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HDL<sup>®</sup> www.hdlautomation.com 01-02



#### What Is Automation?

Automation is the intuitive, advanced, and intelligent operation of a building's functions.

From the control of lighting and music, to the opening of curtains, automation enables your building to look after you.

With HDL control over a home becomes intuitive and effortless, creating an environment that 'just works'.









#### Who We Are

At HDL we have a passion for creating innovative products which help people in their everyday lives, whilst reducing energy consumption and the environmental impact of buildings.

Since 1985 we have been developing award winning products which are accessible, affordable, and easy to use.

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#### A Complete Solution

Because we have created a range of automation solutions which cover every element of a building, users can create a system which is truly integrated

The HDL product range is constantly being updated. Currently the range encompasses lighting, HVAC, background audio, shading, energy management, sensors, user interfaces, intercoms, sockets, and switches.



Lighting



HVAC



Background Audio





Energy

Monitoring





















Sensors

Switches

Sockets

#### Multi Sector Support

With our four product ranges, we can provide solutions that specifically meet the demands of the residential, commercial, marine, and hospitality sectors.

HDL<sup>®</sup>

Because of this our products can focus on the tasks that you need them to complete, making them more efficient and cost effective.

We know there is no 'one size fits all' automation solution, that's why we will always be there to help you on your automation journey.









#### Our Systems

The current HDL system range consists of KNX, Buspro, and Buspro wireless.

These three systems have been created to provide a user with an automation solution which is tailored to meet the demands of their particular situation.



#### **Focused Towards**



"The world's only open standard for home & building control."

As one of the longest established protocols, KNX has the largest user base, and largest product range.

The KNX system is commonly used in large scale commercial projects such as airports, shopping centers, and governmental buildings.

#### buspro

#### **Focused Towards**



Residential & Hospitality Solutions

"Developed by HDL as a more flexible and adaptable alternative to KNX."

Buspro is the ideal system for any commercial, hospitality, or residential project.

Backed up by the extensive HDL Buspro product range, users are provided with a system that is as capable as KNX, but fully customizable.



#### **Focused Towards**



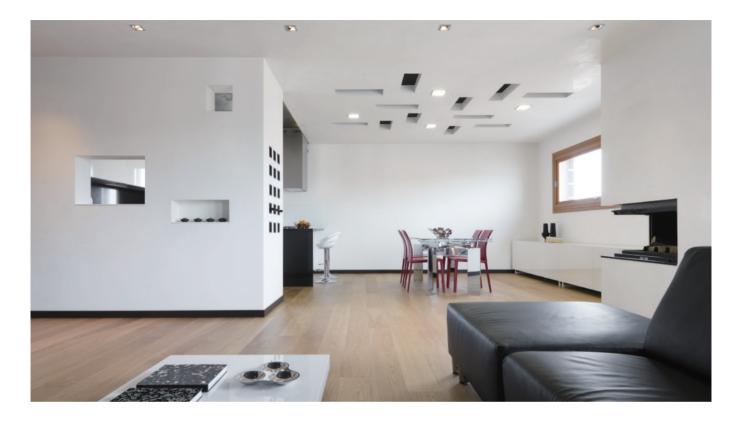
DIY Solutions

"Created for users who want an easy to install system."

As the leatest addition to the HDL family, Buspro wireless has been developed to take advantage of the recent progress made in wireless technology.

With Buspro Wireless the standard wiring that a normal installation requires is no longer needed, enabling installations to be completed faster and at less expense.

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#### Why HDL?

At HDL we are constantly working to improve our solution range, and create the next automation innovation.

All of our solutions can be fully customized to meet the needs of an end user. From module specific functionality, to the color of a fascia panel, HDL is as flexible as you need it to be.

#### There For You

You can rest easy knowing that HDL provides professional training to all HDL integrators, so installations will always be completed to exemplary standards.

This is made possible by a global network of local HDL training centers, which ensure that wherever you are in the world HDL always speaks your language.

In the unlikely event that a module malfunctions, a two year no quibble guarantee, and dedicated technical support team will always be there for you.

