

Plug & Play
wireless monitoring and alarm system

Wireless Lab[®]



Temperature: -200°C to +200°C
CO₂: 0 to 20 %
Relative humidity: 0 to 100 %



ilShin[®] Europe

Wireless Lab[®] Plug & Play data control

Wireless Lab is the plug & play solution for easy monitoring and safe storage of temperature data. Monitor your laboratory equipment without using any paper, installation time or software. Just check your equipment performance on every PC with internet access. Additionally you can receive temperature alarms on your mobile phone or e-mail address.



wireless module

What does it mean for you?

- No investment in software, you can use any available computer with internet;
- Considerable savings in installation costs and time;
- Data is accessible anytime anywhere 24 hours 7 days a week;
- Data is shown in easy graphs and tables;
- Considerable savings on operational costs;
- Monitoring of temperatures on several locations;
- Wireless Lab runs on any kind of platform (Windows 3.1, Mac, NT, 2000, XP, Vista, 7, Linux, etc);
- Download data in Excel format;
- Optional alarms via SMS text messages or e-mail;
- Optional periodical quality report generator.



communication station

Applications:

-200°C to +200°C
0 to 20 % CO₂
0 to 100 % RH

The Wireless Lab system performs independently from brand. Every product related to temperature, CO₂ or relative humidity is suitable for this system:

- Liquid nitrogen vessels;
- Blood bank refrigerators and freezers;
- Water baths and chillers;
- Clean rooms;
- Ultra low temperature freezers;
- CO₂ incubators and ovens;
- Refrigerated rooms;
- Environmental chambers.

Plug & Play

The wireless sensors and communication station arrive plug & play. It is not necessary to install wires and cables between your equipment and computers at all. Just put the sensor inside your equipment and start with the Wireless Lab experience!

Data storage and web service

Imagine a fire or a crash of your computer or server. Your valuable data will be lost forever! Wireless Lab guarantees the safest way of storing your data. All data will be stored on a server which is protected by high security guards and located in a bunker. The data is imaged on 5 independent servers on 2 separate locations. Wireless Lab is CFR21 Part 11 compliant. Each year you will be invoiced for subscription data storage and web-service but don't worry: these costs are equal or even less compared with traditional chart recorders and yearly chart paper costs.

How does it work?

Step 1

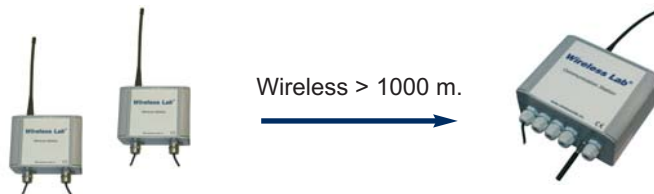


Check it out:
login to www.wirelesslab.eu

loginname: **ilshin**
password: **europe**

Just simply put the (temperature) sensor of the wireless module inside your laboratory equipment. You can easily attach the wireless module to the outside of your equipment (using the magnetic back). The wireless module is battery powered. This battery has a lifetime of around 10 years. Optional you could get an e-mail from the unit when the battery is getting low.

Step 2



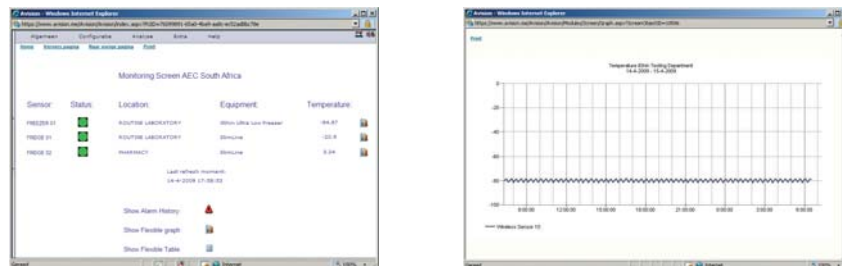
All wireless modules are sending their data to one main communication station. This communication station communicates with a maximum of 32 wireless modules with a distance of up to 1000 metres. The communication station is connected to the main power (220V / 50 Hz) but of course has a built in UPS to continue operation during power failures.

Step 3



All your valuable data is collected and transmitted to a secured data server using a LAN / Ethernet socket. Optional you can also use a SIM card in the communication station to use GPRS for this data transfer. All data is safely stored and multiple back-upped for 1 year.

Step 4



24 hours a day 7 days a week on every PC in the world you can check the performance of your equipment in graphs, tables, log files, etc. All data is securely accessible on www.wirelesslab.eu and can be downloaded any time in Excel.

Step 5

(optional but recommended):







Additional to the standard data logging and storage package you can receive alarms for your sensors. Your personal screen will now show colours indicating alarm status for each sensor. You can choose to receive alarm messages by SMS text message and / or e-mail to single or multiple users. Also you can receive a summary report in PDF every Monday morning by e-mail showing graphs, highest, lowest and average values of your equipment.

Available sensors

We have 4 standard sensors available for our wireless modules. However we are able to configure our system for almost any kind of sensor.

The PT1000 models can be used with a battery powered wireless unit, the CO₂ and RH sensor need a fixed power socket. For all sensors we can supply an optional factory calibration certificate.

	PT1000 standard, code 9901	
	Range	-90°C to +90°C
	Material	vulcanised rubber
	Accuracy	+/- 0.3 °C @ 0°C
	Class	class B
	PT1000 robust, code 9902	
	Range	-200°C to +200°C
	Material	PTFE
	Accuracy	+/- 0.3 °C @ 0°C
	Class	Class A
	CO₂ sensor, code 9910	
	Range	0 -20 % CO ₂ (please specify working range at order)
	Material	PC plastic probe IP65/NEMA4
	Accuracy	+/- [0.02 %CO ₂ + 2 % of reading] @ 25°C
	Class	IR (infrared) dual beam
	RH & temperature sensor, code 9920	
	Range 1	0 -100 % RH
	Range 2	-40°C to +60°C
	Material	PC plastic probe IP65/NEMA4
	Accuracy	+/- 1.5 %RH & +/- 0.3°C @ 23°C

Communication station specifications

Model:	CSE100	CSG100
Communication	LAN connection TCP / IP network	LAN and GPRS (needs local SIM card)
	standard setting to communicate with the server (www.wirelesslab.eu) every hour	
Dimensions	160 x 130 x 70 mm (W x D x H), 1.2 kg	
Material	aluminium casing IP67	
Backup	standard UPS 8.2 Volt, (250mAh)	
Module capacity	maximum 32 wireless modules	
Alarms	internet connection alarm, module communication alarm and power alarm	
Memory	> 120.000 samples storage capacity	

Wireless module specifications

Model:	WTS50	WTS502
Sensors	1 sensor / module	2 sensors / module
Communication	433 Mhz, 100 to 1000 meter (depending on building structure) standard sample time: every 5 minutes	
Dimensions	120 x 90 x 60 mm (W x D x H), 0.6 kg	
Material	aluminium casing IP67	
Battery	lithium D cell, lifetime approx. 10 years	
Alarms	sensor and power alarm	
Memory	> 200 samples storage capacity	