

# 01

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## CSNET MANAGER 2

## INSTALLATION DRAWINGS

air

# CSNET MANAGER RANGE FOR FY20



## CSNET MANAGER 2T10 & 2T15

### Premium solution

High resolution touch screen 10" or 15"

Best in class user experience :

- High resolution touch screen
- Easy to use Web application

Combination with HLINK interface:  
HC-A64NET or CSNET Lite

Controlling up to 16 HLINK interfaces  
1024 indoor units

Dedicated to large and medium VRF  
systems



## CSNET MANAGER 2 SL

### Standard solution

Screen less interface

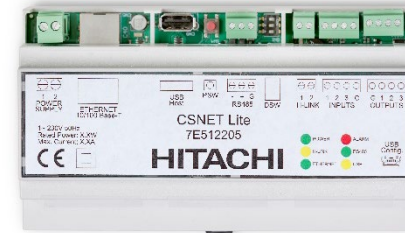
Full standalone device supporting all the  
functions of CSNET Manager 2 software

Same easy to use Web application

Combination with HLINK interface:  
HC-A64NET or CSNET Lite

Controlling up to 16 HLINK interfaces 1024  
indoor units

Dedicated to large and medium VRF  
systems



## CSNET LITE

### Entry solution

Combined Screen less & HLINK interface

Standalone device supporting most of the  
functions of CSNET Manager 2 software

Same easy to use Web application

Controlling up to 64 Indoor Units

Dedicated to small VRF installations and  
light commercial systems

# CSNET MANAGER RANGE FOR FY20



## HC-A64NET

### Standard HLINK interface

Combination with CSNET Manager 2 devices (touch screens or SL device)

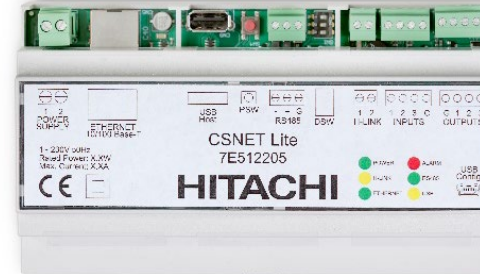
Can control up to 64 indoor units

Local network connections only

No local control of the units (only HLINK interface for CSNET devices)

No remote update

Ideal for large and medium VRF systems



## CSNET LITE

### Advanced HLINK interface

Combination with CSNET Manager 2 devices (touch screens or SL device)

Can control up to 64 indoor units

Local network and Internet connections





Local control features available




Remote update is possible

Dedicated to small installations and light commercial market.

Perfect for remote monitoring of branch offices from headquarter

# CSNET MANAGER RANGE FOR FY20

DESCRIPTION	FACTORY MODEL CODE	ORACLE ordering code	Current software version	Pictures	AVAILABILITY
CSNET Manager 2 T10	7E512203	CSNET Manager 2T10	1.1.1		Available
CSNET Manager 2 T15	7E512206	CSNET Manager 2T15	1.1.1		Available
CSNET Manager 2 Screen Less	7E512204	CSNET Manager 2 SL	1.1.1		Available
HC-A64NET	7E512200	HC-A64NET	H-0125		Available
CSNET Manager 2 Lite	7E512205	CSNET Lite	1.1.1		Available

DESCRIPTION	MODEL CODE	ORACLE ordering code	Pictures	AVAILABILITY
Wall mounted support for CSNET Manager 2T10 and 2T15	7E512302	WALL SUPPORT 2		Available
Stand support for CSNET Manager 2T10 and 2T15	7E512301	STAND SUPPORT	 VESA 75 & 100	Available
DIN Rail support for CSNET Manager 2 SL (Screen Less version)	7E512303	DIN Rail support	 7E512303 – DIN RAIL Support	Available

# DIFFERENT TYPES OF INSTALLATIONS

## Example 1a: basic installation with CSNET LITE

Small or medium sized VRF system

Hotel, light commercial or small office building

Up to 64 indoor units (and 64 outdoor units)

CSNET devices used:

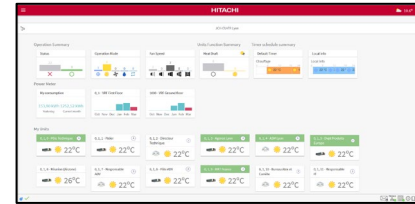
- **CSNET LITE**

Connections:

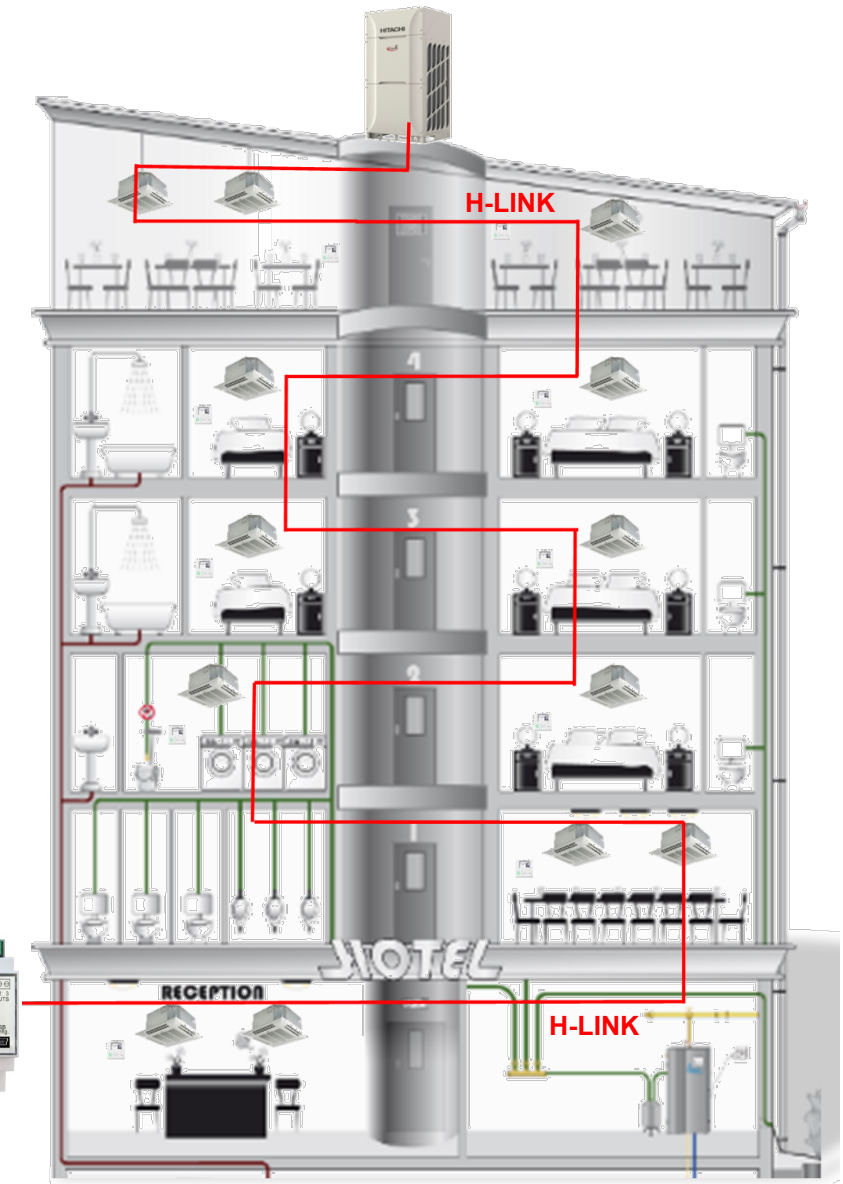
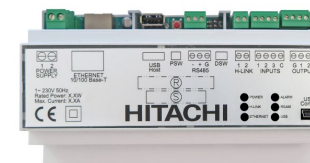
- Direct connection by crossed network cable
- No INTERNET Access

Control of the system:

- Only from the laptop connected to CSNET LITE
- Using the Web browser to run CSNET Manager 2 Web application.



