

Case study: "Cold-chain traceability"

Temperature tracking using wireless sensors

RFID identification and reading solution using active wireless technology to track temperature.



Increase reliability when transporting temperature-sensitive products

Using **wireless temperature sensors**, the system enables you to:

- ✓ **Measure** temperature stability
- ✓ **View** temperature graphs during transport
- ✓ **Record** data in the sensor
- ✓ **Update a log** or measurement points on the Web
- ✓ **Receive alerts** by SMS in case readings go outside specified limits in the delivery vehicle
- ✓ **Geolocalize** vehicle fleets



... and track temperature and vehicle position on the Internet

The NaoTemp solution, integration in the cold-chain sector, developed by:

NAOCOM, telemetry specialist designing and manufacturing Machine-to-Object (M2O) solutions to manage **temperature tracking and vehicle location**. The **NaoTemp** system is comprised of an embedded GPS/GPRS unit and an active RFID reader.



Leveraging patented RFID technology by ELA Innovation

ELA Innovation has developed a high-performance RFID temperature sensor:

- ✓ **Integrated, waterproof temperature sensor**
- ✓ **High detection distance:** over 50 meters
- ✓ **Extremely small size**
- ✓ **Ultra-low power consumption (ULPW)**
- ✓ **Long battery life**
- ✓ **Very low level of electromagnetic emissions**
- ✓ **Respects standards: CE, IETS 300-220**
- ✓ **COFRAC NF12830**



RFID tag	
Reading range (line-of-sight)	60 to 100 meters
Operating range	-30° C to + 60° C
Main features	IP 68 watertight casing
Battery life	2 to 5 years
Standards	CE, IETS 300-220

Clients who have chosen the NaoTemp solution

Developed by NAOCOM, integrating RFID products from ELA Innovation, the NaoTemp solution is used today by:

- ✓ Laboratoires CERBA, Bio Paris Ouest
- ✓ PROLOGISTICS, France Colis Express, Flash Biologic, and more