#### buspro

Powerful

Adaptable

Customizable



Buspro brings users a powerful and adaptable system which can fully control all of the automated elements

With Buspro, HVAC can be adjusted, lighting dimmed, curtains opened, and practically every electrical device or appliance controlled centrally or remotely.

#### Benefits

Dependable



Guaranteed



Future Proof

When a Buspro system is installed you not only get a two year no quibble guarantee, but the reassurance that all of our products have been stringently tested to ensure they can meet the most demanding environmental conditions.

As standard all Buspro systems are future-proofed enabling upgrades to be completed effortlessly.

www.hdlautomation.com 11-12 buspro

#### **Product Range**



Extensive



Innovative



**Evolving** 

With a huge range of modules, sensors, and user interfaces, the Buspro system has one of the largest automation product ranges in the world.

This range is constantly being improved upon and expanded by our dedicated research and development team, ensuring that our customers are provided with the very latest in automation technology.











#### Compatible



Flexible



Upgradeable



Supported

For those with an existing automation installation, Buspro can be used to upgrade their current installation effortlessly.

With dedicated multi-protocol support Buspro can also be incorporated into an existing installation, or have 3rd party modules used within its system.

#### Multi Sector

Not many systems can meet the demands of the commercial, hospitality, and residential sectors as effectively as Buspro can.

With modules specifically tailored to meet the demands of each market, and an inherent flexibility and customizability, Buspro has proven itself in shopping centers, restaurants, and homes across the world.

From PMS integration to DMX lighting control, Buspro is the ultimate solution for any automation installation.











# 03

KNX is the worldwide standard for home and building control, allowing components and devices to communicate via a single language.

This allows KNX products from different manufacturers to be combined into a single system, which is guaranteed to be flexible, adaptable, and future-proof.

HDL KNX solutions bring users the ability to control lighting, heating, ventilation, shading, background audio, and appliances effortlessly.

## Extensive Range

With a wide range of KNX solutions to choose from, whatever your requirements are HDL can provide you with a solution.

Our KNX range encompasses over seventy individual solutions, making it the most comprehensive KNX selection from a single manufacturer currently available.

This range is constantly being updated and expanded to provide users with an unbeatable building control system.

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#### Certified

As a long standing member of the KNX Association, all HDL KNX products are inspected and certified to ensure they meet International Standard (ISO/IEC 14543-3), European Standards (CENELEC EN 50090 and CEN EN 13321-1) and Chinese Standard (GB/T 20965).

This guarantees not only the compatibility of HDL KNX products, but their safety and reliability.











#### Secure

KNX has been specifically developed to provide a rock solid base on which an automation system can be built

Using this tried and true system leaves you safe in the knowledge that you have one of the most reliable, and well established systems available.

HDL KNX solutions can even be integrated into your existing security system, to improve sensor coverage and access control.



#### Efficient

AUTOMATION BRINGS YOU MORE THAN JUST COMFORT AND CONVENIENCE.

BY USING THE HDL KNX RANGE A BUILDING CAN MASSIVELY INCREASE IT'S ENERGY EFFICIENCY.

IN AN AVERAGE HOME EQUIPPED WITH HDL SOLUTIONS, ENERGY SAVINGS OF 30% ARE POSSIBLE THROUGH THE USE OF:













#### Compatible

Built to provide users with the best of both worlds, a HDL KNX solution is fully compatible with KNX modules manufactured by other companies, as well as the award winning HDL Buspro and Buspro wireless solutions.

With a HDL KNX solution you can create a system that meets your needs exactly, yet retain the core values which are inherent to all KNX products.











#### Intelligent

HDL KNX automation solutions form an intelligent autonomous network within a building.

Capable of operating automatically or remotely, the HDL KNX system can control lighting, climate, shading, background audio, home entertainment systems, and connected appliances with ease.

This is made possible through the systems dedicated logic processors, which enable a building to actively look after its occupants.



Lighting







Bac



Background Audio



Home Entertainment Systems

#### Customizable

We know that every automation installation is different, that's why we offer a full customization service to every HDL customer.

From the fascia color of a panel, to personalized icons and engraving, HDL KNX solutions can be tailored to your exact needs.

