the absence of cables allows a considerable saving in cost of material and labour.

Flexibility of the system: the absence of fixed links between the various parts allows moving the system components at any time without problems.

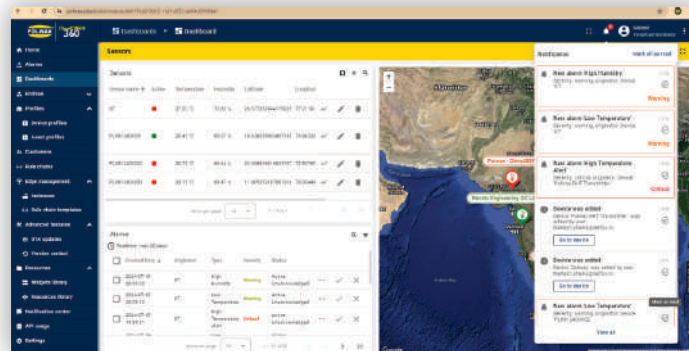
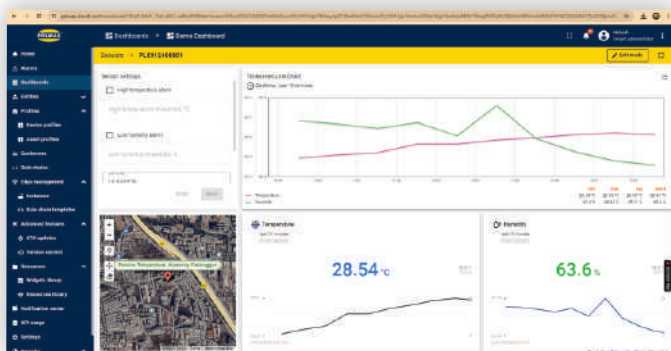
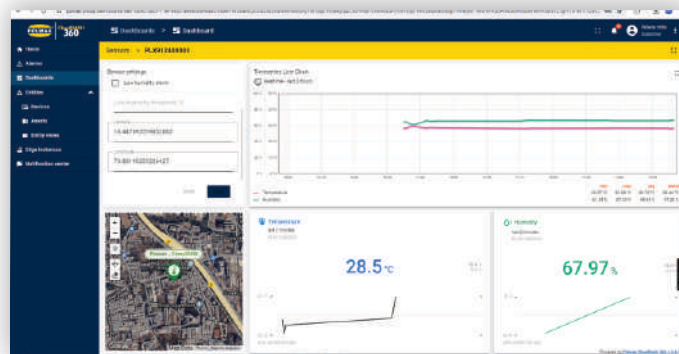
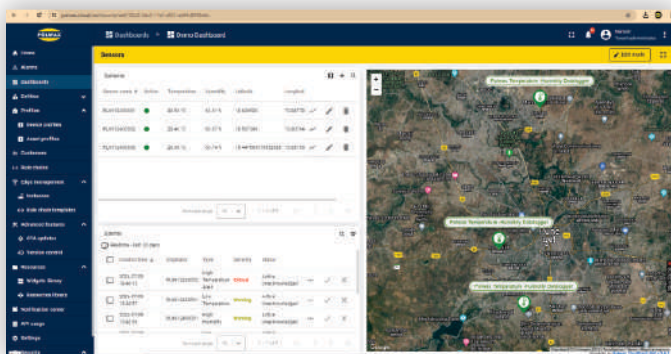
Low maintenance: the cables are subject to deterioration over time, the absence of cables reduces the maintenance costs of the system.

Contraindications of the wireless connection :

The operation of a wireless system can be difficult in environments with excessive electromagnetic interferences (in which case a wired shielded connection may be preferable) or in areas particularly shielded that hinder the radio transmission between the parts of the system.

Cloud

The base units equipped with Ethernet, Wi-Fi and GSM/4G connectivity can automatically send, at regular intervals, the data to an HTTP server, and in particular to the Polwax portal “www.polwax.cloud”. This allows you to view the data from anywhere in the world, even by using mobile devices (tablet, smart phone, notebook), simply having an Internet connection and using a web browser. The data sending interval is configurable.



