



## — OUR SERVICES

# — CASECONNECT PLATFORM & OVERVIEW

**CaseConnect®** Is a future proof, Plug & Play technology that integrates IoT sensors with advanced cloud technology into our refrigerated cases, integrating asset management and retail customer engagement.

**CaseConnect®** provides immediate returns by enabling proactive response for service companies and synchronised approach to retail marketing teams based on real-time data.



## IMPROVEMENT OPPORTUNITIES



UNKNOWN  
BLOCKAGES



MOTOR SERVICE



PRODUCT  
TEMPERATURE



ON DEMAND  
DEFROST



PEOPLE  
COUNTER



NIGHT BLIND



DOORS



BLOCK AIR

### LEADING TO



PROACTIVE  
MAINTENANCE



LOWER OPERATING  
COSTS



MARKETING  
INSIGHTS

### SMART

Proactive Maintenance



### SMART

Energy & Sustainability



### SMART

Sales & Marketing



CaseConnect® - An innovative IoT solution that will enable  
Better Data = Smarter Solutions.

We see the potential in  
Automating **SMART Maintenance** to **SAVE MORE**,  
**SMART Energy** solutions to **WASTE LESS**,  
and incorporating **SMART Sales & Marketing** with live data to  
**SELL MORE**.



# CASECONNECT

BETTER DATA = SMARTER SOLUTIONS



## SAVE MORE

CaseConnect® Comes stock with applicable cases or can be retrofitted in certain cabinets to convert them into smart self-monitoring and self-diagnosis appliances which notifies service staff instantly.

- Enables transition from preventative to Proactive maintenance contracts
- Proactively measures, self diagnoses and reports on critical equipment and incidences
- Integrates with existing equipment controller and alarms systems to optimise case operation



## WASTE LESS

CaseConnect® ensures the optimum level of refrigeration performance and food quality while reducing excessive energy and operational costs.

- Move from conservative pre-set defrosting to demand based defrosting
- Blinds, fans and lights integration to deliver energy savings
- Self monitoring programmes to optimise refrigeration performance including blocked air returns



## SELL MORE

CaseConnect® technology detects customer traffic and provides meaningful insights to know more about your consumers preferences. Live market data enabling you to make more profitable decisions when it comes to product placement, stocking and marketing.

- Real time insights into consumer traffic
- Planogram efficiency
- Real time sales and marketing data for increased sales
- Electronic Shelf Labels & Video output marketing

## First 8 INITIAL IoT SENSORS

### 1. DOORS IoT

SAVING YOU ENERGY & COSTS



Door Open Alarm



Plannogram Success Measure

### 2. NIGHT BLIND IoT

SAVING YOU 14% ENERGY COSTS



NB Open Alarm



Fan Motor energy reductions

### 3. BLOCK AIR IoT

INCREASES CASE EFFICIENCY



Return Air Block Alarm



Optimize Performance

### 4. BLOCK DRAIN IoT

AVOIDS ASSET DOWNTIME



Automatic Drain Blockage Detection



Avoids Poor Hygiene & Customer Impact

### 5. DEMAND DEFROST IoT

SAVING YOU ENERGY & COSTS



Automatic Ice Detection



Adaptable To High Humidity Environments

### 6. MOTOR SERVICE IoT

SAVING YOU ENERGY & COSTS



Maximise Equipment Uptime



Avoid Unsafe Product Temp & Waste

### 7. PRODUCT TEMPERATURE IoT

SAVING YOU ENERGY & COSTS



Monitor Case Temp in Real Time



Prevent Product Wastage

### 8. PEOPLE COUNTER IoT

SAVING YOU ENERGY & COSTS



Insights of High Flow Areas



Plannogram Success Measure

## 1. DOORS IoT

### SAVING YOU ENERGY & COSTS

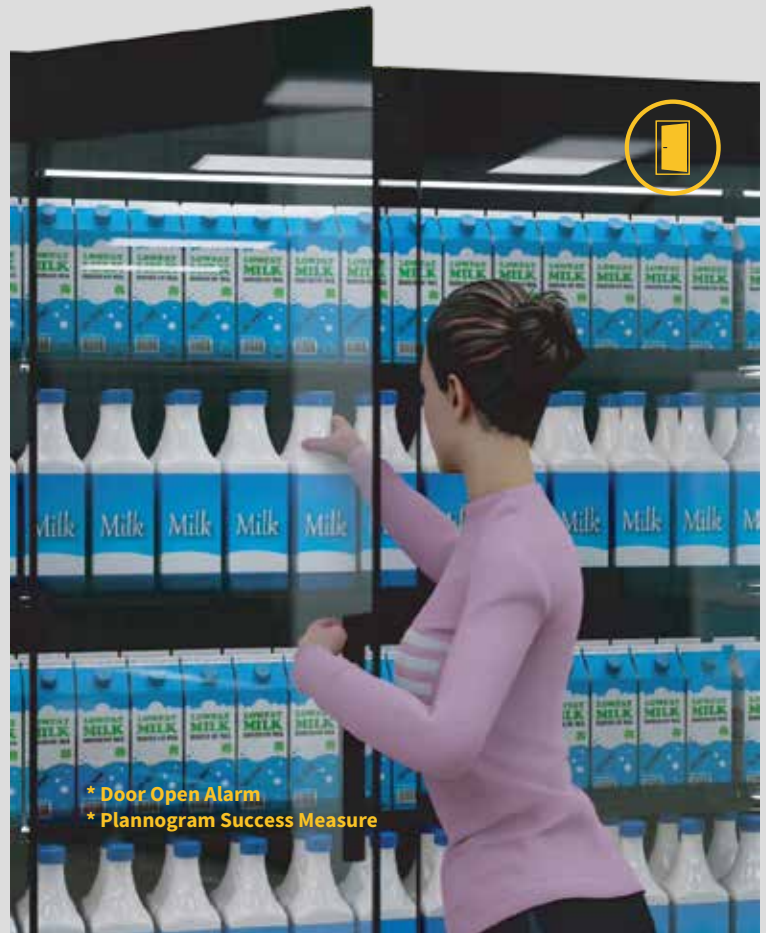
Our CaseConnect® Door IoT ensures food preservation is maximized by sending an automatic alert notification to your team should a door be left ajar or open.

