ORIGIN:
Luxembourg Airport (LUX)
+ 18.45°C Temperature Controlled Area
- 14.55°C Ambient on Tarmac

DESTINATION:
Huntsville/AL Airport (HSV)
+ 19.82°C Temperature Controlled Area
+ 5.93°C Ambient on Tarmac

SmartView
Real-time Shipment Management
Welcome to SmartView, one of the world’s most advanced and validated control systems for freight transport.

- Supply chain optimization
- Pro-active intervention
- Management by exception

SmartView Cockpit

SmartView is at the forefront of what’s possible in the world of supply chain technology. The online platform puts users in the driving seat, enabling them to monitor, intervene and improve global supply chains and storage facilities at the touch of a button. It is the online gateway to Panalpina’s world-class network of people and processes.

The proactive and autonomous system takes cost and concern out of your supply chain. The smartest way to build a better supply chain – let SmartView show you the way.

Benefits of SmartView include:
- Autonomous control
- Proactive intervention
- Continual improvement/optimization
- Near real-time data collection
- End-to-end visibility
- Enriched documentation and reporting

What do I get?

The SmartView package gives you everything you need to build a secure supply chain:

1. **Panalpina’s worldwide freight monitoring network**: an army of SmartSensors and a smart visualization and reporting platform tell you everything you need to know about your goods, from location and temperature to relative humidity, light exposure and even G-Force Acceleration.

2. **World-class technology**: Panalpina works with leading specialists to offer a selection of hardware products, including Wireless Sensor Network and GPS/GPRS devices – with more under development.

3. **Sophisticated online control center**: acts as a gateway to near real-time visibility of your entire operation.

4. **Security**: Panalpina’s SmartView systems are combined with the latest secure database technology to ensure the highest level of protection of data.

Why should I get it?

- **Globally specific**: SmartView seamlessly integrates all your operations to give you end-to-end visibility and control. If you have a question about any aspect of your supply chain, from a global perspective to a single box, SmartView can answer it.

- **Let the machine do the work**: SmartView is your eye in the sky that avoids problems before they even occur. Automatic alerts sent straight to the right people highlight any anomalies and the system facilitates the required action to immediately resolve issues. It then records the data to prevent the same problem from happening again.

- **Flexible to you**: Thanks to state-of-the-art monitoring and control technology, this fully automated system can be implemented according to your exact needs.

- **Inform and improve**: SmartView collects data on every aspect of your supply chain, allowing you to mine information, share best practice, and explore new ways to improve your operations. Build a secure supply chain from your armchair.

- **Broaden your horizon**: Improved routings and new trade lanes breed better efficiency. Use SmartView to conduct fact-based trade lane studies and qualify new trade lanes with ease.
How does it work?
The SmartView Cockpit provides a near-real-time picture of your physical supply chain by collecting data from innovative monitoring devices. These intelligent sensors are placed with your goods and keep you up-to-date about the location, temperature, shock, light exposure or relative humidity of your products.
What does it look like?

Each shipment in SmartView is monitored in near-real-time to provide a detailed picture about shipment excursions and milestones. For a more detailed tour of the application, contact your local Panalpina office to get a demonstration.

Facility Monitoring

Who is it for?
Companies involved in the storage of temperature-sensitive products must ensure that correct temperature conditions are maintained at all times. Regulations provide strict guidelines for continuous temperature monitoring, reliable alerting and documentation of temperature records. SmartView is the ideal solution.

Extremely easy to deploy in existing storage facilities, it combines a web application with the installation of a Wireless Sensor Network in your facility.

Key benefits
- Compliance with GDP regulations
- Very easy to deploy and operate
- No temperature excursions
- No paper storage
- Integrated view of storage and distribution

Shipment Monitoring

Who is this for?
- Companies that ship goods that are sensitive, valuable or private in nature will benefit significantly from SmartView’s near real-time shipment management capabilities.
- If you operate in the pharmaceutical, high tech, auto-motive or fresh food industry, SmartView will help you protect your valuable product during transportation.

