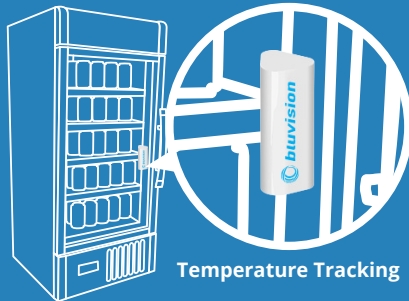




# Cold Chain Monitoring System

BY ACS GROUP

**ACS** GROUP PT. AUTOJAYA IDETECH  
PT. SOLUSI PERIFERAL  
www.acsgroup.co.id



Temperature Tracking

Monitor and track your food cooler and freezer temperatures 24/7!

Know about small issues before they become big problems!

## CCMS Architecture



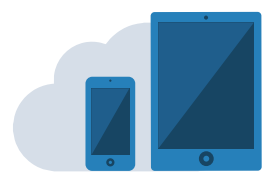
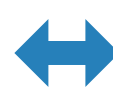
Beacon



BluFi



Bluzone



Business Presentation

### Features:

- Cloud-based Application and Database
- Accessible 24/7 from anywhere
- Automated cold storage/asset monitoring that requires the application of temperature spacing in a disciplined manner
- Provide precise/accurate temperature
- Web-based user interface
- Historical and realtime reports (on-demand or scheduled) and exportable to Excel
- Notification mechanism (alarms) to email
- Simple and ease configuration and monitoring dashboard

### Solution Benefit:

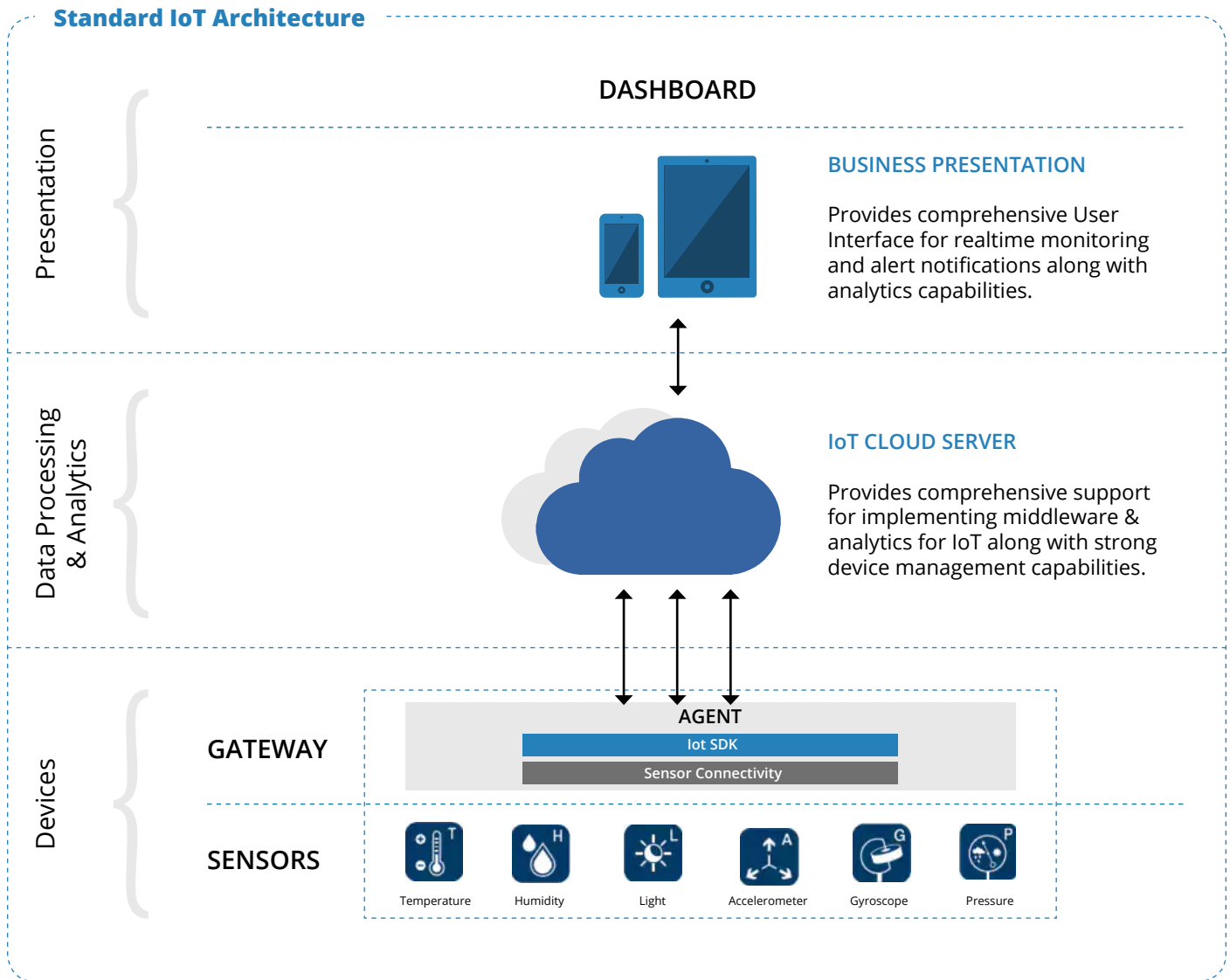
- Take notes of field results and create reports automatically for operational compliance
- Monitor and track your cold storage equipment temperatures 24/7
- Know about small issues before they become big problems
- Make it easier on monitoring process and secure database result accurately
- Decreasing issues towards cold chain system and assets that are critical with total awareness