#### BENEFITS INCLUDE

- Case efficiency by ensuring the door is always closed, improving energy savings.
- Improvement in temperature control resulting in better food storage quality.
- Alongside the people counter IoT, the ability to measure planograms to understand how many people are opening doors and how they move through the supermarket.

#### HOW IT WORKS

This IoT detects if the doors are open/closed using a Hall sensor and a magnet, this works similar to a touch sensor. When the doors are closed the Hall sensor will detect the magnet and read closed, when the magnetic is not detected, it will read open.



Upto

**14%**  
Energy Savings



- \* NB Open Alarm
- \* Fan Motor Energy Reductions

## 2. NIGHT BLIND IoT

### SAVING YOU ENERGY & COSTS

CaseConnect® technology detects the night-blind position and automatically reduces the evaporator fan speed to lower your energy consumption in our new P Series Cases.

#### BENEFITS INCLUDE

- Being able to increase case efficiency by ensuring the blind is closed during off hours, which will decrease fan motor speed and cooling usage and increase energy savings.
- Maintain safe internal temperatures at night by decreasing external and air that can interrupt airflow and cause abnormal temperature changes.
- Align with store operating hours for alarm messages.

#### HOW IT WORKS

This IoT detects if the night blind is open/closed using an infrared (IR) sensor that detects the blind by measuring the distance caused by the light returning to the sensor in Volts (V).

### 3. BLOCKED AIR IoT

SAVING YOU ENERGY & ENSURING PRODUCT QUALITY

With CaseConnect®, airflow is monitored to ensure optimal air return and will automatically generate an alert notification if a blockage is detected.

#### BENEFITS INCLUDE

- Reduces adverse air flow deflection from blockages that could potentially impact case performance and energy efficiency and increases energy consumption.

#### HOW IT WORKS

This IoT detects products and object blocking the airflow at the air return grill. This works using an infrared light from each end of the case to check if there are any obstacle withing the air inlet and notifies accordingly. These live results can be viewed and tracked through our CaseConnect® Portal.



### 4. BLOCKED DRAIN IoT

AVOID ASSET DOWNTIME

CaseConnect® automatically detects the onset of drain blockages and prevents overflow by notifying your service staff.

#### BENEFITS INCLUDE

- Reduce preventative maintenance costs by servicing only the cabinet with a blockage and knowing what the issue is in advance.
- Reduce costs by eliminating the need for expensive chemical drain clearing tablets.
- Avoid the cost of unloading full case line ups for deep
- Minimise customer disruption and lost revenues
- Eliminate flooding and store damage

#### HOW IT WORKS

This IoT detects water accumulation in the basin and notifies if the drain is blocked. This is done using a Capsense sensor that will detect the capacitance of the rising water to send an alarm notification in advance.



