

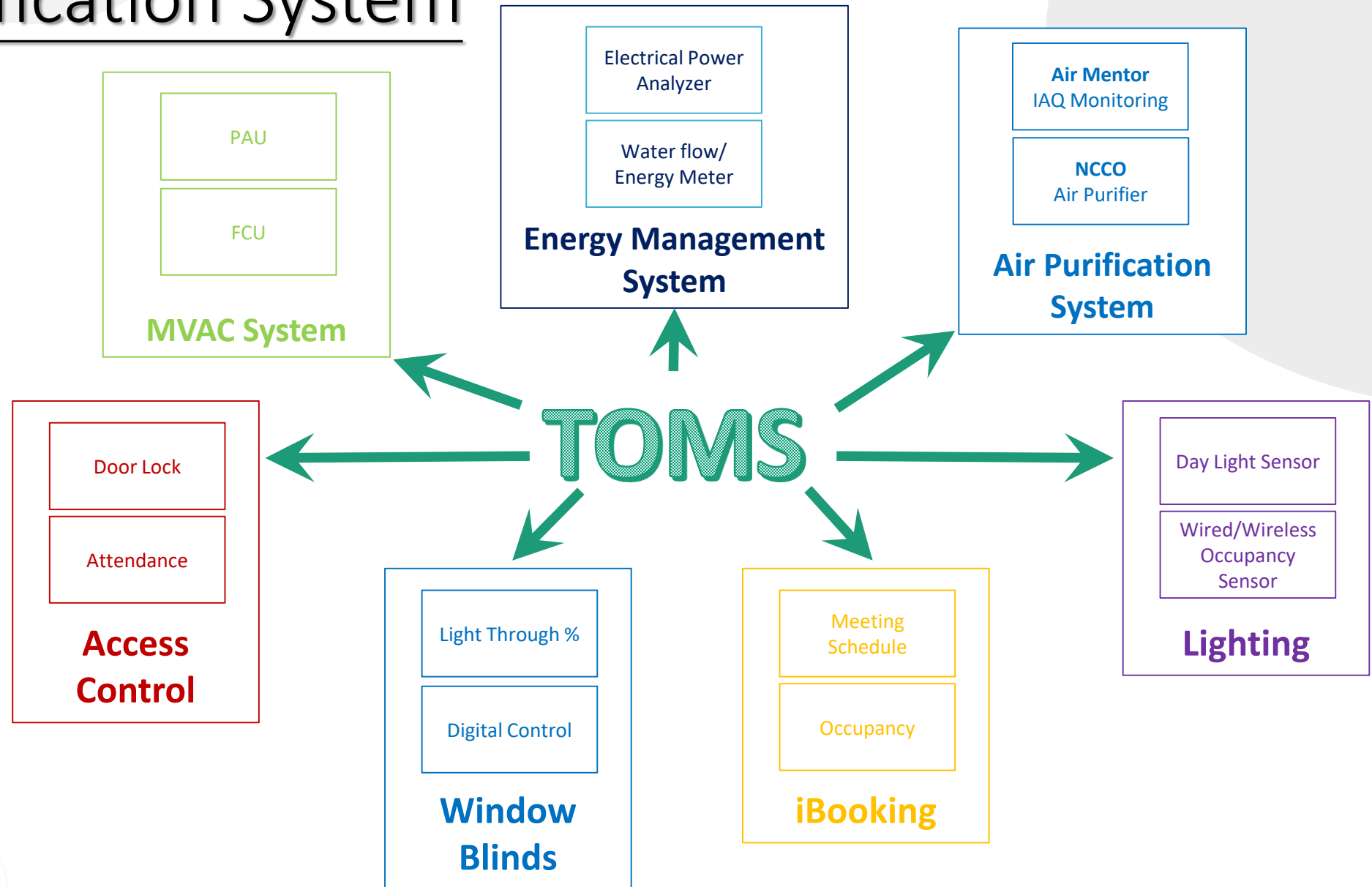


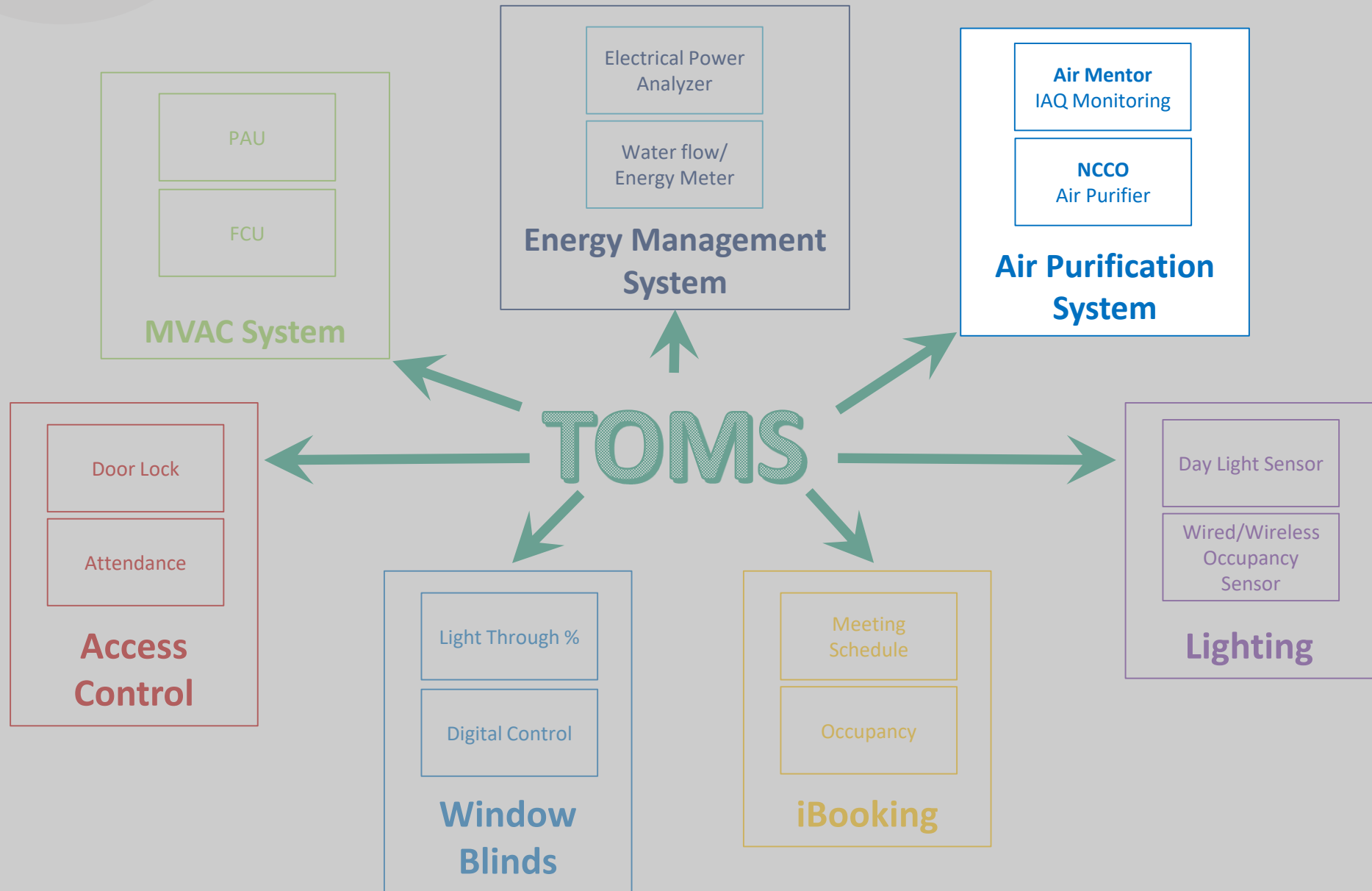
Total Office Management System

FK Engineering

Air Purification System

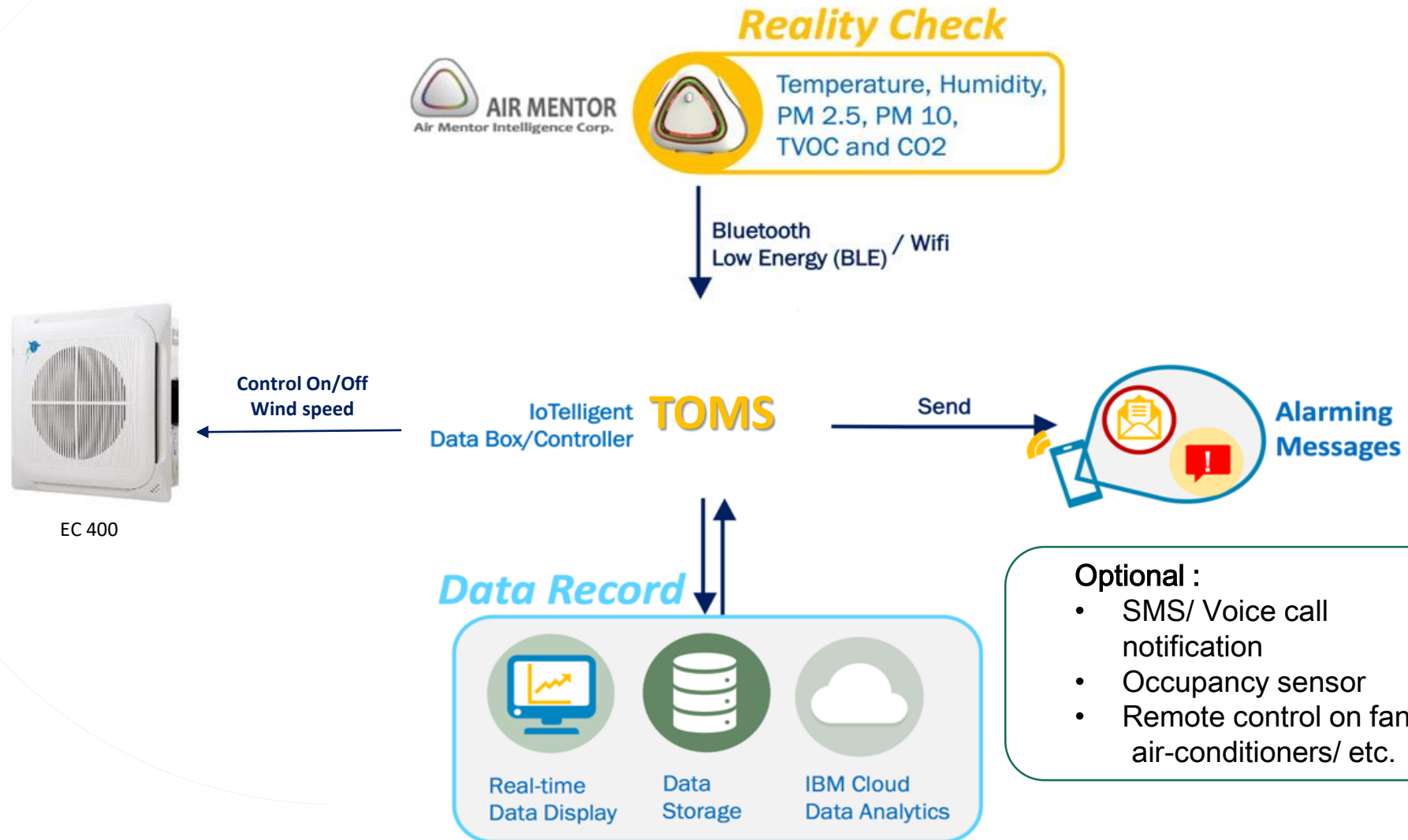
2



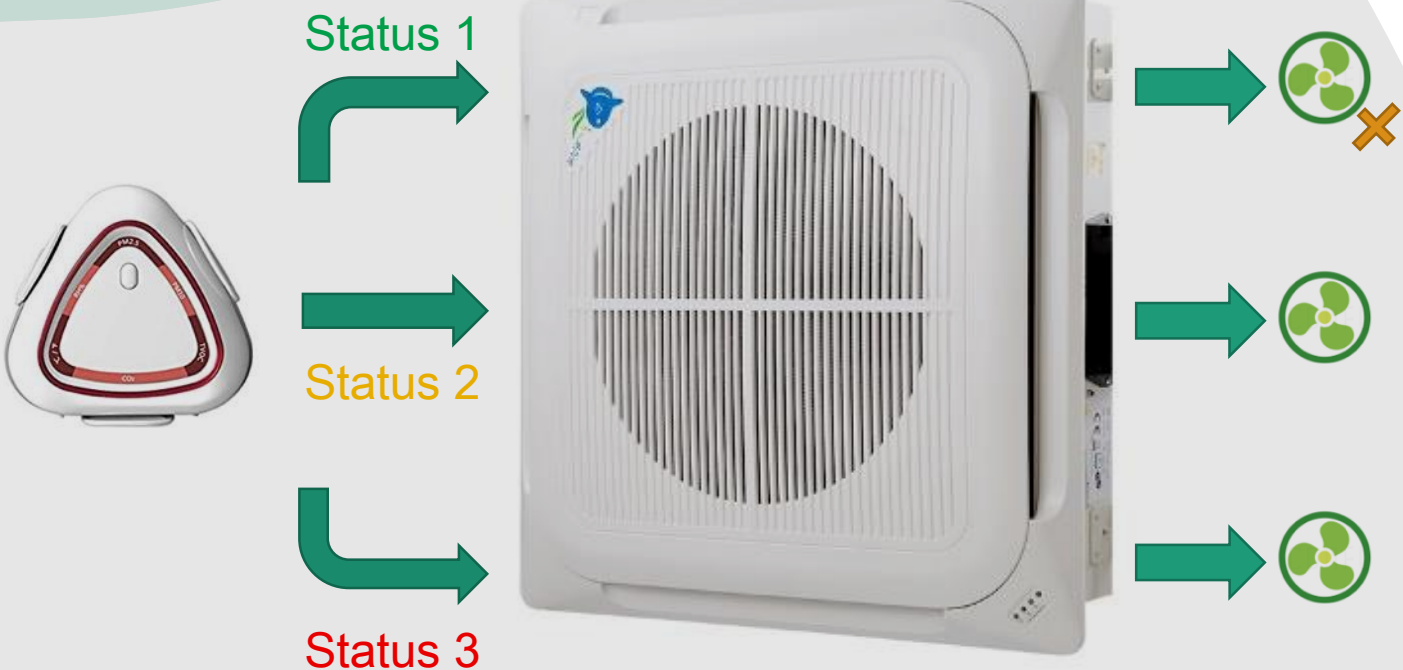


Air Purification System

Indoor Air Quality – To Affect The Health, Comfort and Well – being of Building Occupants



Air Purification System



	Status 1	Status 2	Status 3
CO2	Good (<800ppm)	Moderate (<1000ppm)	Unhealthy (>1000ppm)
PM2.5	Good (<20µg/m3)	Moderate (<180µg/m3)	Unhealthy (>180µg/m3)
PM10	Good (<180µg/m3)	Moderate (<230µg/m3)	Unhealthy (>230µg/m3)
TVOC	Good (<87ppb)	Moderate (<261ppb)	Unhealthy (>261ppb)