Configuration

The data logger equipped with LCD and keyboard can be also configured via the front keyboard. The access to the configuration parameters of the data logger via keyboard is password protected. There is one password for the use of the data logger as operator (access to some settings only) & (access to all the configuration parameters). The changes done to a data logger configuration via keyboard are automatically transmitted to the base unit and also reported in the cloud dashboard, allowing an always updated viewing of the system from the PC connected to the base unit. The base unit keeps also track of the system parameters of each data logger (for example of the alarm thresholds, etc.); it is therefore not necessary to request the parameters to the various data loggers to know the system configuration, just connect the PC to the base unit to immediately get all the information needed.

Internal clock

The internal clock of each data logger is continuously synchronized with the clock of the base unit, thereby eliminating any problems due to the drift of the data logger clock. This ensures that the data loggers of the system have all the same time, feature particularly useful if you want to compare the measures acquired by various data loggers at the same time. If the base unit can connect to the Internet (via Wi-Fi, Ethernet, cellular network), the clock can be regularly synchronized automatically with a reference server.



Polwax Cloud Your Data, Anytime, Anywhere

Polwax Cloud harnesses the power of IoT to automate data logging and alert notifications, enabling you to monitor and manage multiple data logging devices in different locations completely remotely. The system easily scales to meet your needs. Perfect for compact systems with just a few measuring points, or corporate solutions with thousands of devices around the globe.

You will need to create an account at www.polwax.cloud before setting up your cloud-connected data logger.



The **Polwax CLIMA** kit has been designed to monitor air temperature and relative humidity in a large range of applications. Its external temperature and humidity probe made it an ideal choice for applications where it may be problematic to locate the whole device such as museum display cases and HVAC systems.

Products in the **Polwax CLIMA** range are simple to set-up and easy to use. Download the Polwax Cloud App and set-up a device in minutes over your WiFi network. After set-up, the device can be placed anywhere within range of the WiFi network, continually monitoring and

Features at a glance*



Store your data logging records securely on the Cloud



Connect multiple users with variable account privileges



Connect data loggers from multiple sites in a single account



Easily access your most important data, anywhere



Remotely manage all of your data logging devices



Never miss a critical event with flexible advanced notifications



Review and analyse your data with powerful graphing functionality



Keep track of data events and system activity with a detailed event log

*Features depend on account type.



