frigo boss

Smart Refrigerators Monitoring System

FrigoBoss at a glance:

Regulatory Compliance

Redundant, gap-free, secure and protected data logging, fully compliant to EN12830:2018.

Real-Time Alarms

Get real time alerts for equipment and power failures and protect your stored goods.

Money Savings

Avoid product loss and costly downtimes through smart alarming and fault detection.

FrigoBoss Core Features:

- Continuous temperature recording of cold rooms, fully compliant to EN 12830:2018.

- The temperature data logging is fully redundant, gap-free, secure and tamper protected, fully complying and exceeding the requirements of EN 12830:2018.

- Supports the connection of up to 64, high-accuracy digital temperature sensors of the type AP-150-901 (to achieve full compliance with EN 12830:2018).

- Generation of automated reports and data-log files for HACCP regulatory compliance.

- The User Interface is accessible via any device (Mobile/Smartphones, PCs, etc.)

- Fully user configurable alarms and alarm settings per each temperature sensor, according to industrial standards:

  - Alarm ON and OFF Time Delays

  - Temperature Alarm Individual Setpoints (High-High, High, Low, Low-Low)

  - False alarms rejection

- Alarm notifications via SMS, email or voice calls to selected staff and operators. Fully customizable alarm messages.

- System configuration is done either locally or remotely, through an intuitive Web-based application, ensuring trouble-free and fast configuration.

- The system has embedded extensive self-diagnostic functions, continuously monitoring its health (e.g. system status, power supply, communications, memory, batteries, CPU, etc.).

Engineered for IIoT and Industry 4.0

Plug & Play system for Fast setup and deployment time

Extremely reliable and robust system designed to meet the highest industry standards

FrigoBoss Advanced Features:

FrigoBoss is much more than a temperature data-logging system. The real added value comes with the embedded additional powerful features into the FrigoBoss system that turn it to an advanced, total monitoring, predictive maintenance and performance optimization tool.
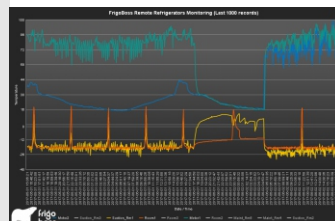
- Supports the connection of up to 32 devices via the ModBus Protocol. The plug & play devices supported with the system are:

  - ▶ Energy Analysers / Power Meters (AP-150-204)
  - ▶ Humidity Sensors (AP-150-HUM)
  - ▶ Other compatible process instruments (Flowmeters, Process Analytics sensors, etc.)

- Supports the connection of up to 67 digital inputs. The digital inputs can be used to serve functions such as:

  - ▶ Status monitoring of the doors of the cold rooms (Open/Closed)
  - ▶ Connection of any digital alarm
  - ▶ Operational functions, such as enabling/disabling alarms, etc.

- Supports the connection of up to 65 digital outputs. The digital outputs can be used to serve various functions such as alarm outputs or commands to external systems.

- Supports the connection of up to 16 analog inputs. The analog inputs can be used to connect pressure transmitters.

- The combined usage of the temperature and pressure transmitters, along with the energy analysers / power meters and the auxiliary instruments (e.g. humidity sensors) enables the performance analysis of the refrigeration installation.

- The powerful embedded analysis algorithms based on physics-based modelling and AI, enable the incipient fault detection and abnormal situations prediction with the utilization of the data from the sensors connected to the system.

- The performance analysis and the fault prediction functions provide great value, in addition to the standard alarming functionality, as great savings can be achieved by the optimization of the energy usage, as well as the prediction of serious faults in the refrigeration installation.
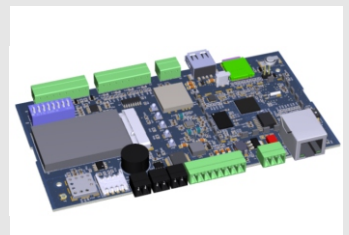
FrigoBoss Control Panel	**The AP-150-901 Digital Temperature Sensors**	**Remote Monitoring Temperature Trends**	**FrigoBoss Advanced Telemetry Controller**