Air Purification System

Mercedes – Benz and Huatai Financial site photos

Proposal @ Copy Right 2020 By FK Engineering



Air Purification System

Mercedes – Benz and Huatai Financial site photos

Proposal @ Copy Right 2020 By FK Engineering



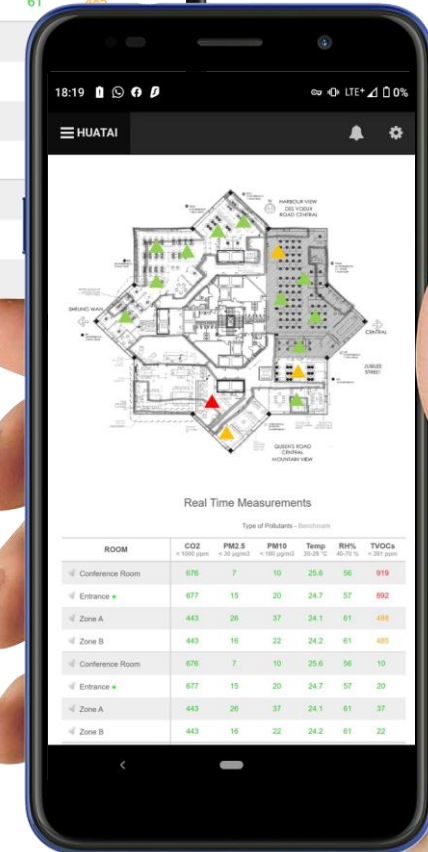
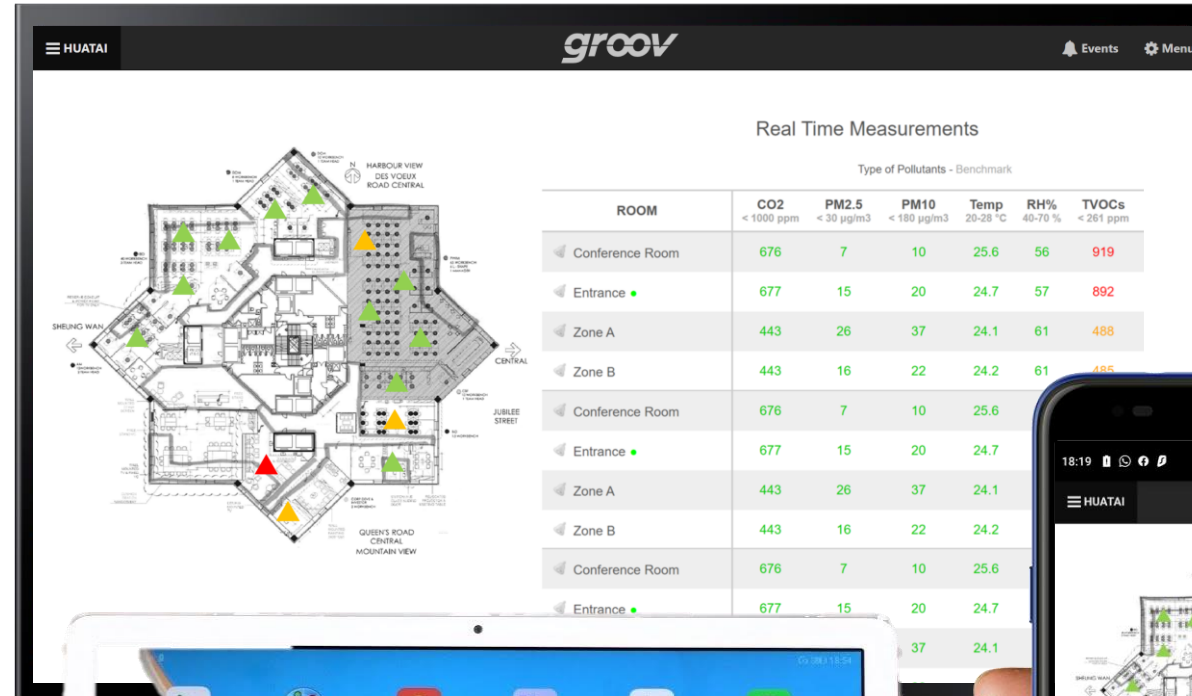
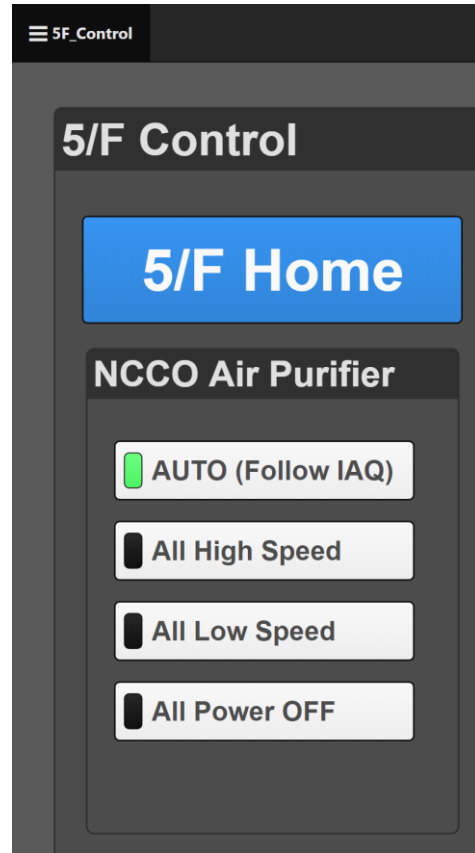
Mercedes-Benz



華泰金控
HUATAI FINANCIAL

Air Purification System

User Interface

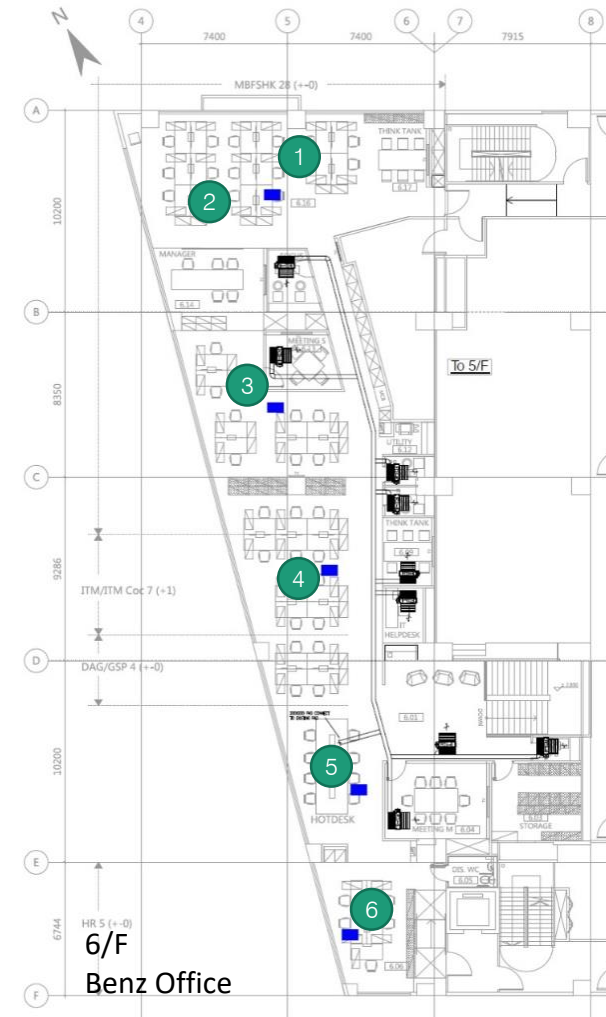
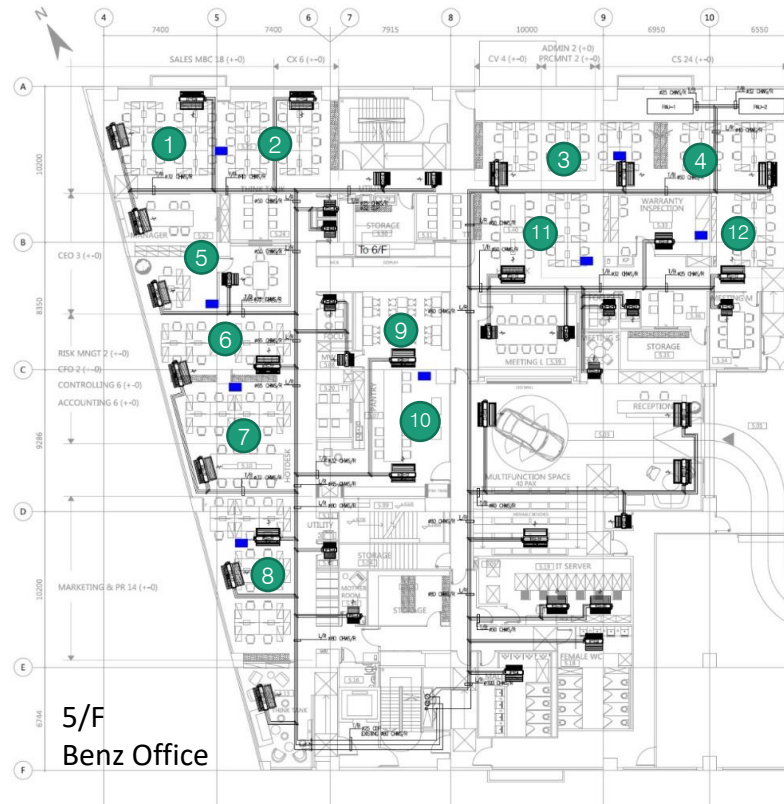


Air Purification System

Job Reference - Mercedes Benz Office

9

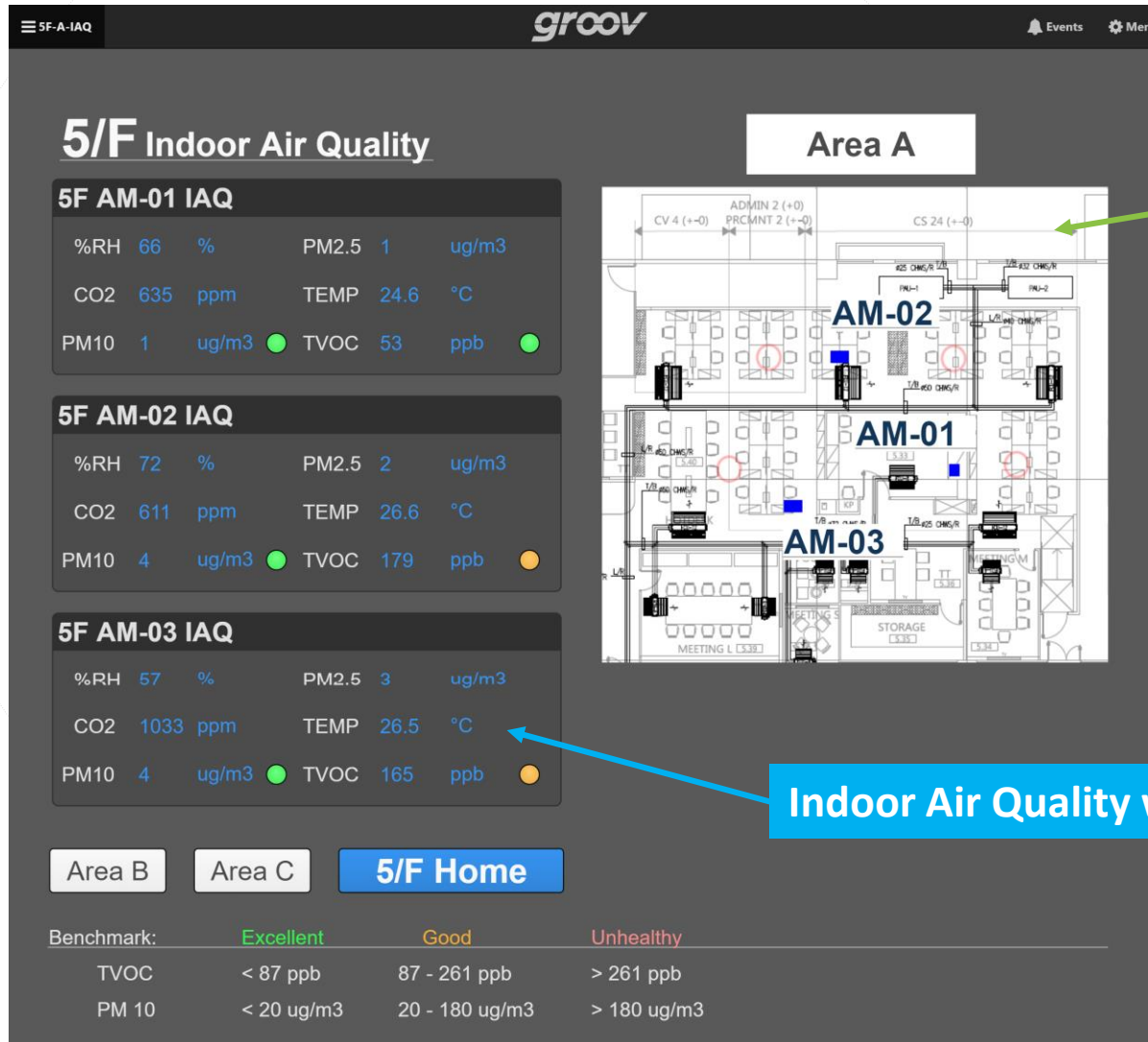
IAQ Monitor – Air Mentor 2 Location (Circled)
Quantity : 18



