

## Making HACCP easy! (\*)

*The wireless temperature monitoring network from WNC ensures automatic monitoring of refrigerated areas in supermarkets – making compliance to HACCP and food safety regulations an easy battle!*



### Save time - improve daily operation

Temperature readings are logged and stored automatically - eliminating the every-day manual collection and recording of temperature data. This frees the staff, reduces human error and enables a more cost-efficient and smooth operation of the food store.

### Reduce wastage - less worry

Sooner or later every shop-owner experiences break-down of a refrigerated cabinet or coldroom. Even if just one unit fails, a large amount of food can be spoiled unless spotted within reasonable time. With a wireless sensor in each refrigerated area, any failure will be detected and immediately reported to the responsible person on duty.

### Easy installation – easy use

Since it is designed for easy fitting and retrofitting in food stores, the system installation is quick and simple. All communication is wireless, taking away the hassle of cables. In addition, mobile cabinets are easily moved around when reorganizing the food store.

### Cost-efficient - short pay-back time

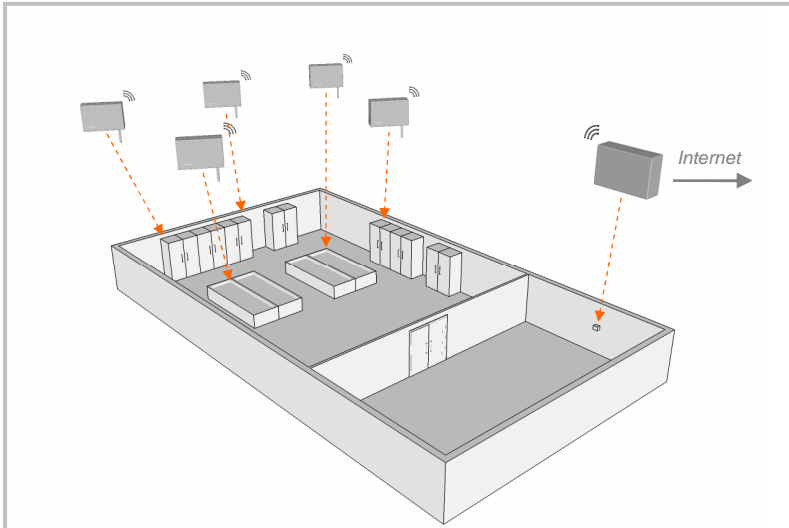
Due to the significant labor and cost savings, the system has a pay-back time of only a few months of operation. Instant detection of cooling machinery failures and reduced energy costs due to better adjusted temperatures reduces the pay-back time even further.

### Compliant to EN 12830

*- the European standard for measuring temperatures of food in storage and transport*



(\*) HACCP (Hazard Analysis Critical Control Point) is a preventive approach to identify potential hazards within food safety, and forms some of the principles behind the ISO 22000 standard for complete food safety management system.



#### Designed for food stores:

- Reliable communication
- Long battery life time
- Extreme temperatures
- Easy installation
- EN 12830 compliant

#### Continuous monitoring of:

- Temperature
- Relative humidity *(optional)*
- Alarms / digital IO *(optional)*

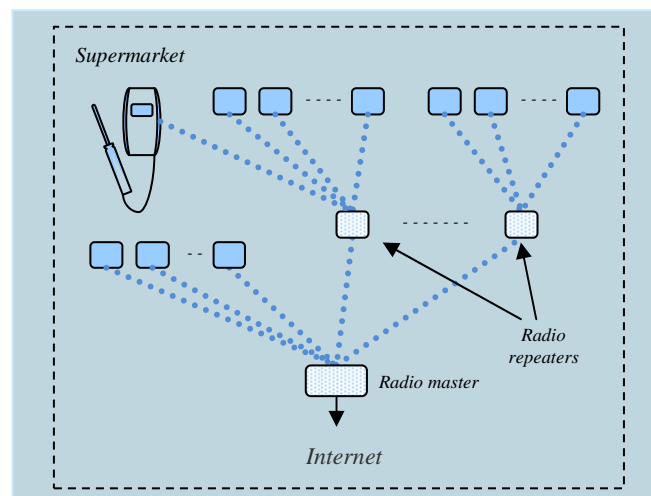
## How it works

Wireless sensors are placed in each refrigerated area in the supermarket. The sensors continuously and automatically register air temperatures and forward the readings to a wireless receiver typically located in the back-room of the store. A hand-held unit is used for measuring incoming goods and hot-food products. The wireless receiver is connected to the Internet either by ADSL or GSM and forwards continuously all temperature data to an internet based server and database.

An overview of the shop with accurate temperature readings for each disk/ position may be presented on the shop PC through a user-friendly web-application. Through the Internet, the user gets graphical pictures and graphs of each position visualizing defrost intervals and abnormal performance. Reports according to HACCP regulations can be generated and forwarded on a regular basis. All measurement data can be stored for several years. If the system detects a critical failure in a cooling unit, an alarm is sent to the user via an SMS to his mobile phone.

## References

The wireless sensor network from WNC is vastly deployed in the Scandinavian countries collecting millions of temperature readings every day. Both large supermarkets and smaller food shops are using the system to facilitate the day-to-day operation of their stores.



Repeater units ensure coverage of large surfaces

For more information, visit our website  
[www.wnc.no](http://www.wnc.no)