NB-IoT Alarm

AKR

NB-IoT Alarm
Abnormal Notification Gateway

Through NB-IoT, you can manage and monitor Live data and events in anywhere, anytime! Applicable in various industrial machinery equipment or environmental monitoring with high performance controller.

The controller supports various sensors, such as temperature / humidity / pressure / flow sensors. All on-site sensor data are collected and transmitted through NB-IoT to remote devices such as PC or mobile phone. Get all live data without boundary.

Application

NB-IoT is essential for smart city, smart factory, smart agriculture and intelligent construction.
• Monitoring application in agriculture, fisheries and animal husbandry.
• Communities' safety and plants' automation.
• Best solution for area where the Internet of WiFi is not accessible.

Features

• Abnormal notification sensor (collection / control / adjustment / abnormal report)
• Sensor hubs can be plugged by a variety of sensors (NB-IoT, Cat-M1)
• Temperature, humidity, air pressure and air quality monitoring such as CO, CO_2 and PM2.5 and soil moisture.
• High GPS accuracy (equipped as optional)
• IP66

Wild trapper
Capture notification

Farming and fishery monitoring
Automatic irrigation system

Factory abnormal notification
Monitoring machines and production line

Portable asset surveillance & control
Hospital Equipment

Warehouse surveillance
Access control and fire alarm

Data collection & monitoring
water meter, electricity meter, gas, timer

Line instant notification
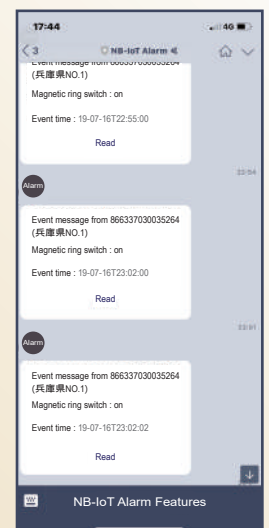
High volume voice notification.
GPS enabled customers can customize the notification language, for example :
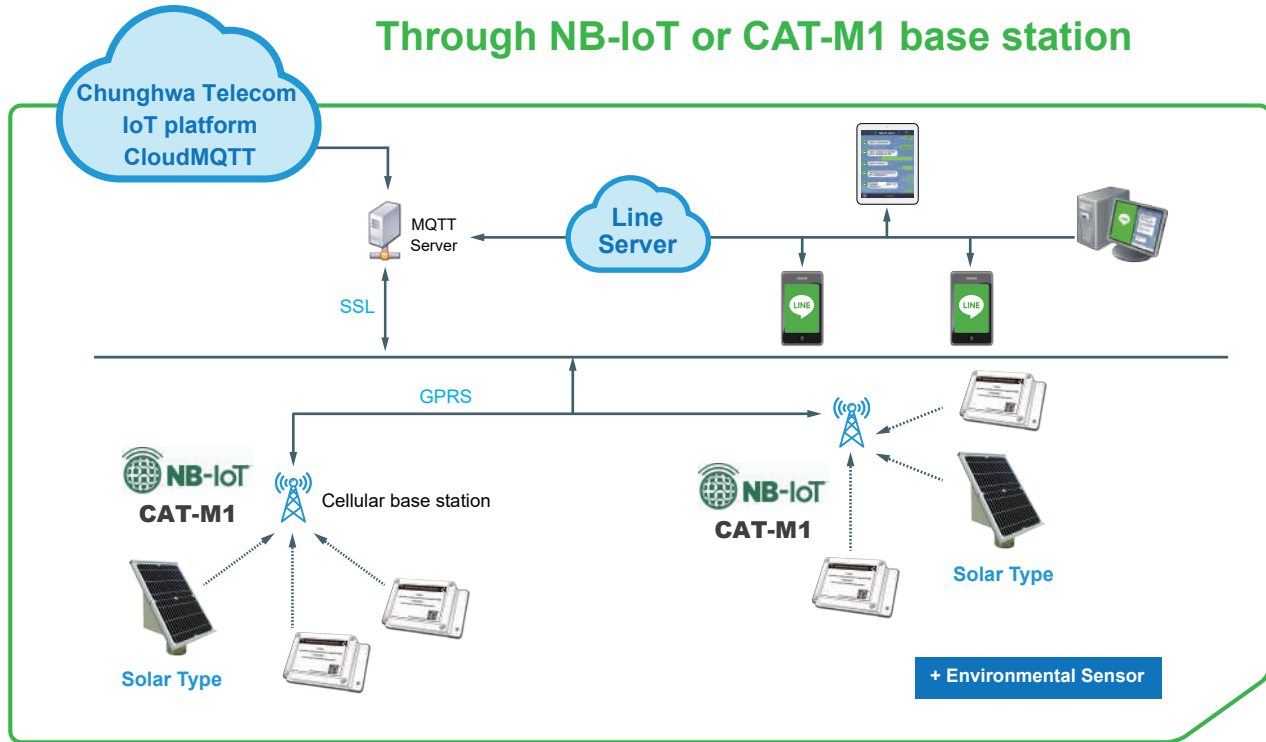"East door is opened! Tell manager and call police ASAP"
"Please check No. 3 catcher. Movement detected over there."
"Water level of West 14th pool is rising fast. Please do maintenance check."
"Please check the temperature of No. 6 freezer."

Through NB-IoT or CAT-M1 base station

Chunghwa Telecom IoT platform CloudMQTT

MQTT Server

Line Server

SSL

GPRS

NB-IoT
CAT-M1

Cellular base station

Solar Type

NB-IoT
CAT-M1

Solar Type

Solar Type

+ Environmental Sensor

Control Communication Logic

- Transmits every 6 hours : field value, battery status.
  Control settings :
  Transmission interval 1~12H adjustable. Abnormal value setting.
- In case of abnormality :
  First output the control signal and report immediately.
- Light signal : Device condition indication.
- Test reset button

Circuit Characteristics

- Overrun active return data.
- Automatic data collection & preservation while the outbound communication is interrupted. Once the communication resumes, it start retransmitting the preserved data.
- Power failure (or low battery) instant notification.
- Optional wall mounting or plug-in mounting.
- Communication parameters are automatically configured.
- Wide voltage input range : +12V to +24V DC(±10%)

Technical specifications

Mode	+ 9V (Adtper) (or solar panel power supply 9V ~ 24V)
Product Name	NB-IoT Multi-function wireless monitor
Size	115 x 85 x 35mm
Weight	280g (No external wiring weight)
LED lights	Bi-color 3mm x 1 two-color indicator number
Power supply	1865 lithium 3.7V rechargeable battery + 9V (Adtper) (can also use solar panels to supply 9V ~ 24V)
Communication function	Off line (Power saving, light traffic, less immediacy) On line (High power consumption, heavy traffic, real-time monitoring)
Input Description	Red Line + power supply (Solar-IN) Black Line G power supply (Solar-IN) White Line Reed SW (or water level) / Photo Coupler (Other) Blue Line Reed SW (or water level) / Photo Coupler (Other) Yellow Line Temperature Sensitive NTC Rod (Other) Green Line Temperature Sensitive NTC Stick (Other)
Output Description	Gray Line 1 output (Photo Coupler) (Other) Brown Line 1 output (Photo Coupler) (Other)
Shell	Waterproof +8pin connector, environmental protection color such as grass green
Control Function	The temperature and other sensors' data are reported back to the user's mobile phone (via Line notification) every 5 minutes. User can take action as soon as abnormal occurs. There are power outages alert and battery status report, too.