Air Purification System

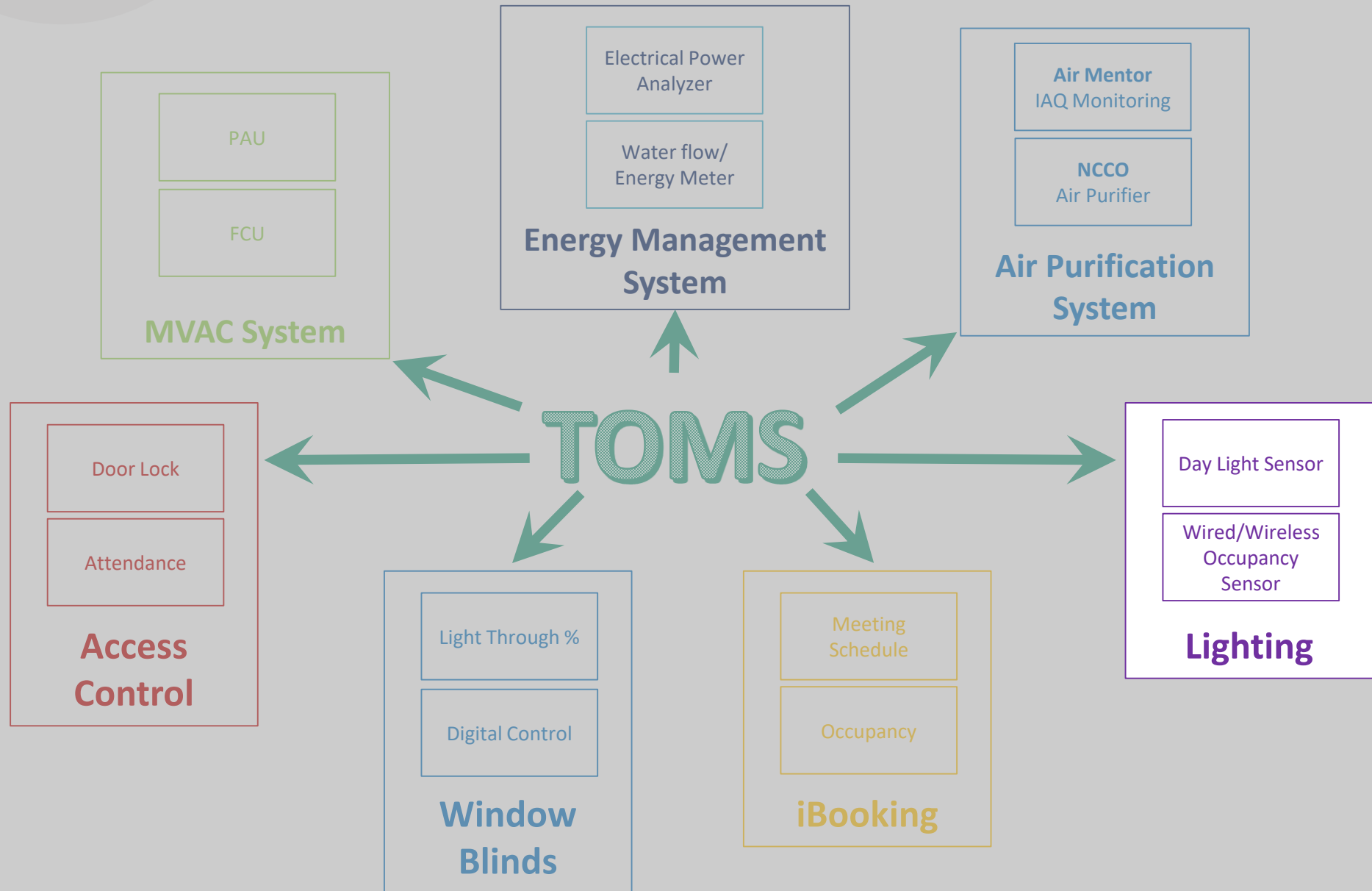
Job Reference - Mercedes Benz Office

User Interface – IAQ Monitoring with Air Mentor 2



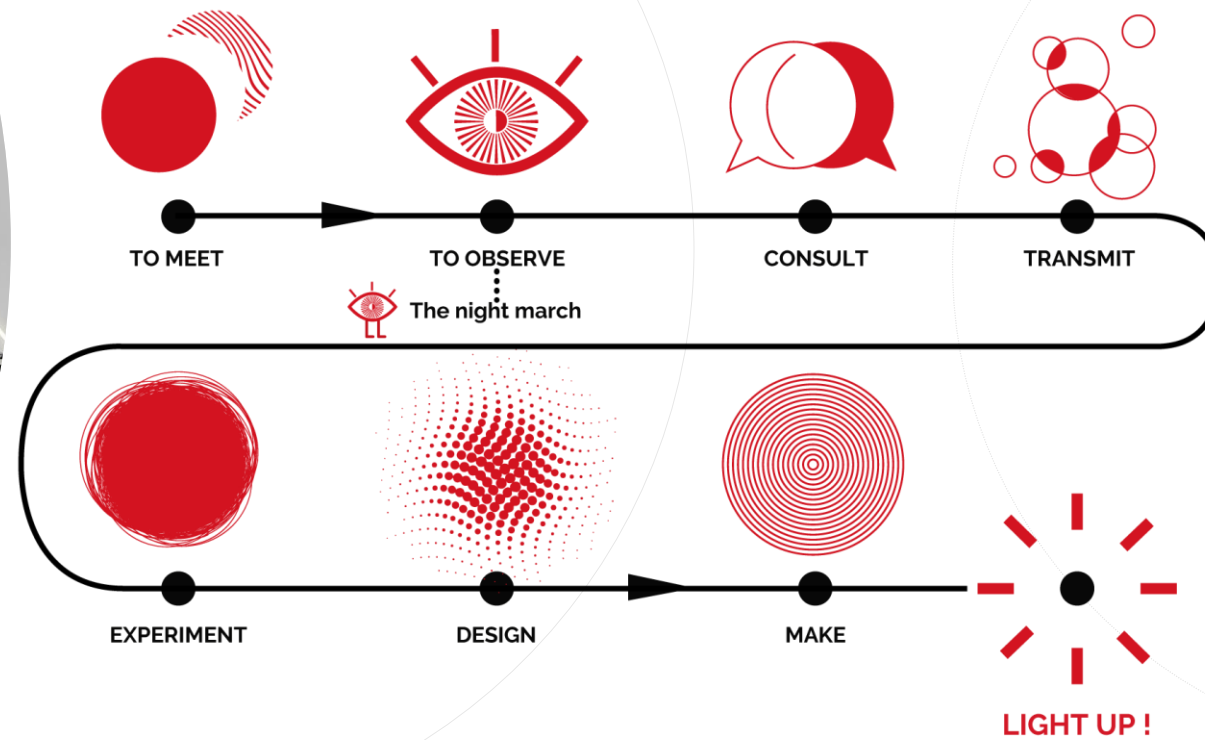
Office Floor Plan
& Air Mentor 2 Location

Indoor Air Quality with 6 parameters



Lighting Controls

12



Lighting Controls

13

Easy
installation



Suits for
different
ceiling
options

UGR <19



Suits for
different
dimming
protocol

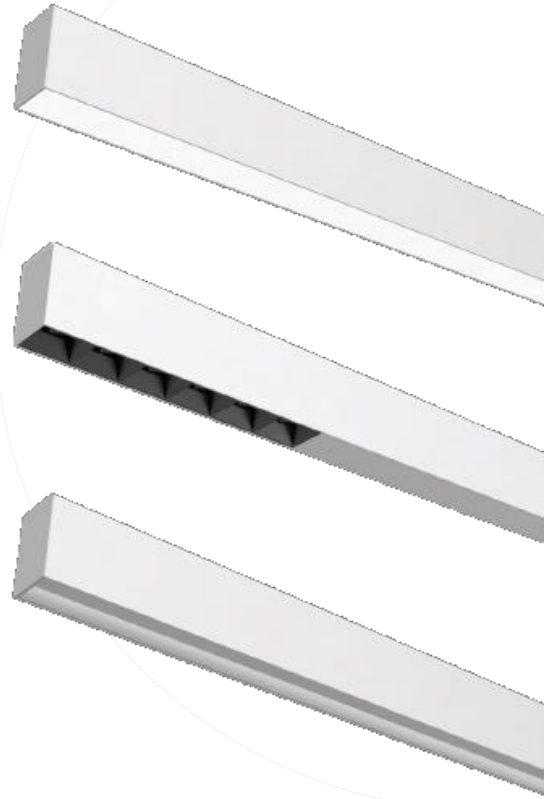


Indefinite
continuity

General Light

Accent Light

Wall Washer



Lighting Controls

MAG + Magnetic LED System

14



Plug & Play

Suits for
different
ceiling
options

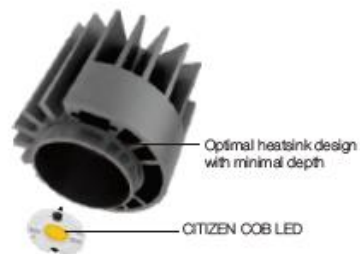
Suits for
different
dimming
protocol

Indefinite
continuity

START ADJUSTABLE

Meticulous to detail
Interchangeable design
Best optics control
Guarantee maximal eye comfort

Secondary Reflector



Primary reflector with different beam angles

Protection cover

Anti-glare ring provides eye-comfort
 $UGR < 16$

Optional honeycomb mesh
provides zero-glare effect

Precise angle alignment

Trimless
Version Available

RoundSquare
trim for one
light engine

Trimless
Version Available

Interchangeable
secondary reflector

Lighting Control

Module Start

Creative
Celling
Treatment

Easy to
Adjust

$UGR < 16$

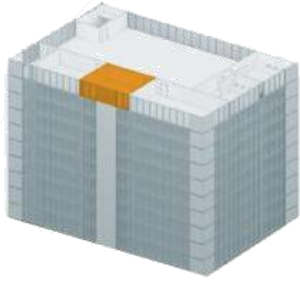
Consistent
design



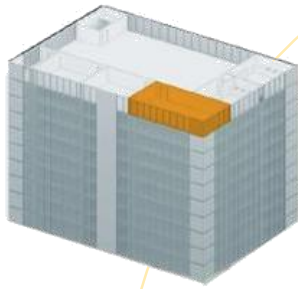
Lighting Controls

16

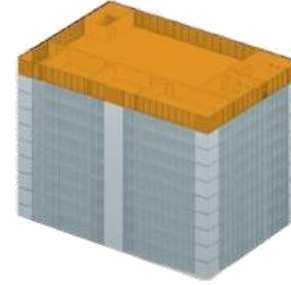
Rationale + Scalable Solutions



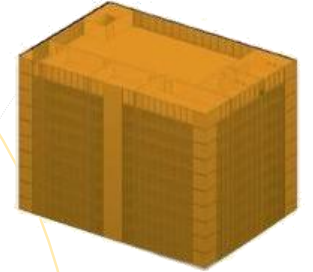
Standalone or
Single Space Solutions



Small Area Solutions



Multi-Room or
Entire Floor Solutions



Whole Building Solutions

Lutron's design philosophy

Wireless: simple installation or retrofit

Interoperable: easily connects to other systems

Expandable: easily add to existing installations

Energy Saving: every Lutron product saves energy

Lighting Controls

Rationale + Scalable Solutions



The Buildings Energy Efficiency Ordinance
(BEEO Cap.610)

電力裝置
Electrical installation

- LPD requirement covers new spaces
- LPD requirement of certain spaces tightened
- Lighting control point to all spaces
- **Automatic lighting control** (new requirement)
- **Daylight responsive control** (new requirement)

Clause 5.6 Automatic Lighting Control

5.6.1	The Basic Provision
5.6.2	Daylight Responsive Control thro' Fenestrations on Exterior Wall
5.6.3	Daylight Responsive Control thro' Overhead Skylight