A typical cold storage facility will likely contain coolers, freezers, refrigerators, and deep coolers, all at a variety of temperatures. Manual processes of monitoring and recording temperature can be time-consuming and do not provide continuous logs which can result in missed temperature fluctuations or temporary fault and failures in equipment, potentially going undetected. Any such compromise to the integrity of storage temperature will ultimately affect the quality of your product, your business, and potentially put your customers health at risk.

Our technology is ideal for guaranteeing those cold storage facilities such as restaurant freezers, walk-in refrigerators, and food warmers are always maintained at ideal conditions. In the event of a change, like temperature fluctuations, early detection programs make sure the right parties know about the shift immediately in order to take action and prevent having to throw out inventory.

The solution with high standard sensors that are placed in the units and are connected to Cold Chain Monitoring System (CCMS), our IoT cloud based solution, via an SDK through a WiFi or GPRS connectivity. The real advantage to using the CCMS solution is in its ease of installations. The 'stick and go'; installation requires the beacons to be stuck to a flat surface on the cooler, refrigerator, freezer etc. and the WiFi gateways can be plugged into an outlet.

## Standard IoT Architecture



Our wireless temperature monitoring system is very cost-effective. It is designed to monitor controlled environments where sensitive meat, frozen eatables, and other fresh foods are stored. The solution alleviates difficulties inherent in manually monitoring multiple cold storage environments in multiple locations while automatically maintaining complete regulatory compliance.

Doing work "by hands" presents many obstacles that restrict the capabilities of an audit for both internal and external auditing teams inspecting food safety and storage regulation compliance. Lack of visibility and difficult to access data along with the large volumes of data to be analyzed present barriers to efficient collection and can lead to human and input errors in reporting. Automate Data Collection and Improving Your Audit Capabilities With CCMS. CCMS temperature monitors are reliable, easily scalable, and provide a centralized system to collect historical data for use in audits as well as use to actively monitor, manage, and alerts to changes in temperature. You can ensure that perishable food items are always maintained at the proper temperatures with the continuous monitoring and early detection devices offered by CCMS.

**ACS GROUP**  
**PT. AUTOJAYA IDETECH**  
**PT. SOLUSI PERIFERAL**  
[www.acsgroup.co.id](http://www.acsgroup.co.id)

### Jakarta (HO)

Perkantoran Gunung Sahari Permai #C03-05  
 Jl. Gunung Sahari Raya No 60-63 Jakarta 10610  
 Telp : +6221-4208221(H), 4205187(H)  
 Fax : +6221-4207903, 4207904, 4205853

### Cikarang

Cikarang Square Blok E No 62,  
 Jl. Raya Cikarang Cibarusah Km 40,  
 Cikarang Barat, Bekasi  
 Telp : +6221.29612366, 29612367  
 Fax : +6221.29612368

### Semarang

Grand Ngaliyan Square Blok B No.18,  
 Ngaliyan 50181, Semarang  
 Telp : +6224.76638092, 76638093  
 Fax : +6224.76638096

### Denpasar

Ruko Grand Sudirman Agung Blok B No.29,  
 Jl. PB Sudirman, Dauh Puri Kelod,  
 Denpasar Barat, Denpasar - Bali 80114  
 Telp : +62361-4457859  
 Fax : +62361-4746526

### Surabaya

Komplek Ruko Gateway Blok D-27  
 Jl. Raya Waru, Sidoarjo 61254  
 Telp : +6231-8556277(H); 8556278  
 Fax : +6231-8556279