#### Customized Iconography

























#### Controllable

With the push of a button, or the touch of a screen, the entirety of your HDL KNX installation can be controlled with ease.

Thanks to our unique panel selection, you can choose from classic switches and buttons, or state of the art capacitive keypads.

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#### Suitable For **Any Situation**

From family homes to flats, and mansions to malls, a HDL KNX solution is suitable for any type of building.

With the huge range of modules available, a powerful system can be created that can control hundreds of household devices.

This is due to the modular nature of the KNX system. If a new device needs to be controlled, a new module can be added to the existing KNX system effortlessly.

**WHOEVER YOU** ARE, **WHEREVERYOU** ARE, **WHATEVER BUILDING YOU** USE, **HDL HAS AN AUTOMATION SOLUTION FOR** YOU.

#### buspro WIRELESS

# 04

#### What Is Buspro Wireless?

Buspro wireless is an automation system that gives users complete control over an entire building, without the need for rewiring.

Consisting of three basic elements, the gateway, the sensor network, and the control targets, Buspro wireless can be controlled centrally via a Buspro wireless panel, or remotely via a mobile device.

#### Quick To Install

We created Buspro wireless to be swiftly installed, and easily configured.

This is enabled though our revolutionary wireless technology, which eliminates the need for rewiring.

When Buspro wireless is coupled with the easy programming app, configuring your installation becomes quick, easy, and intuitive.

With the app amateurs and professionals alike can manage an entire building via customized zones, scenes, and sequences. www.hdlautomation.com 25-26

#### Dependable

We know that sometimes accidents happen, be it a water leak or a power surge, every Buspro wireless module is rigorously tested to meet the harshest real world environments.

Even if a module is severely damaged, thanks to the wireless mesh network your command will always get through.

# Lighting Control Actuator Air Conditioner Actuator Actuator Sockets Floor Heating Actuator Panels/Switches Shading Control Actuator Shading Control Actuator Shading Control Actuator Shading Control Actuator

# Why Buspro Wireless?

Buspro wireless brings users a powerful command platform with a wide range of modules, enabling them to take complete control over any building.

Once installed the flexible and easily customizable system can increase a building's energy efficiency, security, and convenience.





## Who Can Use It?

Buspro wireless can be used to control a wide range of devices, in practically any type of building.

From homes and offices, to hotels and schools, Buspro wireless can be used to effortlessly bring automation efficiency into any environment.

With easy to use panels and iOS/Android control, adding devices, creating scenes, and building sequences has never been so easy.





#### Android

## What Can It Do?

Using Buspro wireless scenes can be created that allow you to take control over multiple devices and appliances at once

With a single button press, you can control your lighting, television, air conditioner, curtains, home cinema, and a host of other connected devices.

The system's intelligent control features also mean that your connected appliances can be activated or deactivated automatically, allowing a building to effectively manage itself.



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#### Your Schedule

Make your building follow your schedule by configuring your connected devices to open and close, or turn off and on at set times.

From opening the curtains and brewing coffee when you wake, to presence simulation when you are away, your building will work in time with you.

#### A Holistic Provider

At HDL we don't just make automation systems, we make homes safer, offices more efficient, and hotels easier to manage.

We create solutions which enhance comfort and convenience, while reducing the environmental impact of human habitation.

#### Hospitality Automation

# 05

HDL hospitality automation solutions enable hotel operators to not only improve guest comfort, but a hotel's energy efficiency.

Able to be integrated into every area of a hotel, HDL brings guests a powerful control platform, and operators a holistic management solution.

Fully compatible with leading PMS systems, HDL simplifies the building management process whilst simultaneously improving the guest experience.

# The Future Of Hotel Management

"ENHANCE THE GUEST EXPERIENCE, WITH A MORE EFFICIENT ENVIRONMENT"

HDL hospitality solutions empower hotel owners to optimize their building, and provide guests with truly memorable experiences.

With HDL hospitality automation time consuming tasks become trivial, and labor costs are reduced.

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### What Is Hospitality Automation?

Hospitality automation makes the day to day running of a hotel simple, efficient, and effective.