Lighting Controls

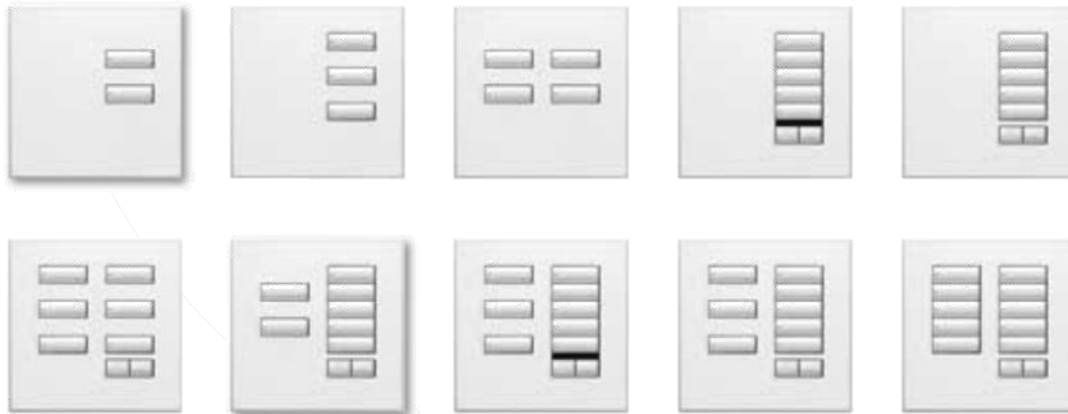
Lutron lighting control system



International seeTouch Keypad



GRAFIK Eye QS Time Clock



Daylight Sensor

Wireless Occupancy Sensor Wireless Receiver

Daylight Sensor

Pico Control

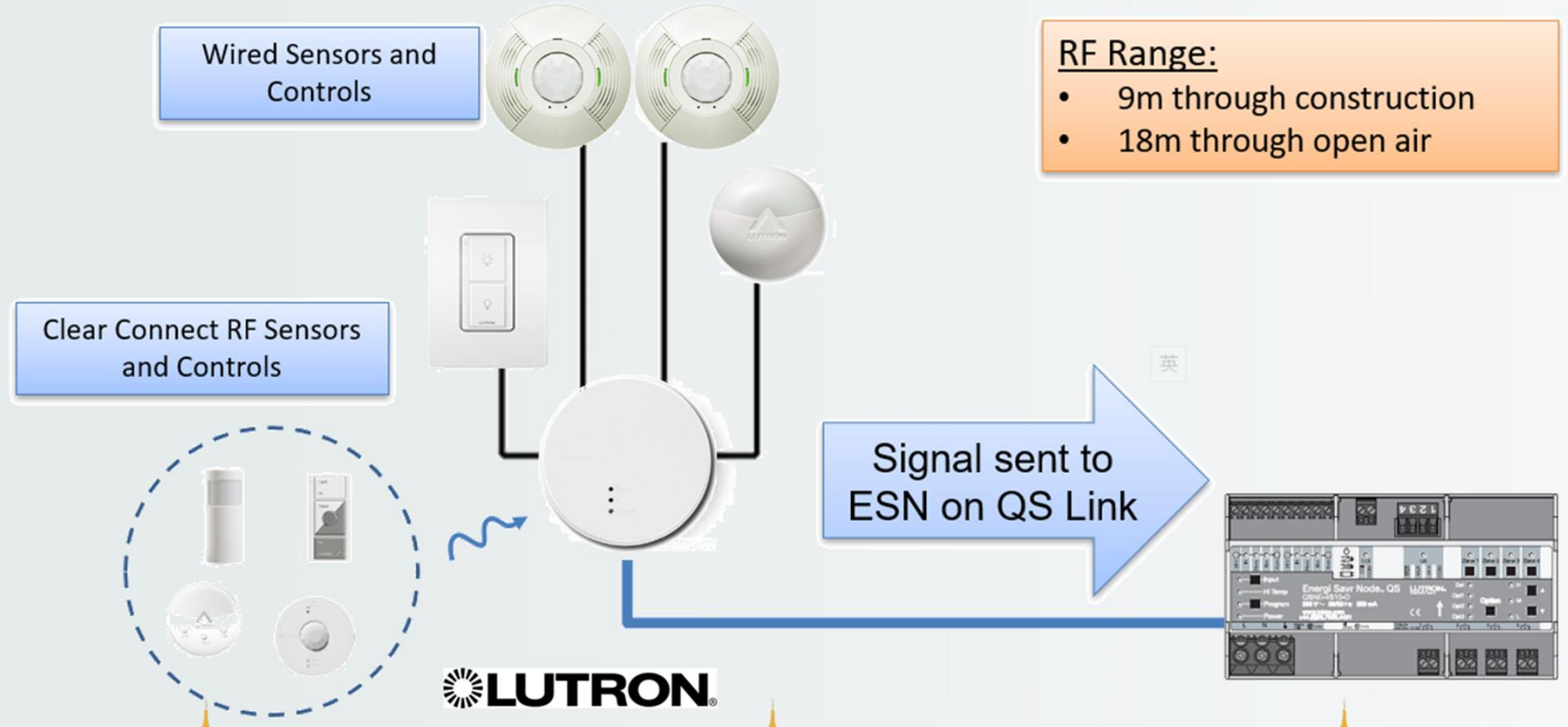
Wired Occupancy Sensor

Lighting Controls

Lutron lighting control system

19

Access point on QS link for wired and wireless sensors and controls

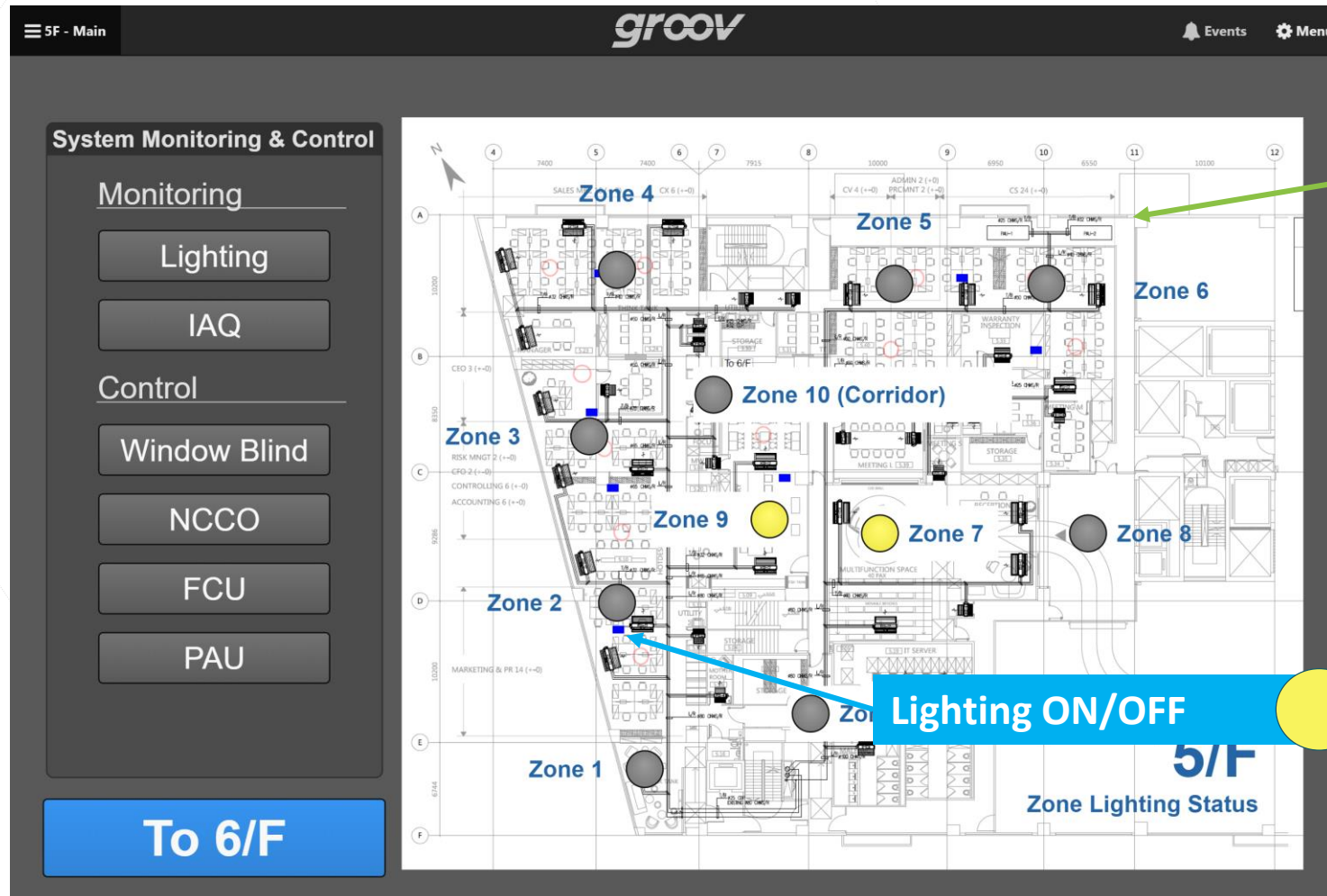


Lighting Controls

20

User Interface Job Reference - Mercedes Benz Office

User Interface – Lighting ON/OFF Monitoring connected with Lutron Lighting

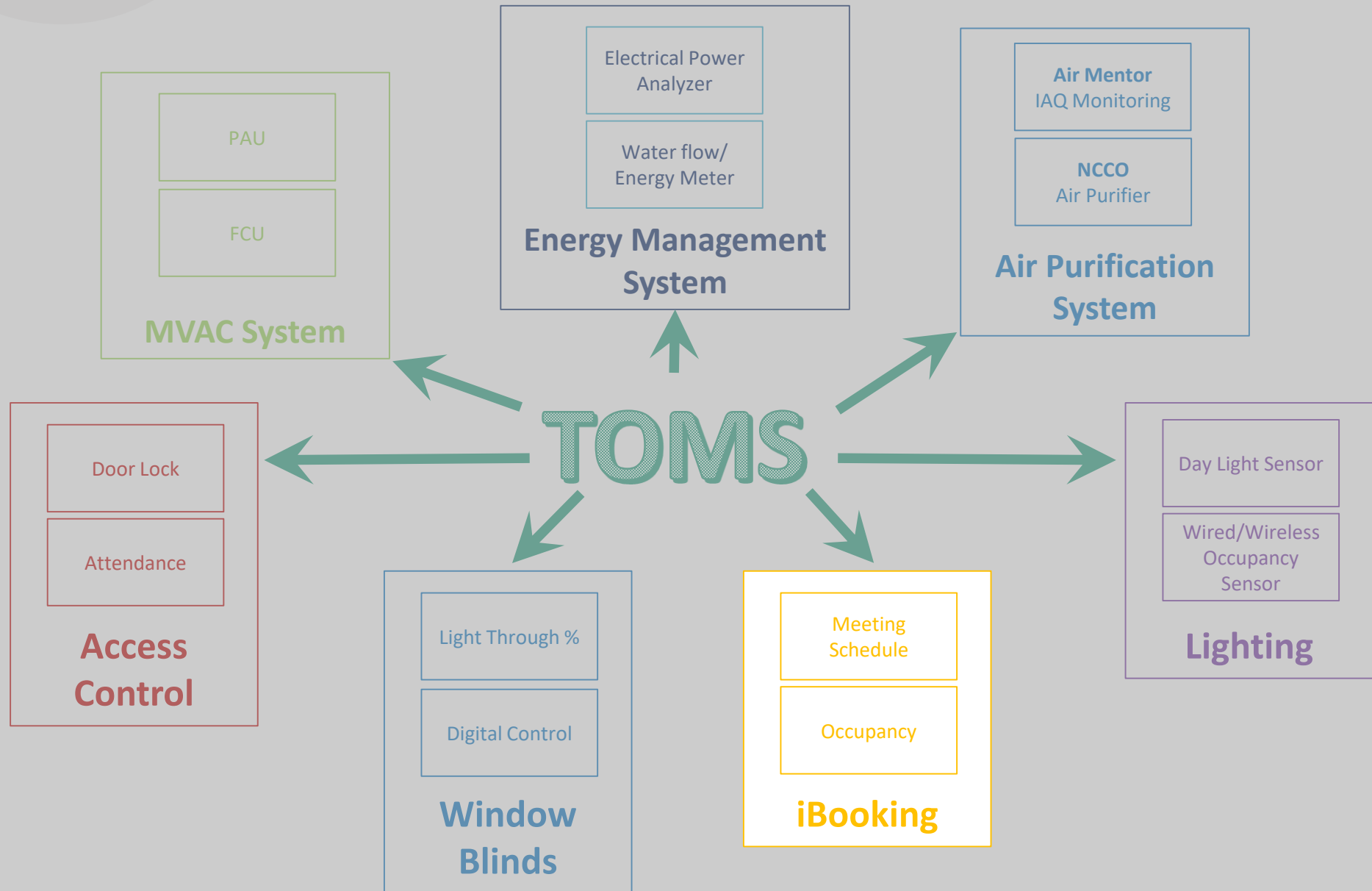


Office Floor Plan
& Lighting Zones

Lighting ON/OFF

To 6/F

Zone Lighting Status





a user-friendly **Web-based Room Booking and Hot Desk Booking System.**



User-friendly Booking System

User can book the meeting room and hot desk in just four steps.



Microsoft Outlook Integration

Integrate with Microsoft Outlook calendar and email notification.



Multiple Check-in Ways

User can check-in via QR Code, PIN and RFID Card.



Analysis & Reporting

Provide managers the Detail History, Utilization Report, Absent/ Cancellation Report.



API Ready

API is ready for further develop and integrate with webpage portal.



Add-on Service

Allow to book the meeting room with some add-on services.



E-ink and LCD Display

iBooking support types of display, E-ink Displays and LCD Display

iBooking System

23



User-friendly Booking System

User can book the meeting room and hot desk in just four steps.



Step 04

Step 03

Step 02

Step 01

The screenshot displays the iBooking System interface with four numbered steps highlighted: 1 (blue circle), 2 (red circle), 3 (orange circle), and 4 (green circle). The interface includes a navigation bar with links like Dashboard, Booking, Browse, Services, Resources, Statistic, and User. The main content area shows the 'Service & Time' step with filters for Category (Meeting Room), Location (Educational Building), and Service (Meeting Room in Educational Center). Below this, there are four room options: Large Meeting Room : 2/F, Medium Meeting Room I : 3/F, Meeting Room II : 3/F, and Meeting Room III : 3/F. The bottom section shows a calendar view for Thursday, May 2, 2019, with a table of available time slots from 8:00 am to 11:00 am.

	Large Meeting Room : 2/F	Medium Meeting Room I : 3/F	Meeting Room II : 3/F	Meeting Room III : 3/F
8:00 am				
9:00 am				
10:00 am				
11:00 am				

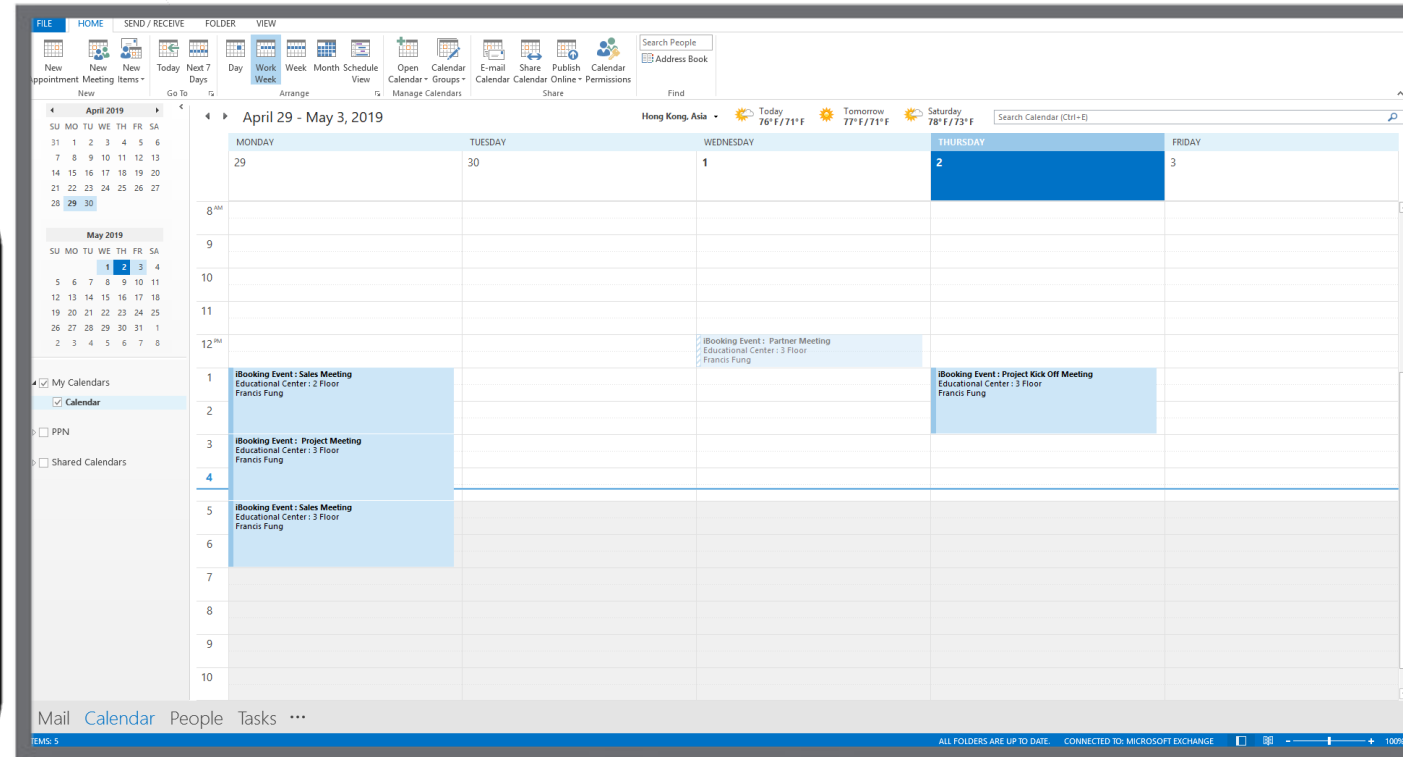
iBooking System

24



Microsoft Outlook Integration

Integrate with **Microsoft Outlook** calendar and email notification.



iBooking System

25



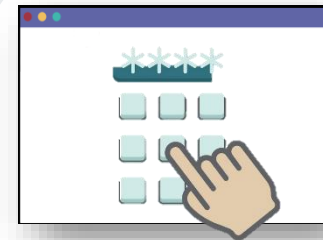
Multiple Check-in Ways

User can check-in via **QR Code**, **PIN** and **RFID Card**.

WAY 1



WAY 2



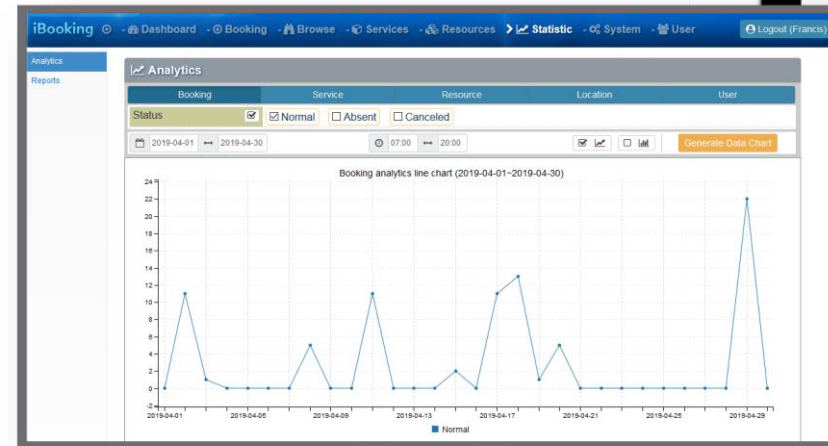
WAY 3





Analysis & Reporting

Provide managers the **Detail History, Utilization Report, Absent/ Cancellation Report**, assist in better decision making on space utilization.