Analysis Report



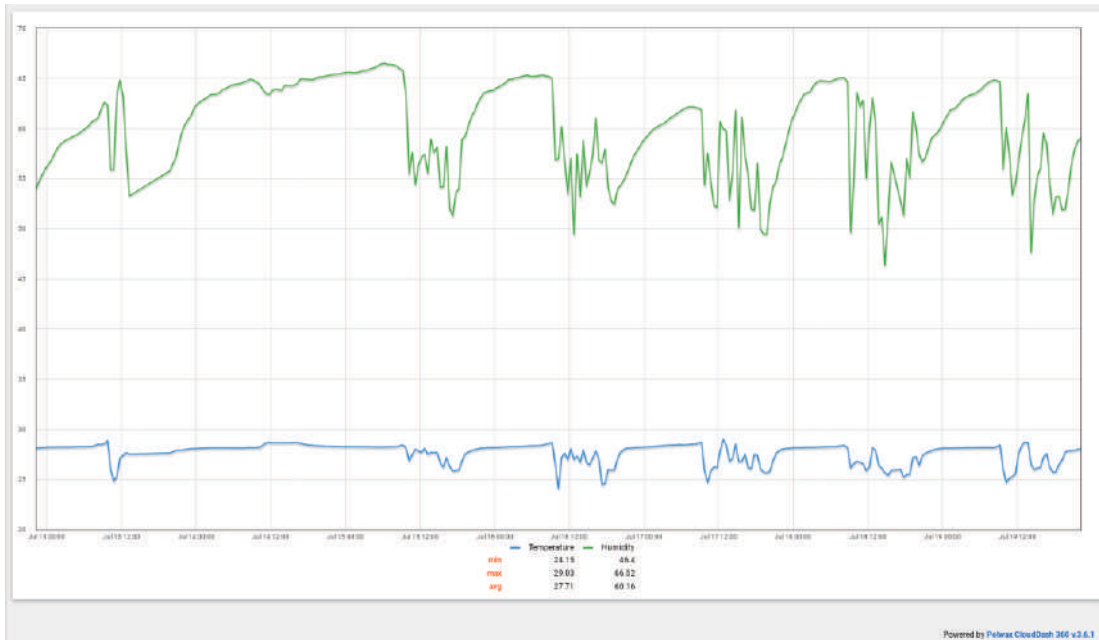
Details

Device Name:	PLX912400001	Report Print Date:	19-07-2024
Firmware:	123	Report Period :	12-07-2024 - 19-07-2024
Time-zone:	GMT+05:30	Device Location:	https://maps.google.com/?q=18.62806,73.84233
Company Name:			

Device Configuration

Login Interval:	1.00 Hours	Assigned User :	
Device ID / Label		Device Group :	Temperature Sensor
Device Profile:	Temperature Sensor	No. of records :	179