HDL brings hotel operators a powerful control platform which can increase energy efficiency, enable services to be delivered faster, improve a building's security, and increase guest comfort and convenience.

#### AUTOMATE YOUR:



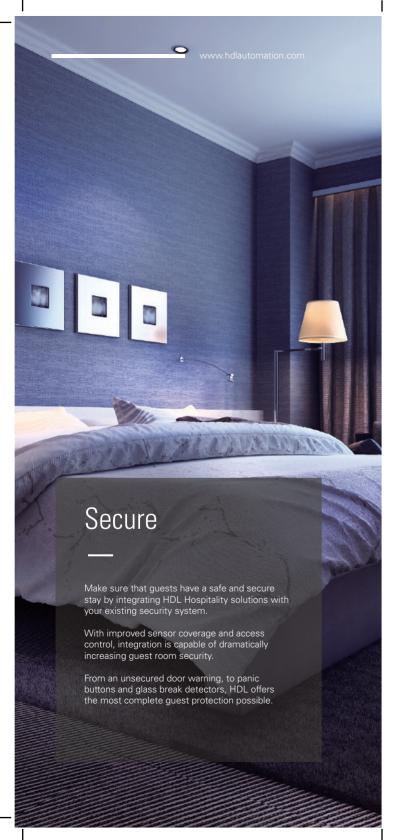
#### Holistic

From reception to guestrooms, and hallways to back of house, a HDL hospitality automation solution can provide users with universal control over an entire building.

Able to be installed during construction, remodeling, or retrofitting hotel managers can use the HDL system to significantly improve the guest experience.

This can be done through customizable guest room welcome scenes which activate HVAC, lights, appliances, and background audio as soon as the door is opened, or intuitive total room control via a wall panel and the guests own iOS/Android device.





#### Compatible

One of the best things about a HDL hospitality solution is that it's fully compatible with a hotels existing PMS system.

Using a combination of the HDL Intelligent hotel management software, and the existing PMS system, hotel procedures can be automated, real time reports generated, and on demand monitoring and control achieved.

OUR
AUTOMATION
SOLUTIONS
HAVE
BEEN
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WITH:













#### Customizable

We know that every automation installation is different, that's why we offer a full customization service to every HDL customer.

If a panel needs to be a specific shade of red, or a doorbell needs to be engraved, a HDL hospitality solution is as flexible as you need it to be.

#### Customized Iconography



























#### Controllable

A HDL automation system is designed to work behind the scenes, creating the perfect atmosphere via automated sequences and adaptive environmental management.

Sometimes a human touch is needed though, that's why we've created a unique range of hospitality user interfaces.















#### Proven

Installing an automation solution into a building is a big

At HDL we know this, having worked with countless industry leaders around the world.

With our unique innovations a hotel can increase productivity, profitability, efficiency and quest satisfaction.

#### **SOME OF OUR PAST PARTNERS WHO HAVE CHOSENTHE HDL HOTEL ADVANTAGE INCLUDE:**

















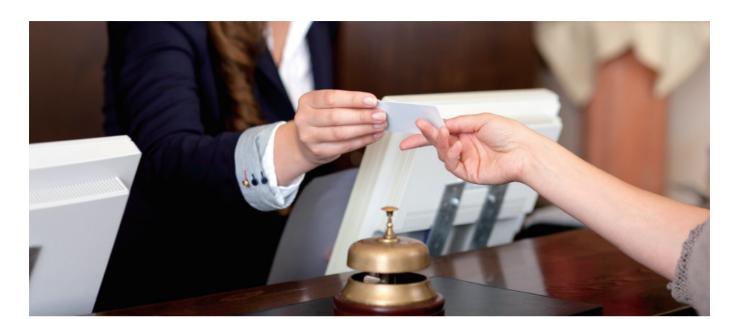










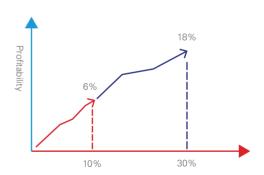


#### **Profitability**

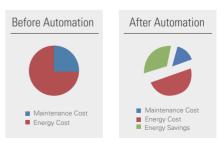
"If an average hotel reduces its energy consumption by 10%, profit margins will be raised by 6%."