Booking Report 2019-04-01 - 2019-04-30 (7:00 am - 8:00 pm)

#	Title	Service	Resource	Start Date	Start Time	Quantity	Duration	Add-on	User
1	Sales Meeting	Meeting Room in Educational Center	Meeting Room in Educational Center	2019-04-02	2:00 pm - 2:59 pm	1	60	N	admin
2	Kick off meeting	Meeting Room in Educational Center	Meeting Room in Educational Center	2019-04-02	2:00 pm - 2:59 pm	1	60	N	Francis
3	Test Meeting	Meeting Room in Educational Center	Meeting Room in Educational Center	2019-04-02	3:00 pm - 3:59 pm	1	60	N	admin
4	Partner Meeting	Meeting Room in Educational Center	Meeting Room in Educational Center	2019-04-02	7:00 pm - 7:59 pm	1	60	N	Francis
5	Test Meeting	Meeting Room in Educational Center	Meeting Room in Educational Center	2019-04-02	4:00 pm - 4:59 pm	1	60	N	admin



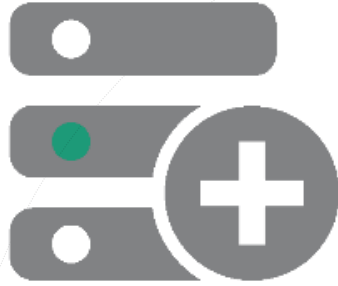
API Ready

API is ready for further develop and integrate with webpage portal.



iBooking System

28




Add-on Service

Allow to book the meeting room with some add-on services, such as **Combine Room, Equipment, Catering Service and Meeting Service.**

iBooking [Dashboard](#) [Booking](#) [Browse](#) [Services](#) [Resources](#) [Statistic](#) [System](#) [User](#) [Logout \(Francis\)](#)

[Service & Time](#) [Details](#) [Confirm](#) [Completed](#)

Booking Items

 Medium Meeting Room I : 3/F





2019-04-29 **5:00 pm ~ 7:00 pm** **Duration: 120 mins**

Sales Meeting [Add Self](#) [Add User](#) [Add Attendee](#)

Attendees

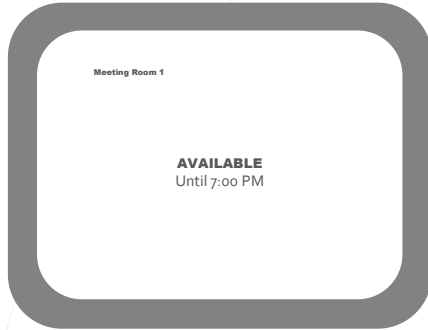
1	Francis	francisfung@isignage.com.hk	-
2	Fred	fredchan@isignage.com.hk	-

Extra Add On [Add-on](#) [Meeting Room in Educational Center](#) [Equipment](#) [Catering Service](#) [Meeting Support Service](#)

#	Photo	Name	Unit	Quantity	-
1		Activity Table	item	1	-
2		Side Table (A)	item	1	-
3		Black Tea	person	1	-
4		AV Technician Support	person	1	-

5:00 pm ~ 6:00 pm

iBooking System



Support E-ink and LCD Display

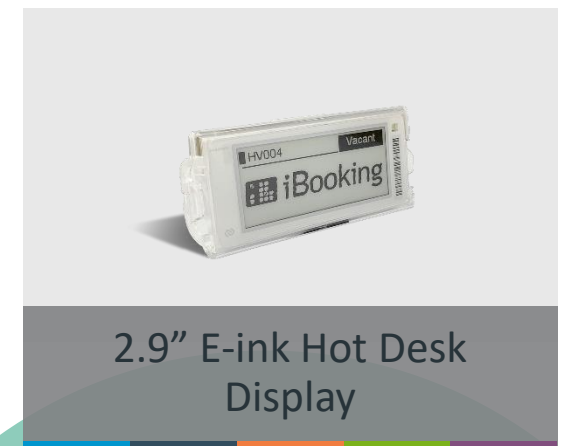
iBooking supports types of display, **E-ink Displays and LCD Display**. With wireless E-ink Display, it is more power-efficient, affordable, sustainable than traditional LCD Display.



6" E-ink Door Display



10" LCD Door Display



2.9" E-ink Hot Desk Display

iBooking System

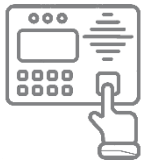
Optional integration features

30



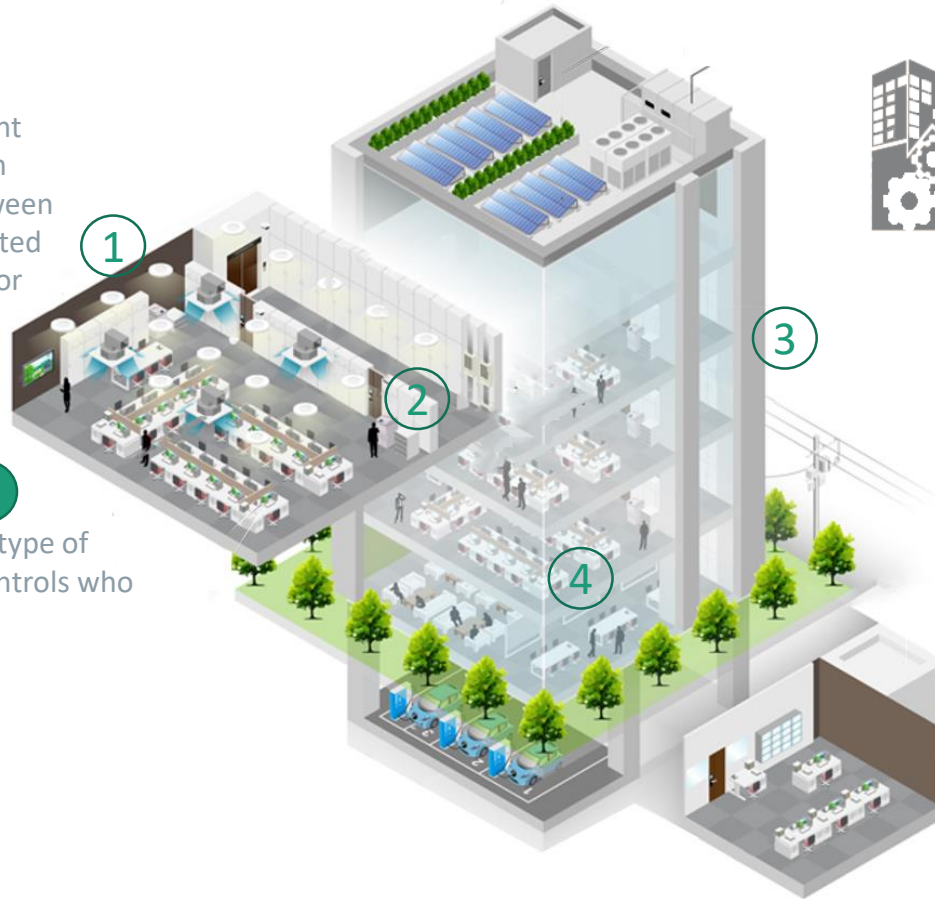
Lighting Control 1

A lighting control system is an intelligent network based lighting control solution that incorporates communication between various system inputs and outputs related to lighting control with the use of one or more central computing devices.



Access Control 2

An access control system is a type of security that manages and controls who or what is allowed entrance.



Building Management System 3

Building management systems enable you to monitor, control and optimize your building's performance throughout its lifecycle.



Facility Management System 4

Facilities Management Software is used to manage facilities as a whole as well as the space within those facilities.

iBooking System

Benefits

31

01

Increase Productivity

Enable the staff to schedule desks easily, manage bookings with a simple booking system. Allow to book ahead of time that no more time wasted searching for a workspace and meeting room.

02

Maximize Usage

Maximize meeting room and hot desk usage by enabling measure and thus optimize the space utilization, ensuring that using desks and facilities in the most efficient way.

03

Lower Cost

Significantly lower operating and administrative costs. iBooking will remove the need for a dedicated member of staff who organizes schedules or operates phones.



04

Decrease no. of No-Shows

Appointment reminders are also a great way to ensure that the users will turn up.

05

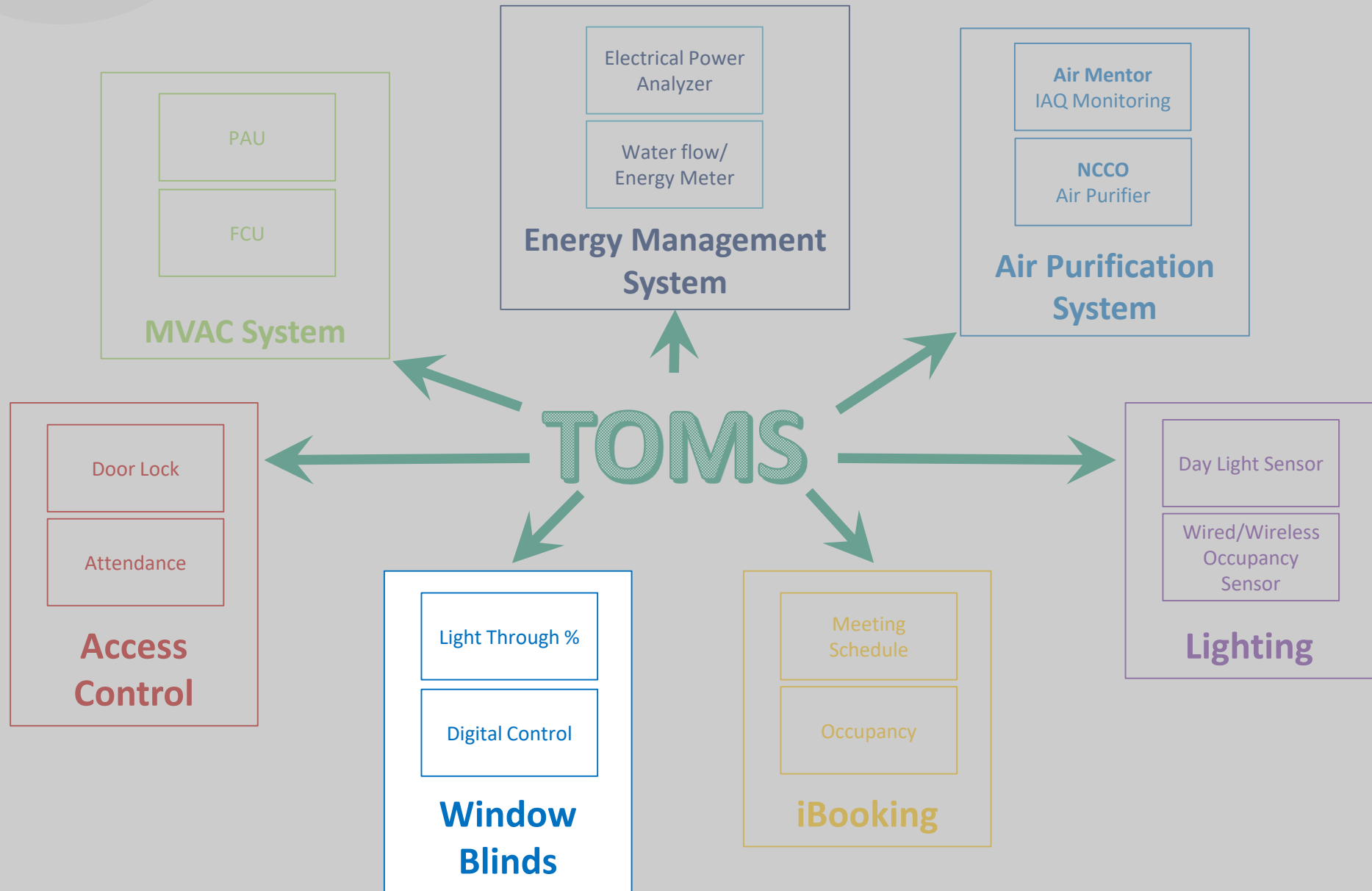
Zero Double Bookings

Allow checking real time resource status, no risk of contention and Zero double bookings.

06

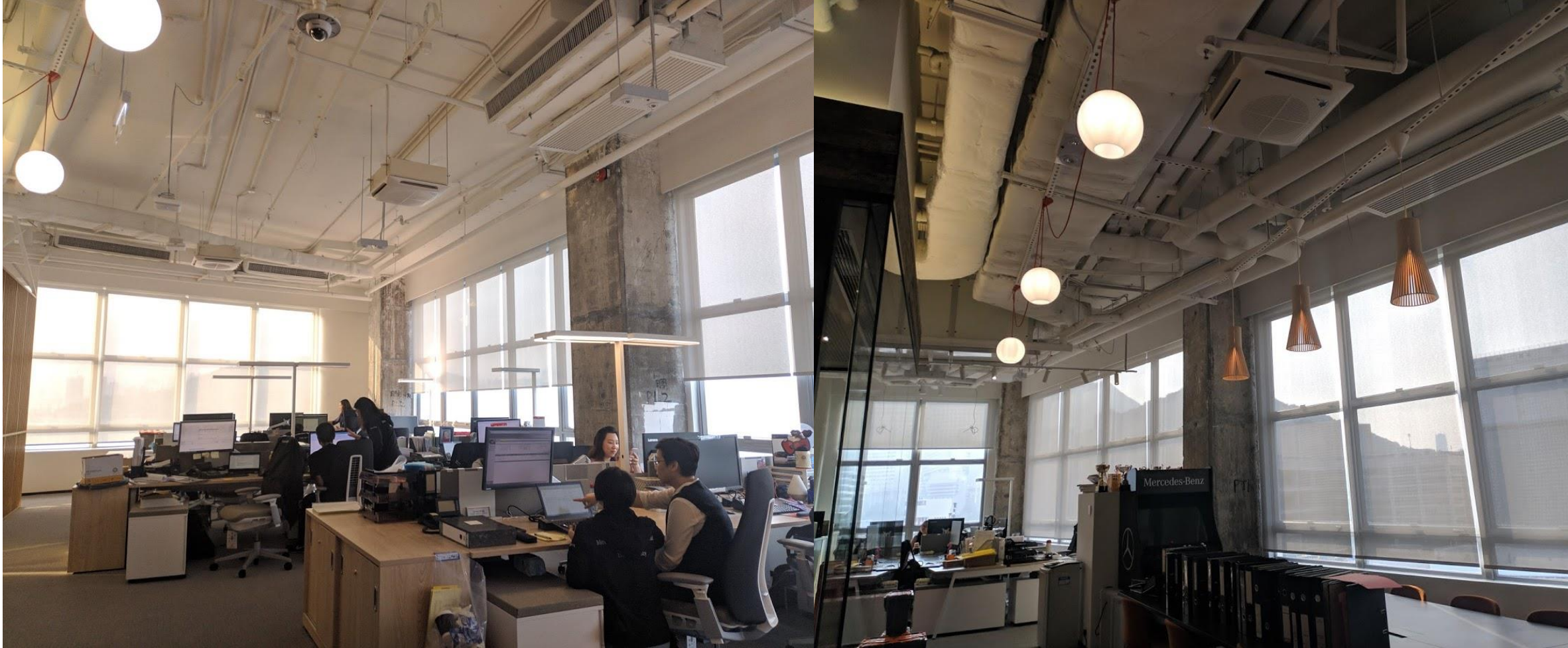
Data Analysis

Provide facilities managers the real data of desk booking usage by comprehensive reporting, assist in better decision making on desk space utilization.



