

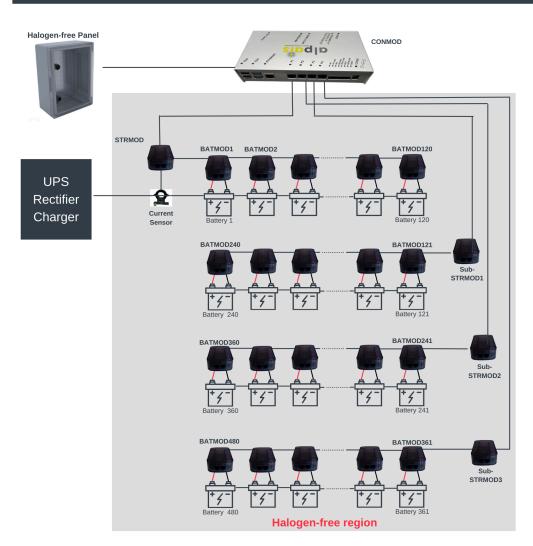
ALPAIS

BATTERY MONITORING SYSTEM INDUSTRIAL AREA SOLUTION



- In the need for more reliable power backup systems in industrial areas, 1.2V, and 2V cells can be used. Hydrogen gas leaks and the level of electrolytes are assigned to the pain points of the chemical design of NiCd batteries. Due to hazardous environments, the need for extra protection of the battery system will arise.
- Alpais's solution for industrial areas is specially designed to cover protection for a better environment for the batteries thus ensuring reliable power.
- Furthermore, since 1.2V and 2V battery packs can have many more batteries than the UPS applications, Alpais solves this issue with its "Sub-String Modules". Sub-String Modules are responsible for lengthening the communication line in the battery packs which consist of more than 120 batteries.
- Also, Alpais con offer a "Halogen-free region" for Industrial Applications.

Alpais System Architecture for Industrial Areas



- **1 Battery Module** for each battery.
- **1 String Module** for each string.
- 1 Sub-String
 Module for each
 extra 120 cells.
- 1 Control Module for a up to 480 cells.

Remarkable Features of Industrial Area Solution

- Up to 480-cell on 1 string monitoring
- Hydrogen Gas Leak Sensor (optional)
- Low-Electrolyte Level Sensor (optional)
- Halogen-free Panel (optional)
- Halogen-free Battery and String Modules (optional)
- Halogen-free measurement and data cables (optional)
- Multiple locations on 1 single screen
- Multiple users with different authorization levels
- Automatically addressing for Battery Modules

- · Remote and real-time monitoring
- Email, SMS, and buzz notifications
- 3 LED sources on modules for on-site detection
- Graphical tools to determine the battery performance trends in time,
- · Reporting in PDF and CSV format
- Daily, monthly, or yearly reports
- Immediate detection of the batteries that have manufacturing failures
- Recording of constant measurement and alarm logs
- · More than 10 years of historical data

Measured Parametres

- Alpais monitors the most important parameters for battery health.
- Alpais monitors each battery/cell temperature and cell voltage.
- Alpais also measures the string voltage. String current and also charge status is recorded.
- Alpais records the charge/discharge cycles of each string.
- Since the ambient is important for the batteries, Alpais monitors the ambient temperature and humidity.





resistant





String voltage



voltage

String current





About Alpais

Alpais is Turkiye's first and only battery monitoring system with an original design, with its unique technology, innovative product development, and customer-oriented services for UPS & Data Center and other applications.