How it works
1. Tag: the required sensor is placed with the shipment prior to departure and the related travel parameters are defined in SmartView.
2. Travel: the sensor transmits or collects data as the goods travel, and SmartView sends out automatic intervention alerts if required.
3. Accept: goods are received at their final destination where the SmartSensor is removed and the shipment is accepted by the consignee.
Hardware components

With the SmartView solution we offer a range of hardware products to provide different visibility levels, depending on the type of technology to collect sensor measurements.

USB data loggers
These devices log temperature measurements during transportation and provide this information after a shipment has arrived at its destination. At that moment the data log is retrieved by a user on a PC, with the use of a USB connection. From there the information can be easily uploaded in the SmartView application.

Wireless sensor data loggers
Wireless Sensor Networks provide intelligent temperature loggers with wireless communication capabilities.

These sensors transmit their logs at various points in the supply chain that have been equipped with sensor network components.

GPS/GPRS data loggers
These sensors use the cellular networks operated by mobile operators to send their measurements in near real-time to our SmartView application (e.g. with 15 minute intervals). These products come with a variety of features and pricing, targeted at specific applications in road, air and ocean transportation.
**USB data loggers**

**Q-tag CLm doc – USB data logger**

The Berlinger Q-tag® CLm doc is a powerful temperature monitor with significant benefits. Up to 5 different temperature and time alarms can be set between -25°C and +50 °C. The display shows any temperature limit violation at a glance, even if an alarm is not triggered yet. Once the device has been connected to a PC, it creates a PDF and a ASCII file with all measured temperatures and time data. The ASCII file can be uploaded into the SmartView application for central data storage and additional reporting.

**Applications**
- Temperature Monitoring with full data report after shipment arrival at destination.
- Single-use device.

**Key benefits**
- Easy upload in the SmartView application.
- Configuration of up to 5 different temperature alarms.
- Display that provides immediate feedback at destination on temperature excursions.
- Fully validated for pharmaceutical applications.

**Wireless sensor data loggers**

**SmartPoint Wireless data loggers**

SmartView is fully integrated with the Ambient Systems Product Series 3000 Wireless Sensor Networks. The Product Series 3000 provides highly energy-efficient self-organizing wireless networks based on the IEEE 802.15.4. standard. Within the Wireless Sensor Networks, SmartPoints provide the intelligent Wireless Data Loggers that act as the “ears and eyes” on a shipment or in a facility. These sensor devices are attached to objects they closely need to monitor or guard, but can also be used for static monitoring purposes.

When inside a Wireless Sensor Network, SmartPoints provide real-time measurements, and they automatically turn into a RF-data logger when out of range of network. Upon return in a Wireless Sensor Network, the Smart-Points automatically download their sensor log, without the need for any manual activity.

**Applications**
- Facility Monitoring with automatic real-time alerting
- Shipment Monitoring with near real-time visibility for road, air and ocean transport

**Key benefits**
- Robust enclosure that protects against dust, moist and force.
- Very long battery-life of 3-5 years.
- Memory storage for thousands of measurements.
- Variety of sensors available, including temperature, humidity and open/close sensors.
ILC2000 GPS/GPRS data logger

The ILC2000 is an autonomous battery-powered device for real-time monitoring of valuable shipments and transportation vehicles via the GSM network. The ILC2000 contains a range of sensors, including temperature, shock, humidity, air pressure and light. The device also enables localization of shipments with GPS and cellular localization.

The ILC2000 is FAA-compliant so it automatically shuts off prior to aircraft take-off, and automatically turns back on when the aircraft lands. While in flight, the device continues to collect sensor data.

**Applications**
- Shipment monitoring with near real-time visibility for road, air and ocean transport.
- Supply Chain Security applications, which require real-time location and condition monitoring.

**Key benefits**
- Completely autonomous device for GPS/GPRS tracking of shipments and vehicles.
- Range of sensors enables both cold chain and security applications.
- Battery-life can vary from 2 days to 6 weeks, depending on user configuration.
- Aircraft mode available to automatically switch off wireless communication onboard aircraft.
The global Panalpina network: ■ Countries with Panalpina presence ■ Countries with partner presence