Window Blinds

- Intelligent Tilt Alignment maintains uniform tilt and lift positions across multiple shades
- Programmed presets according to date and time : roll up and down automatically
- With data from local weather reports

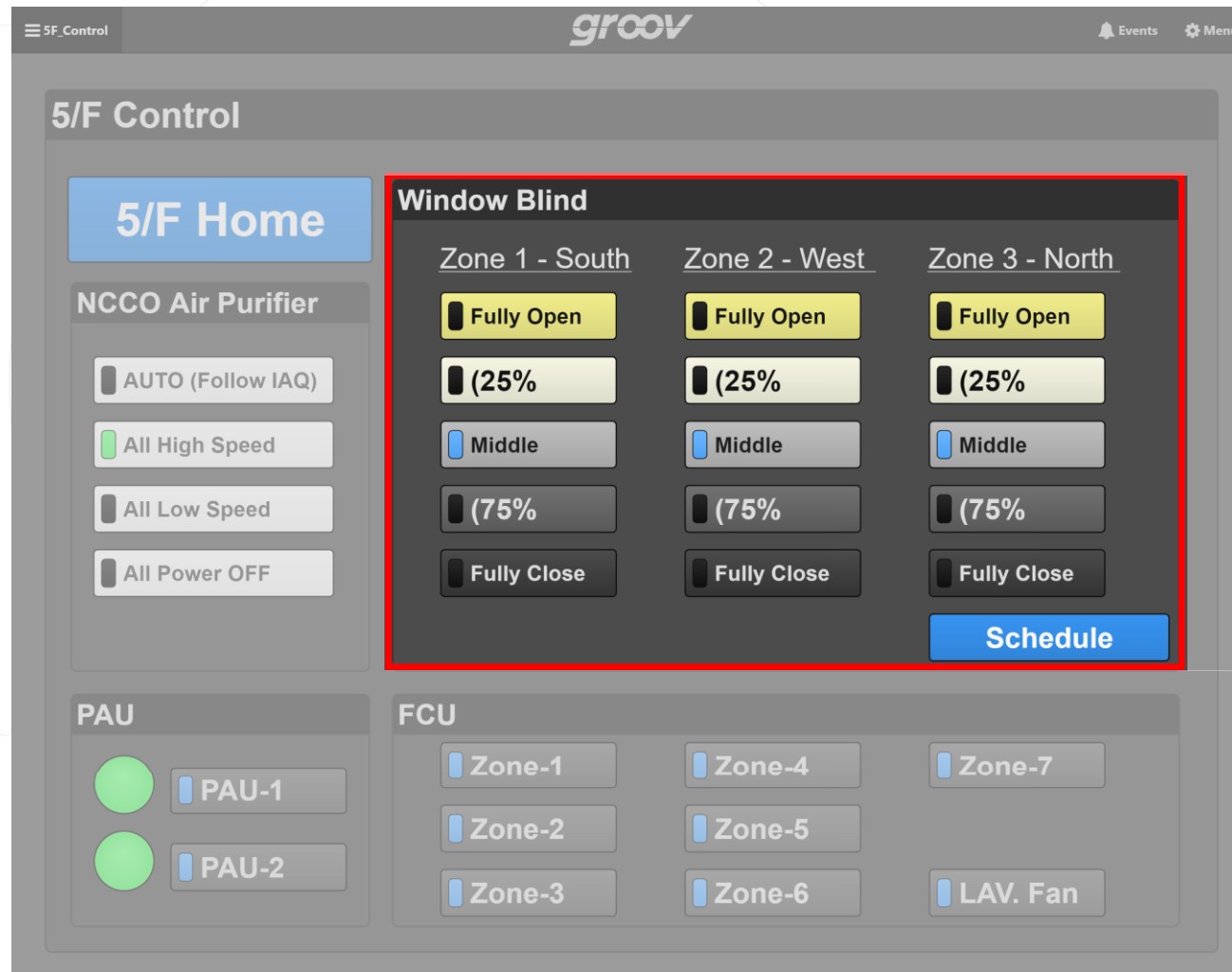


Window Blinds

Job Reference - Mercedes Benz Office

34

User Interface – Equipment Control



Window Blinds

Job Reference - Mercedes Benz Office

35

User Interface – Equipment Control

Schedule

groov

EventsMenu

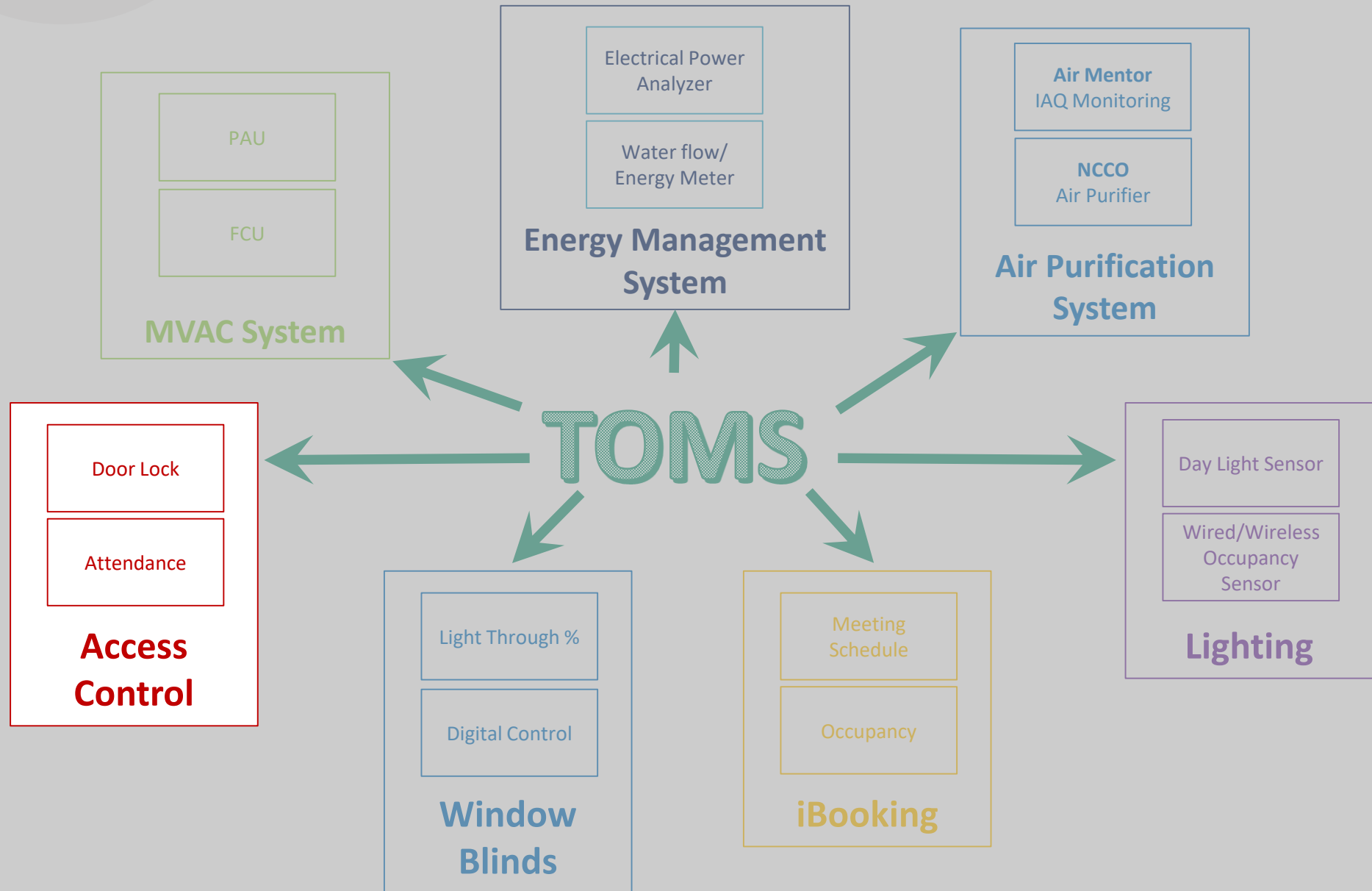
Window Blind Schedule

*HH:MM 0/25/50/75/100 %close

	5F	Zone 1 - South	Zone 2 - West	Zone 3 - North
Time-1	07:00	25	50	75
Time-2	11:00	50	75	50
Time-3	14:00	75	50	75
Time-4	17:30	25	25	0

	6F	Zone 1 - South	Zone 2 - West	Zone 3 - North
Time-1	07:00	50	50	75
Time-2	11:00	50	50	75
Time-3	14:00	75	50	50
Time-4	18:00	0	0	0

HOME



Access Control

- Hardware
 - Access Controllers
 - Biometric products
 - Controllers
 - Readers
 - Electric Locks
 - TCP/IP converter, Cards, Key Tag, Exit Switch...etc
- Software

SECURITY
SYSTEM



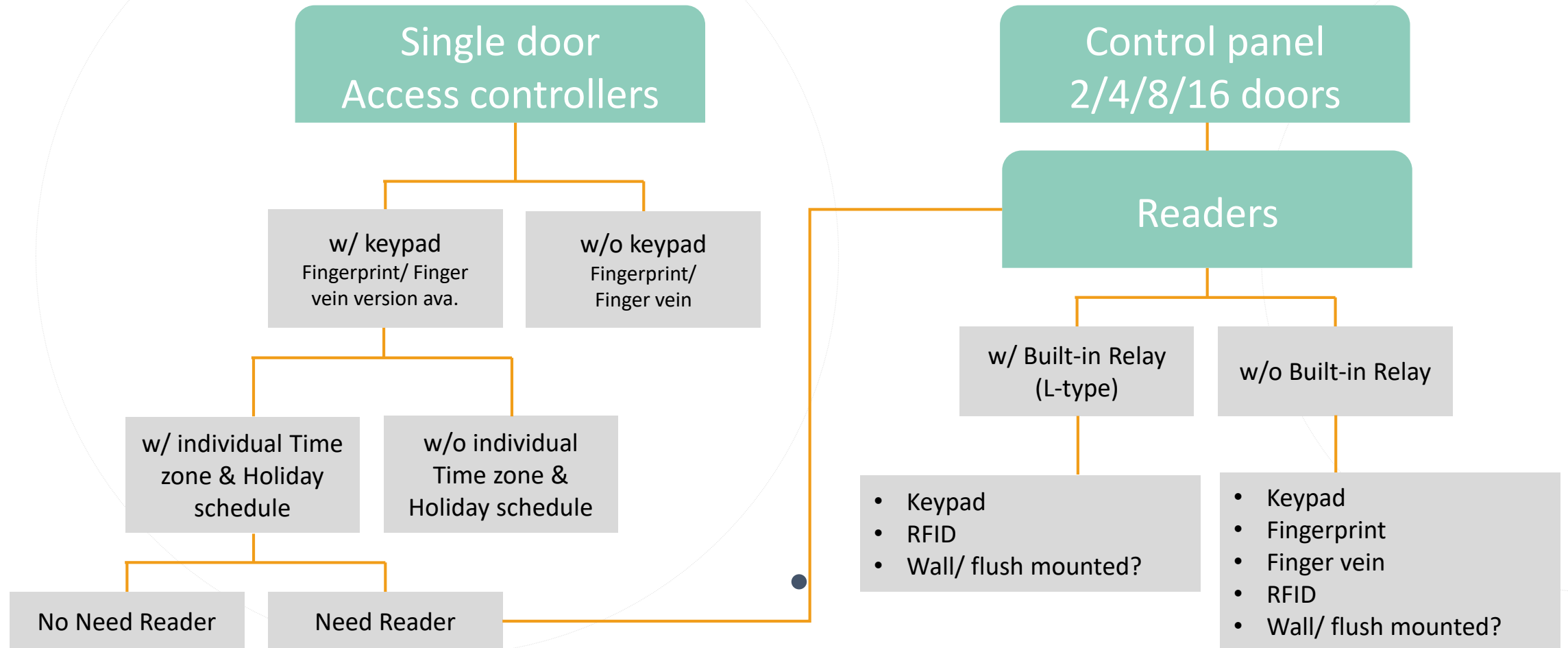
Access Control



Selection of the right mix

38

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Access Control



Featured model

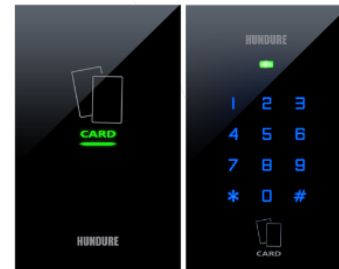
39

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Flush-mounted
Tempered glass
IP33



PXR-10/ PXR-10K



PXR-12/ PXR-12K



PXR-13/ PXR-13K



PXR-Q1 (QR code)

Wall-mounted
IP65



PXR-A1/ PXR-A1K



PXR-93/ PXR-93K



PXR-97MSKL



PXR-92M-BE (BLE)

With App



Biometrics from head to toe

Agencies' use of biometrics for identity management has centered on fingerprints and iris scans, but the options do not stop there

FACE

Facial features or patterns are analyzed using eigenfaces or local feature analysis. Research has also shown that vein-pattern recognition can be used to identify an individual.

EARS

Analyzing ear shape might be as effective as facial recognition — and the shape remains consistent as individuals age.

EYES

Iris recognition is the most common method, but retinal capillary patterns are also unique. And researchers see potential in periocular recognition.

VOICE

The tone, pitch and cadence of an individual's voice can be matched to previously authenticated recordings.

RAPID DNA TESTING

DNA, the ultimate identifier, used to take months to analyze and profile. Now there are machines that can do the work in less than 90 minutes.

ODOR

An individual's body chemistry provides an olfactory signal that can be identified by biosensors.

HANDS/FINGERS

Fingerprints are the time-honored biometric marker. Finger geometry, hand geometry and vein recognition in a finger or palm are also options.

SIGNATURE RECOGNITION

Dynamic authentication, which tracks the speed and motions of the handwriting process, is rapidly replacing the comparison of static signatures.

TYPING RECOGNITION

The force, speed and rhythm with which an individual taps the keys produce a personal signature of a different sort.

GAIT

The way one walks can be observed and measured to determine identity.