## 5. MOTOR SERVICE IoT

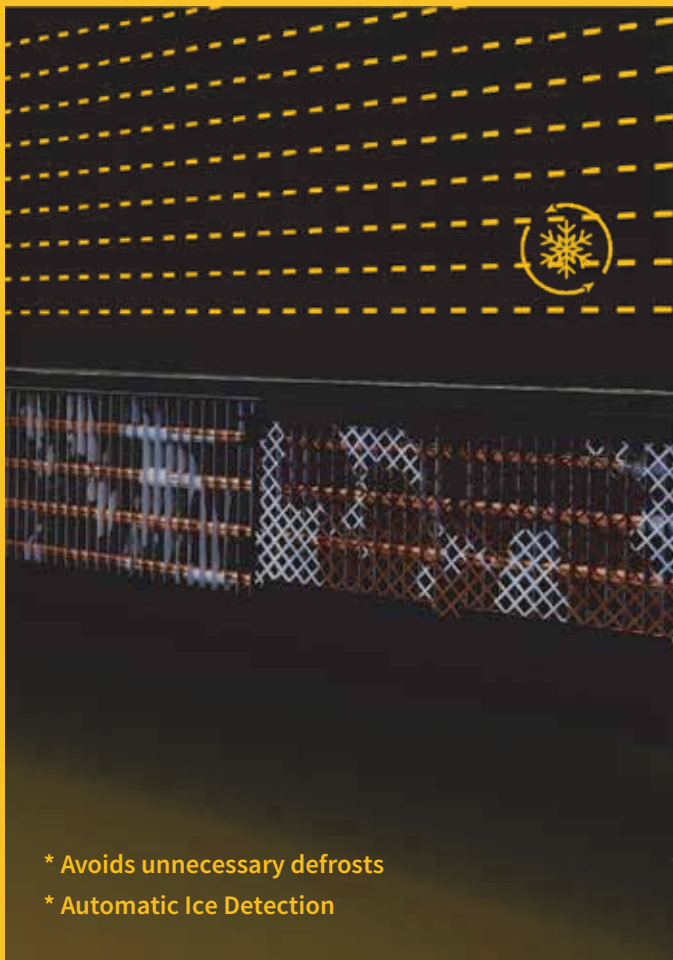
### FOCUSED MAINTENANCE & RUNNING

#### BENEFITS INCLUDE

- Early signs of maintenance & notifications
- Planned service based on total run time.
- Avoid unsafe product temperatures and wastages from abnormal fan speed/action notifications.
- Maximize equipment uptime by monitoring and using the different fan speeds when its actually needed as supposed to full time. Increases energy efficiency.

#### HOW IT WORKS

This IoT monitors the current usage by all fans in the case and report abnormality. This is done by using a current sensor to calculate the current passing through to measure speed at which the fan is operating at.



## 6. DEMAND DEFROST IoT

### ENERGY SAVINGS AND NO ADJUSTMENTS FOR SEASONALITY/DEMAND

The system uses advanced technology to detect exactly when the evaporator coil requires defrosting, based on the individual case conditions. We simply measure ICE !

#### BENEFITS INCLUDE

- Increase case efficiency resulting in energy saving and lower overall costs.
- Avoid temperature fluctuations and prevents microbe growth in products.
- Ability to adapt to high humidity environment. Also includes fail safe option when used with Temperature sensor to trigger an on demand defrost.
- Eliminates unnecessary defrosts by detecting best possible times from defrost and allows for defrost cooldown periods.
- Reduce Carbon Emissions through energy savings .

#### HOW IT WORKS

This IoT detects ice formation on the evaporator fins to trigger an On-Demand Defrost cycle. This is done via a Capsense sensor that will record the capacitance change between sensor and evaporator fins when ice occurs, thus triggering a response to the cases controller.



## 7. PRODUCT TEMP IoT

### FOOD SAFETY AND COMPLIANCE

CaseConnect® intelligent monitoring of operating temperatures provides alert notifications in cases with abnormal operating temperature conditions. It takes care of compliance costs with minimal increase in cost.

#### BENEFITS INCLUDE

- Monitor case temperature in real-time for compliance
- Prevent product wastage
- Detecting unsafe temperature
- Air off Fail Safe for Defrost

#### HOW IT WORKS

This IoT is a waterproof digital temperature sensor, that's used to monitor product temperature as well as act as a fail-safe option for the on demand defrost application.



- \* Monitor Case Temp in Real Time
- \* Prevent Product Wastage



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- \* Insights of High Flow Areas
- \* Plannogram Success Measure

## 8. PEOPLE COUNTER IoT

### CUSTOMER METRICS

The CaseConnect® IoT People Counter monitors the movement of customer traffic flow.

#### BENEFITS INCLUDE

- Insights of high traffic areas
- Assists in-store marketing to better plan and increase sales
- Indications of dwell time and traffic lead to real-time planogram feedback
- Future engagement can be enhanced by integrating Hussmann Digital Labels and Video rails

#### HOW IT WORKS

This IoT is used to monitor customer traffic and case usage trends. This works by using Lidar sensors that Counts the number of people passing by or stopping by the case .

# IOT SENSORS

HOW IT ALL WORKS

## CaseConnect®'S First 8 IoT TECHNOLOGIES

Connected to our CaseConnect® Controller

IOT SENSORS	PROACTIVE MAINTENANCE	ENERGY SAVINGS	SUSTAINABILITY	SALES & MARKETING
DOORS	✓			✓
NIGHT BLIND		✓	✓	
BLOCK AIR	✓			
BLOCK DRAIN	✓			✓
MOTOR SERVICE	✓	✓	✓	
DEMAND DEFROST	✓	✓	✓	
PRODUCT TEMP	✓		✓	
PEOPLE COUNTER				✓

## INSTALLATION & MAINTENANCE



### COLOR CODED PROBES

- All wires are labelled with color-coordinated, water proof probe connection points. This increases efficiency & ease for installation and servicing.

### SERVICIBILITY & MAINTENANCE

- Easy access via Electric box.
- Labelled connection points for quick identification
- Wifi Connectivity



**HUSSMANN®**

# INFORMATION SYSTEM ARCHITECTURE

## HOW IT ALL WORKS



## WEBSITE & DASHBOARD

Customers can set-up and customise their reports.