#### -US.EPA

Thanks to light harvesting, temperature balancing, intelligent lighting, occupancy detection, and smart appliance control, HDL automation solutions make energy reductions of around 30% possible.



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Standard Energy Savings And Profitability
 Projected HDL Energy Savings And Profitability

#### Case Studies



HDL automation solutions have been installed into thousands of buildings across the globe.

From London to Lisbon, and Berlin to Beijing, a completed HDL project will always be close by.

To show what HDL automation solutions are capable of, on the following pages we've collected some of our latest residential, commercial, and hospitality installations.



Homes come in a variety of styles and sizes, to suit the individuality of their owners.

HDL has completed projects in flats, country homes, mansions, and even palaces.

Our professional installers can create an automation system which is tailored to an owner's exact needs, enabling them to focus on what's important in life.

HDL www.hdlautomation.com 45-46

#### Mexican Villa

Located in Hidalgo, Mexico, this stunning five bedroom villa epitomizes style, avant-garde design, and modern technology.

Empowered by the HDL Buspro system the villa has fully automated lighting, HVAC, and shading creating an environment which automatically adapts itself to the owner's needs.

Able to operate autonomously, or be controlled via DLP panels and iOS/Android devices, the owner is provided with a uniquely flexible control platform.









DLP Panels iOS/Android

#### Norwegian Smart House

This recently renovated Norwegian family home in Oslo is fully controlled by the Buspro system, enabling it to be ultra-efficient yet retain a warm, friendly, welcoming environment.

Each room in the house utilizes a HDL keypad or panel to provide individual room control over heating, lighting, ventilation, shading, and background audio. Central control over the entire house is provided via the owners' smart phones, and two HDL panels mounted in the master bedroom and kitchen.

Integrated into the HDL system were glass break sensors, window sensors, and door sensors.

This enables the security status of the home to be monitored from anywhere in the world, via an Android or iOS device.









Shading Background Underfloor Ventilation Audio Heating





iOS/Android Device



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#### Commercial



Our commercial customers have one requirement first and foremost, energy savings.

With a full HDL automation solution energy bills can be reduced by up to 30%, making it little wonder that HDL commercial automation solutions are so popular.



#### Opal Trade Center Mall

With a projected daily footfall of thousands, the operators of the Iranian Opal Trade Center Mall realized that to deliver the best guest experience possible their entire lighting and background audio network needed to be automated.

Due to the modular nature of the HDL Buspro system, and its compatibility with building management systems, HDL was selected to be the sole automation provider to the project.

With the installed Buspro system, the entirety of the mall's lighting and audio channels can now be centrally controlled via the building manager's work station. This provides an efficient and effective control capability, whilst minimizing operational cost and maintenance.





ighting Backgrou

HDL www.hdlautomation.com 49-50



#### Boryspil International Airport

Airports demand high quality systems which are ultra-reliable, user-friendly, and efficient.

With time proven HDL KNX solutions available, the Boryspil International Airport made the decision to automate its entire lighting network.

Covering thousands of channels, and hundreds of areas, the airport operators selected HDL to maximize their lighting efficiency.

Through a combination of light sensors and presence detection sensors, energy expended on unnecessary lighting targets has now been completely eliminated.





#### Hospitality

HDL hospitality solutions can be installed into any manner of hotel, restaurant, or bar.

Through utilizing HDL automation solutions, those in the service industry can simultaneously increase guest comfort, while streamlining and simplifying building management.

With full PMS integration possible, HDL automation solutions can be seamlessly incorporated into a hotel providing increased operational efficiency and reduced staff workload.

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#### **Crown Towers**

Located in the Philippines, the Crown Towers is a luxury hotel featuring 541 guest rooms, a bar, a restaurant and a gym.

To enhance guest comfort and convenience the Crown Towers management team requested that HDL fully automate all of the hotel's guest rooms and public areas.

Guestrooms now have automated shading, lighting, and HVAC as well as the ability to be controlled via a bedside mounted DLP panel or the guest's iOS/Android device.