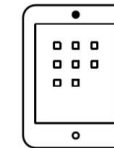
Sources: Biometrics Institute, FBI and Wired

BIOMETRICS ADVANTAGES

KEY SECURITY BENEFIT VERSUS OTHER TECHNOLOGIES

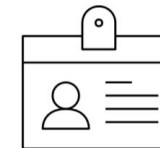
Something you know

- PIN, Password
- Forgotten
- Transmitted
- Guessed
- Hacked



Something you have

- Badge, RFID Card, Key
- Lost, Forgotten
- Damaged
- Copied
- Forged, Stolen



Someone you know

- Reception, Security Officer
- Distracted
- Mistaken
- Permissive
- Coerced



Something you are

- Physical Biomarker
- Behavioural Biomarker

Only biometrics can witness presence beyond reasonable doubt. Biometrics knows WHO was WHEN and WHERE in your





- **100% Made in Switzerland** 
- **reddot design award**  **reddot**
design award
- **The most accurate and comprehensive product range**
- **Heavy duty compatible** *(water/ oil/ dust/ dirt/ thin latex gloves)*
- **Anti-spoofing**
- **Customizable casing, screen logos & buttons**



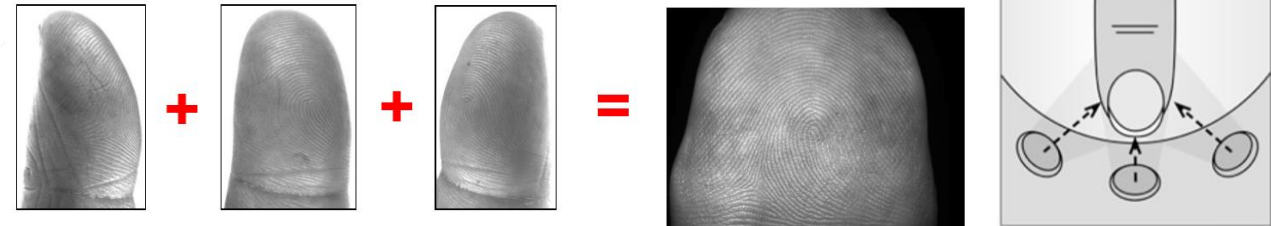
2D EYE

- Features & Benefits
- Hybrid FACE + IRIS
- Contactless & Hygienic
- Indoor ONLY
- Scrambled PIN & RFID
- Liveness detection
- Target segments
- Offices/ shops/ Residential



3D Terminal

- Features & Benefits
- Contactless & Hygienic
- Anti-spoofing
- PIN & RFID compatible
- 120 degree x 3 cameras
- ZERO failure-to-enroll
- Target segments
- Data Center/ Airport/ Military/ Hospital



Access Control

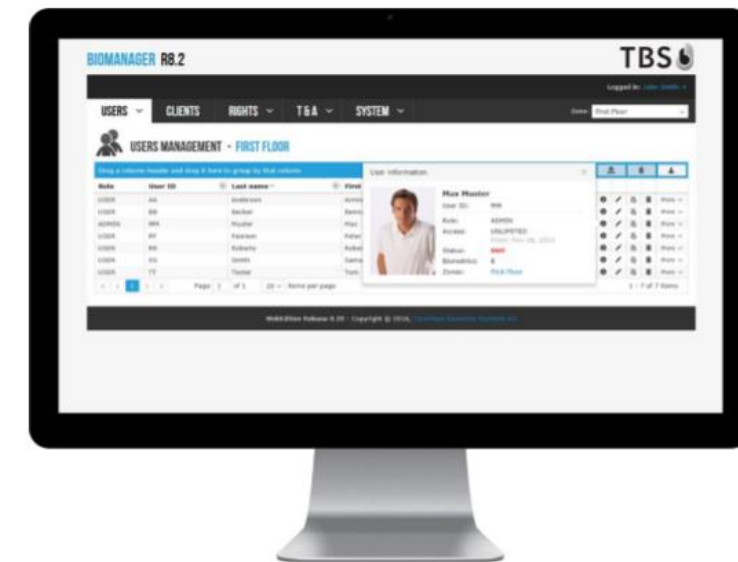


Software BioManager

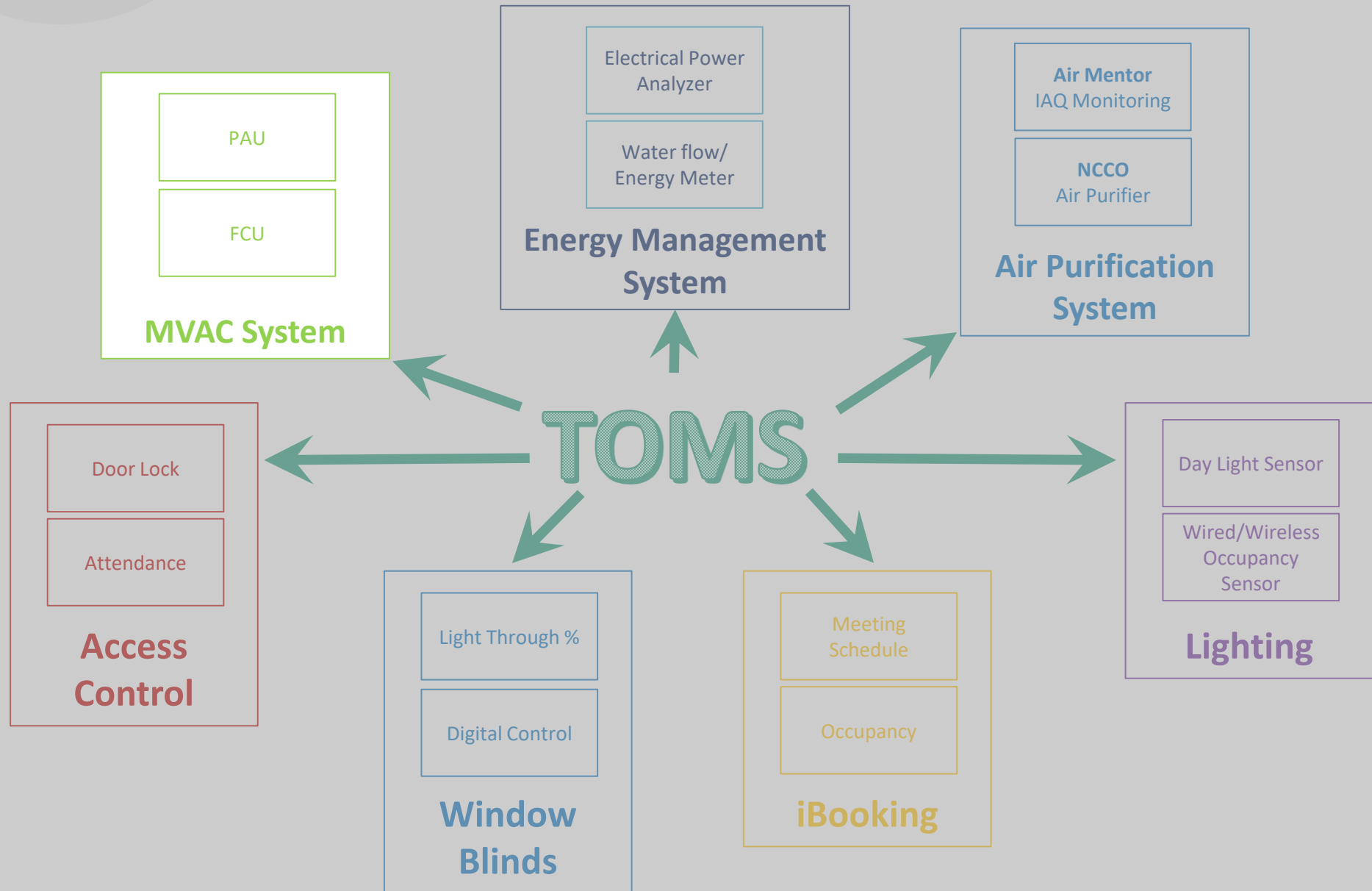
43

All devices are managed by the TBS server software, together forming the TBS Biometric subsystem. It can be integrated seamlessly into third party applications.

- Management of devices and network
- Management of users and their rights
- Management of zones
- Synchronization of large volumes of transactions
- Sync even in partly instable networks and/or including offline branches
- Support for special database back ends
- Integration with third-party controllers and various RFID technologies
- Customization of Firmware workflows
- Adaptations for difficult user groups
- Special requirements such as smart mode or remote enrolments
- Recovering of tampered databases



43

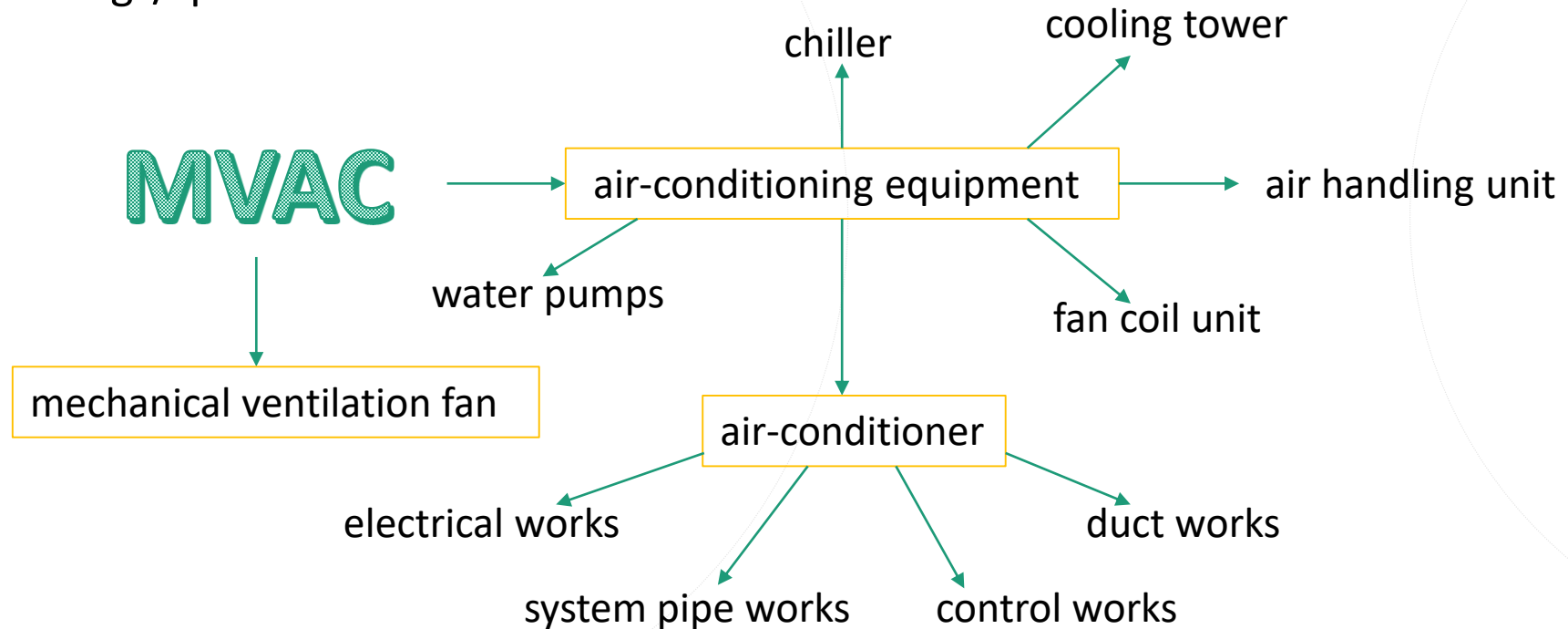


MVAC System

Mechanical Ventilation & Air Conditioning

45

- Provide customers with sufficient inflow and outflow of air within buildings/spaces by channeling treated air into the building
- Extracting exhaust air out; and controlling and maintaining the temperature and humidity of air within buildings/space