Graphical View



Parameters	MIN	MAX	AVG
Temp	25.10	29.01	27.68
Humidity	48.53	66.48	59.68

List of Records

Date & Time	Device Location	Humidity	Temperature
12-07-2024 06:00:00	https://maps.google.com/?q=18.62806,73.84233	62.0618333333333	28.7591666666666
12-07-2024 07:00:00	https://maps.google.com/?q=18.62806,73.84233	62.2883333333333	28.7784999999999
12-07-2024 08:00:00	https://maps.google.com/?q=18.62806,73.84233	62.4523333333333	28.8311666666666
12-07-2024 09:00:00	https://maps.google.com/?q=18.62806,73.84233	62.1535593220338	29.0079661016948
12-07-2024 10:00:00	https://maps.google.com/?q=18.62806,73.84233	50.6715000000000	27.7326666666666
12-07-2024 11:00:00	https://maps.google.com/?q=18.62806,73.84233	51.3245000000000	26.4613333333333
12-07-2024 12:00:00	https://maps.google.com/?q=18.62806,73.84233	56.7616666666666	26.4571666666666
12-07-2024 13:00:00	https://maps.google.com/?q=18.62806,73.84233	56.1361666666666	28.0255000000000
12-07-2024 14:00:00	https://maps.google.com/?q=18.62806,73.84233	49.1367796610169	26.6027118644067
12-07-2024 15:00:00	https://maps.google.com/?q=18.62806,73.84233	49.5476666666666	25.8126666666666
12-07-2024 16:00:00	https://maps.google.com/?q=18.62806,73.84233	49.9463333333333	25.7539999999999
12-07-2024 17:00:00	https://maps.google.com/?q=18.62806,73.84233	53.0003333333333	25.8766666666666
12-07-2024 18:00:00	https://maps.google.com/?q=18.62806,73.84233	64.3258333333333	28.4764999999999
12-07-2024 19:00:00	https://maps.google.com/?q=18.62806,73.84233	56.5050847457627	27.6225423728813
12-07-2024 20:00:00	https://maps.google.com/?q=18.62806,73.84233	48.5321666666666	27.0015000000000
12-07-2024 21:00:00	https://maps.google.com/?q=18.62806,73.84233	49.7361666666666	27.6851666666666
12-07-2024 22:00:00	https://maps.google.com/?q=18.62806,73.84233	53.3581666666666	28.0756666666666
12-07-2024 23:00:00	https://maps.google.com/?q=18.62806,73.84233	55.1048333333333	28.1643333333333
13-07-2024 00:00:00	https://maps.google.com/?q=18.62806,73.84233	56.2486440677966	28.2057627118644
13-07-2024 01:00:00	https://maps.google.com/?q=18.62806,73.84233	57.2301666666666	28.2271666666666
13-07-2024 02:00:00	https://maps.google.com/?q=18.62806,73.84233	58.3106666666666	28.2318333333333
13-07-2024 03:00:00	https://maps.google.com/?q=18.62806,73.84233	58.8309999999999	28.2416666666666
13-07-2024 04:00:00	https://maps.google.com/?q=18.62806,73.84233	59.1541666666666	28.2513333333333
13-07-2024 05:00:00	https://maps.google.com/?q=18.62806,73.84233	59.4825423728813	28.2808474576271
13-07-2024 06:00:00	https://maps.google.com/?q=18.62806,73.84233	59.9370000000000	28.2878333333333
13-07-2024 07:00:00	https://maps.google.com/?q=18.62806,73.84233	60.5106666666666	28.3211666666666
13-07-2024 08:00:00	https://maps.google.com/?q=18.62806,73.84233	60.9933333333333	28.4634999999999
13-07-2024 09:00:00	https://maps.google.com/?q=18.62806,73.84233	62.3186666666666	28.5344999999999
13-07-2024 10:00:00	https://maps.google.com/?q=18.62806,73.84233	59.1023728813559	27.4267796610169
13-07-2024 11:00:00	https://maps.google.com/?q=18.62806,73.84233	59.684	25.1000000000000
13-07-2024 12:00:00	https://maps.google.com/?q=18.62806,73.84233	64.0146666666666	27.2905000000000
13-07-2024 13:00:00	https://maps.google.com/?q=18.62806,73.84233	56.1804347826087	27.6391304347826
13-07-2024 20:00:00	https://maps.google.com/?q=18.62806,73.84233	56.3000000000000	27.7364285714285
13-07-2024 21:00:00	https://maps.google.com/?q=18.62806,73.84233	57.8758333333333	27.9266666666666
13-07-2024 22:00:00	https://maps.google.com/?q=18.62806,73.84233	60.1383333333333	27.9876666666666
13-07-2024 23:00:00	https://maps.google.com/?q=18.62806,73.84233	61.1753333333333	28.0713333333333
14-07-2024 00:00:00	https://maps.google.com/?q=18.62806,73.84233	62.3348333333333	28.0958333333333
14-07-2024 01:00:00	https://maps.google.com/?q=18.62806,73.84233	62.8369491525423	28.1240677966102
14-07-2024 02:00:00	https://maps.google.com/?q=18.62806,73.84233	63.2501666666666	28.1493333333333
14-07-2024 03:00:00	https://maps.google.com/?q=18.62806,73.84233	63.4425000000000	28.1575000000000
14-07-2024 04:00:00	https://maps.google.com/?q=18.62806,73.84233	63.7603333333333	28.1556666666666
14-07-2024 05:00:00	https://maps.google.com/?q=18.62806,73.84233	64.1064999999999	28.1516666666666
14-07-2024 06:00:00	https://maps.google.com/?q=18.62806,73.84233	64.3974576271186	28.1472881355932
14-07-2024 07:00:00	https://maps.google.com/?q=18.62806,73.84233	64.5058333333333	28.1478333333333
14-07-2024 08:00:00	https://maps.google.com/?q=18.62806,73.84233	64.7348333333333	28.1596666666666
14-07-2024 09:00:00	https://maps.google.com/?q=18.62806,73.84233	64.8888333333333	28.1696666666666
14-07-2024 10:00:00	https://maps.google.com/?q=18.62806,73.84233	64.527	28.2075000000000
14-07-2024 11:00:00	https://maps.google.com/?q=18.62806,73.84233	63.6998305084745	28.5472881355932
14-07-2024 12:00:00	https://maps.google.com/?q=18.62806,73.84233	63.6188333333333	28.7096666666666

Polwax International Co. www.global.polwax.it



POLWAX Group has got an experienced, highly-qualified project team conducting extensive R&D operations. Owing to that, goods holding the POLWAX brand feature customer-tailored flexibility and meet requirements of various industries.

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