Public areas in the hotel also benefit from shading, lighting, and HVAC but have additional background audio control to provide a tailored ambiance.













DLP Panels iOS/Android

#### Savoy Grill

Renowned throughout the world the Savoy is the epitome of luxury, elegance, and attention to detail.

To ensure that diners in the hotel's Grill Room are provided with an unparalleled dining experience, the hotel operators requested that HDL automate the restaurant's lighting, HVAC, and background audio.

As the hotel specified that the Grill Room was to be separated into three distinct zones, the HDL team were able to utilize the lighting and audio to enhance these three distinct areas.

Controlled through a combination of three DLP panels and an iOS app, the restaurant now has three unique environments negating the need for traditional room partitions.





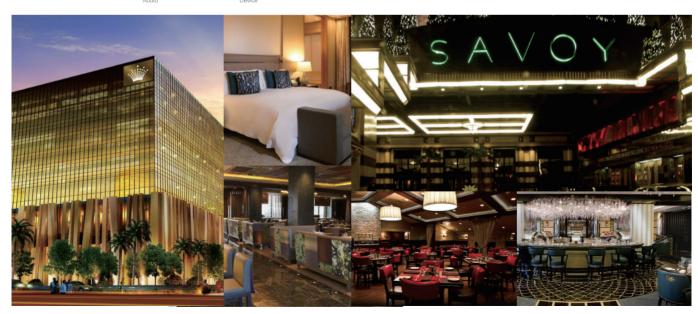






HDL

DLP Panels iOS Device



# Integration Partners

07

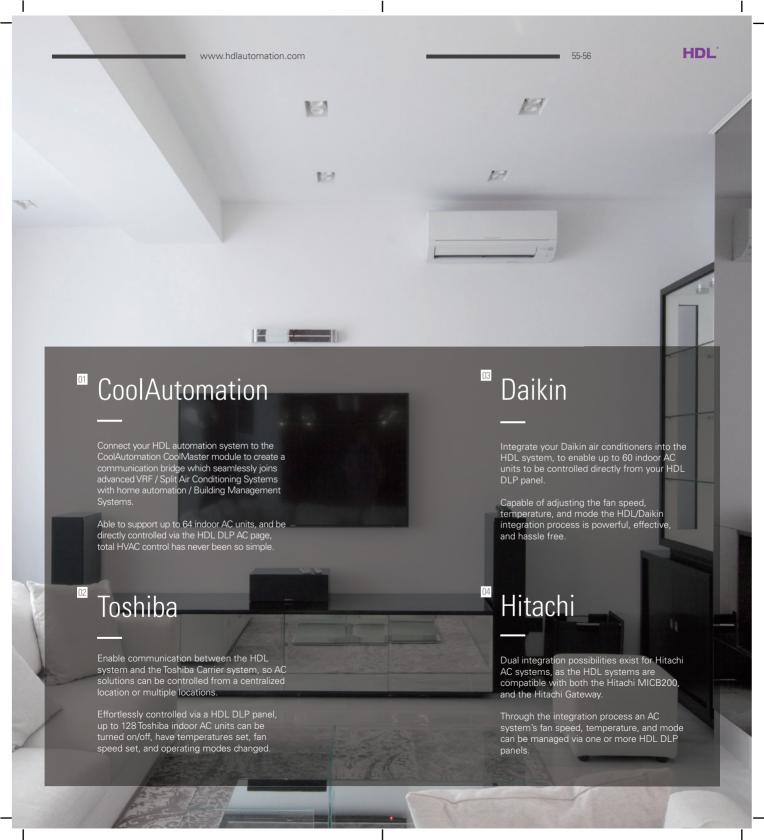
At HDL we realize that buildings require automation solutions which are as individual as their owners.

That's why we've partnered with some of the world's leading appliance and electronic manufacturers, enabling a truly inclusive automation experience to be created.