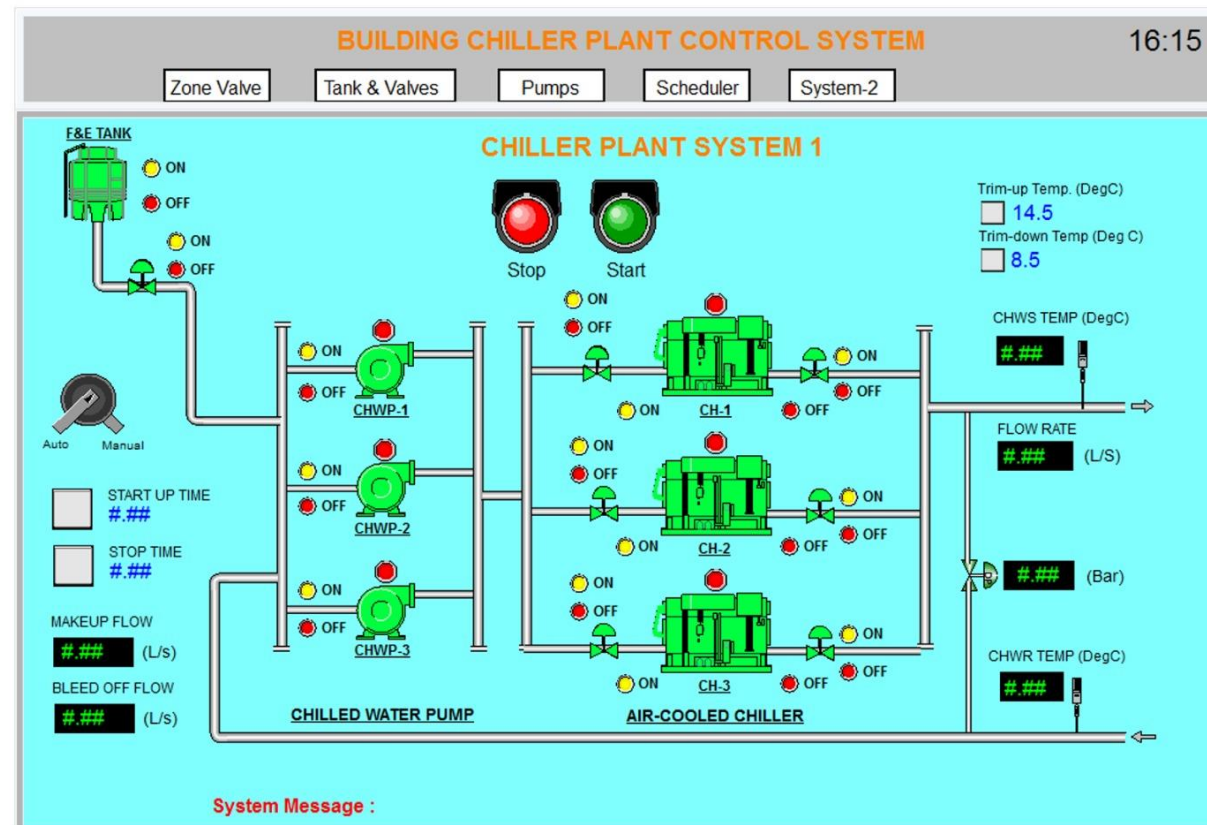


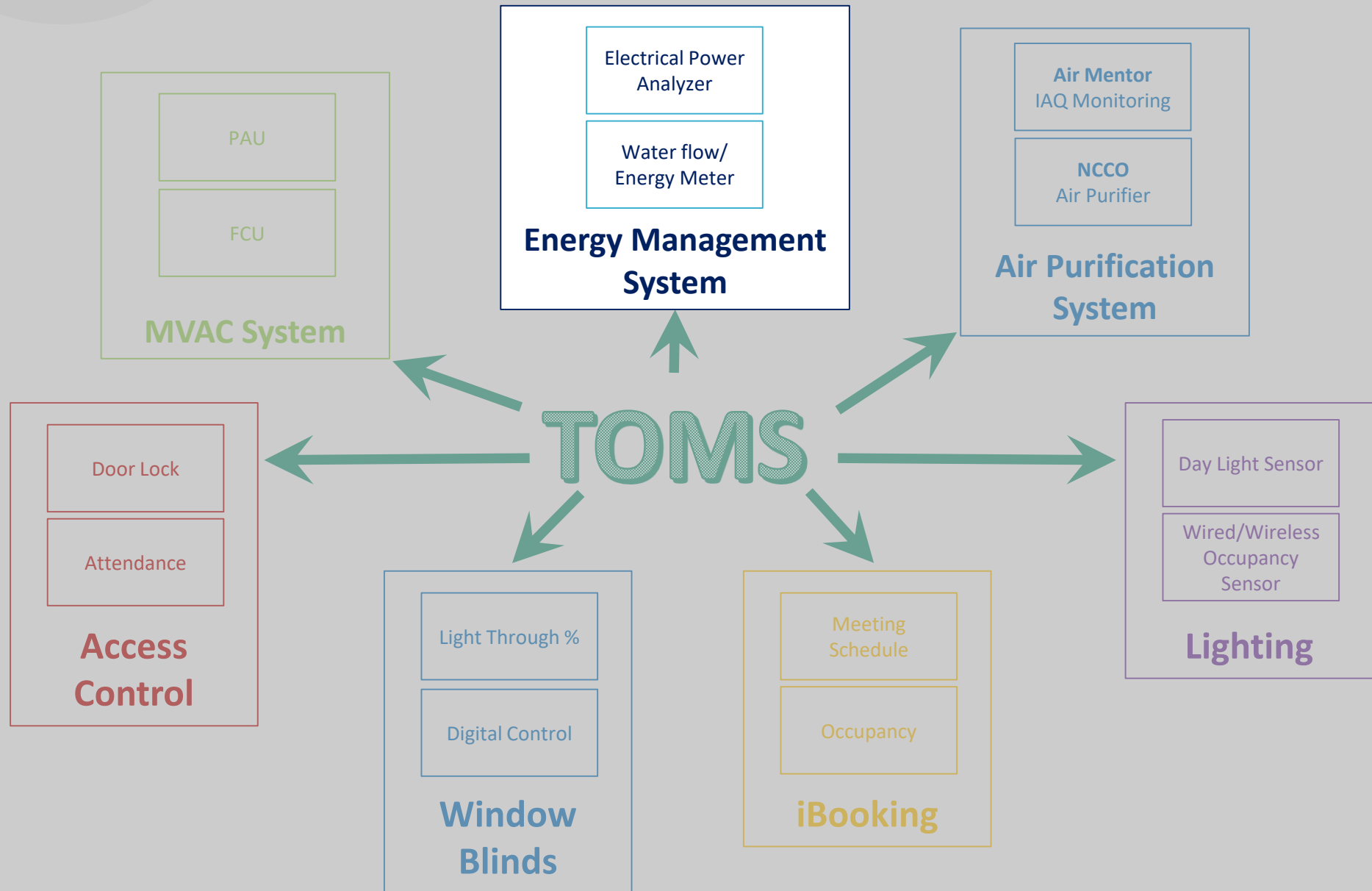
MVAC System

control interface of building chiller plant control system of Po Fook Memorial Hall

46

Chiller Plant Control

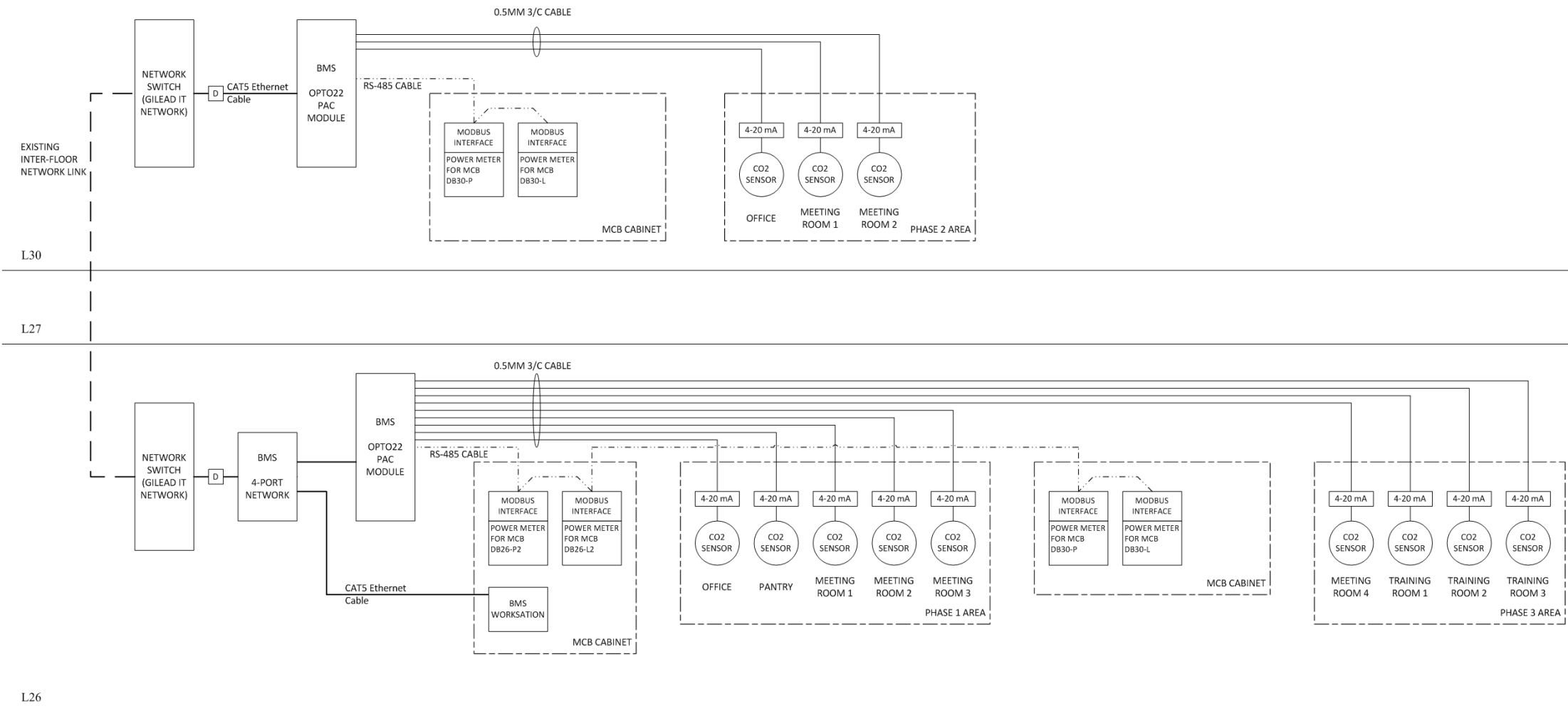




Energy Management System

System schematic

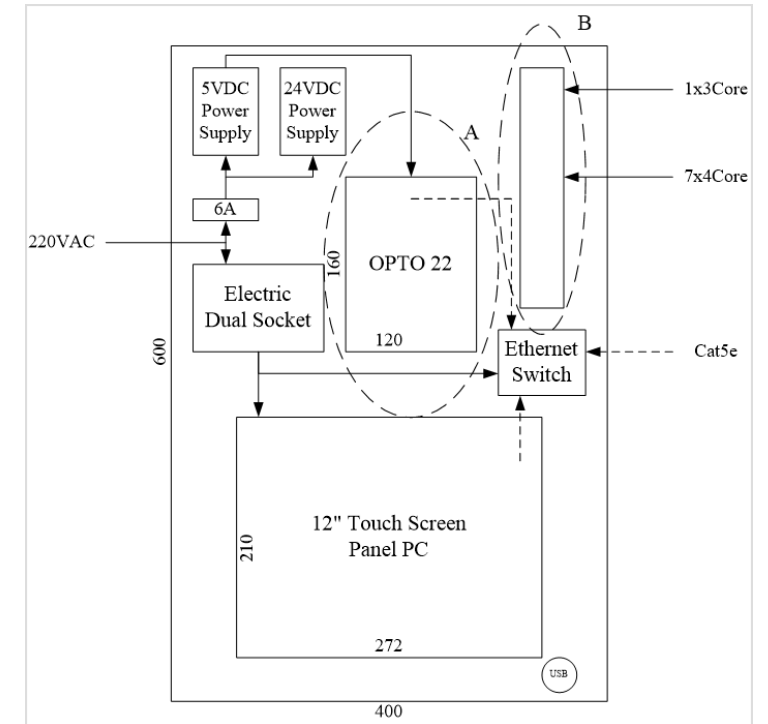
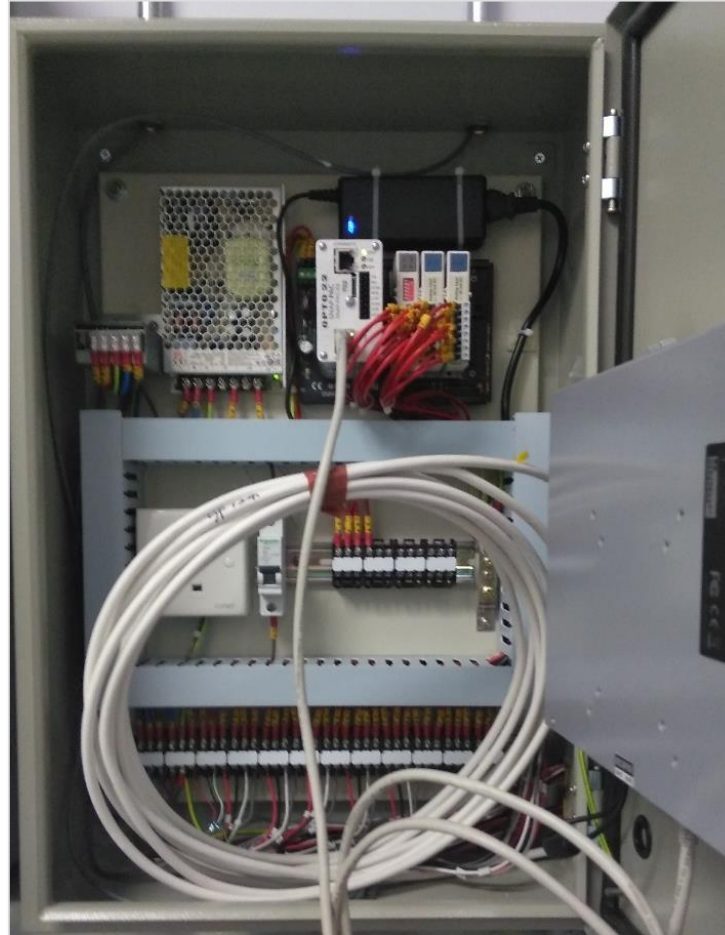
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Energy Management System

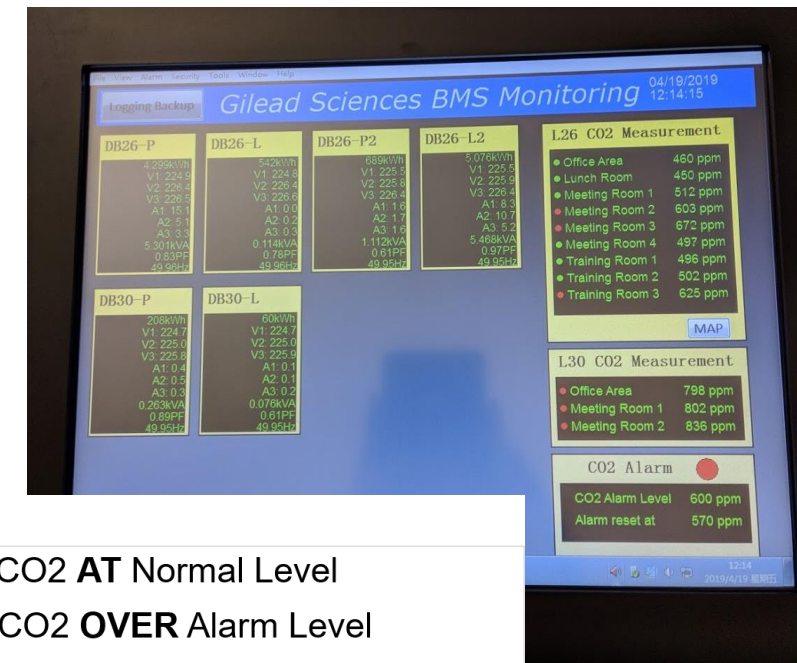
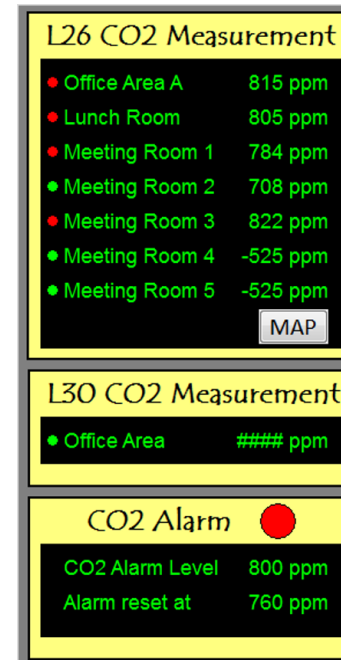
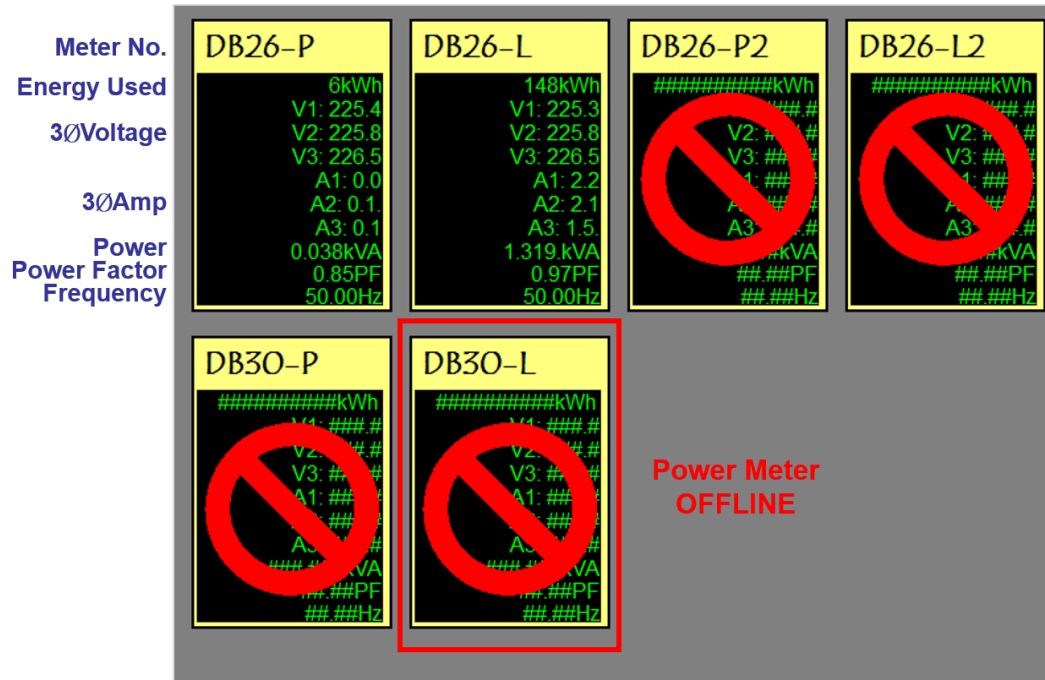
Gilead Sciences – monitoring energy meter and CO2 sensor

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Energy Management System

Workstation interface



- CO2 AT Normal Level
- CO2 OVER Alarm Level

MAP – Click to view floor map

- CO2 Common Alarm Active
- Click to adjust Alarm Level value
- 5% span for reset alarm