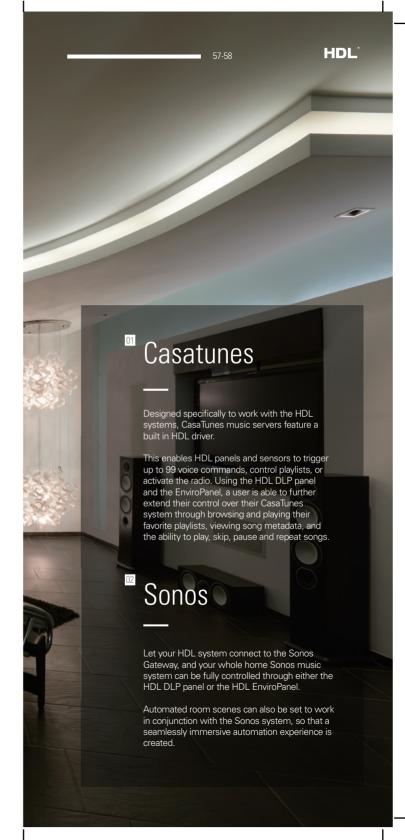
From air conditioners to audio systems, and hospitality management systems to third party apps, the flexibility of the HDL systems ensures your smart building can be uniquely customized.



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#### THRONE

With a revolutionary 3D control interface, the THRONE iOS app has been developed to make control over a building's automated elements genuinely intuitive.

Fully compatible with the HDL systems, the THRONE platform also includes the T-Studio configurator which enables integrators to develop a THRONE interface for their project independently.

#### RTI

Now fully compatible with HDL's systems, RTI can empower building owners by unifying control of electronics, whole house audio, lighting, security, and HVAC into one simple interface.

This interface can take the form of the RTI mobile app, or one of the many RTI control panels giving users a control solution tailored to their automation needs and technical aptitude.

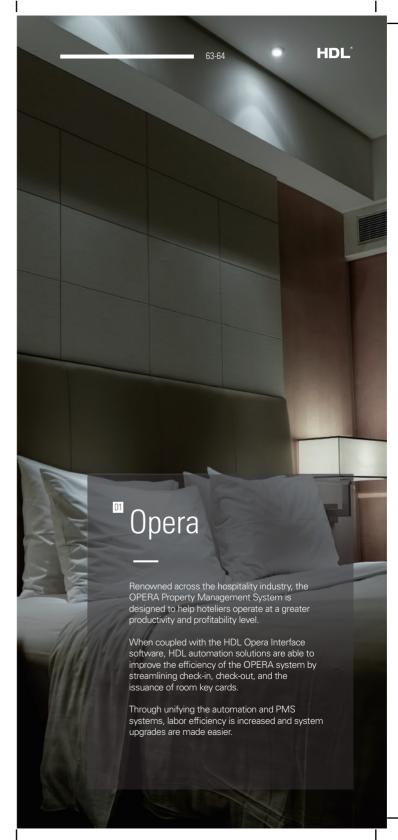
#### Energy Cloud

Let EnergyCloud unify your HDL automation solutions and third party equipment, so that you can monitor, control, and generate in-depth energy usage reports effortlessly.

From local hardware to a cloud interface, EnergyCloud can provide greater flexibility than ever before when integrating new or existing physical installations.

This enables productivity to be increased, and provides an extra level of security by reacting to both normal and abnormal events.





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#### Hoteza

Developed as a powerful tool for guests and hotel operators alike, Hotzea is a mobile hotel application designed to enhance efficient communication.

Able to be downloaded from Google Play and the App Store in a matter of seconds, Hotzea allows guests to make use of a hotel's services easily without having to call or ask reception.

When combined with the HDL RCU module, the Hotzea app is able to control every automated element in a guest's room.

Combining up-to-date information with an impressive visual display, Hotzea is the ultimate application for guest room management.

#### Cenium

Created from an integrated system of modules, Cenium forms a total information platform for hospitality providers.

With Cenium Information can flow seamlessly from one module to the next, allowing simultaneous access by all users through a common visual work environment.

When Cenium is connected to the HDL system via the HDL Cenium interface software, hotel operators can increase the efficiency of the check-in, check-out, and guest room notifications.

This integrated and optimized approach to information and resource management, reduces staff work load while increasing guest satisfaction.