Direct  
network  
connection



# DIFFERENT TYPES OF INSTALLATIONS

## Example 1b: basic installation with CSNET LITE

Small or medium sized VRF system

Hotel, light commercial or small office building

Up to 64 indoor units (and 64 outdoor units)

CSNET devices used:

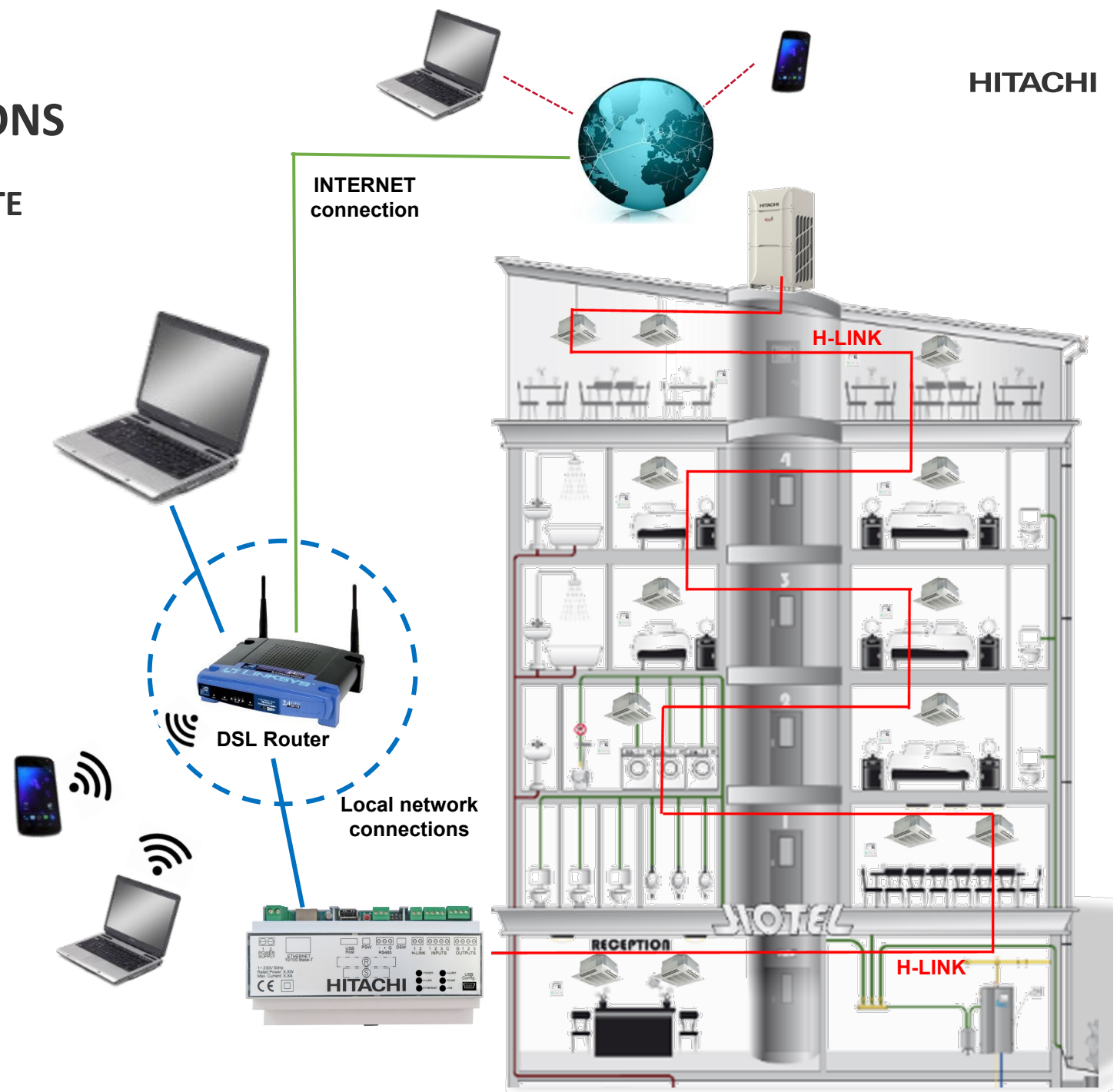
- **CSNET LITE**

Connections:

- Network connections with a **DSL router**
- Network cables and / or Wi-Fi can be used
- Remote **INTERNET Access** is possible!

Control of the system:

- From any device (laptop, smartphone) connected to the local network
- From any device connected to Internet (DSL router setting is necessary)





# DIFFERENT TYPES OF INSTALLATIONS

## Example 2: basic installation with CSNET MANAGER 2T10

Small or medium sized VRF system

Hotel, light commercial or small office building

Up to 64 indoor units (and 64 outdoor units)

CSNET devices used:

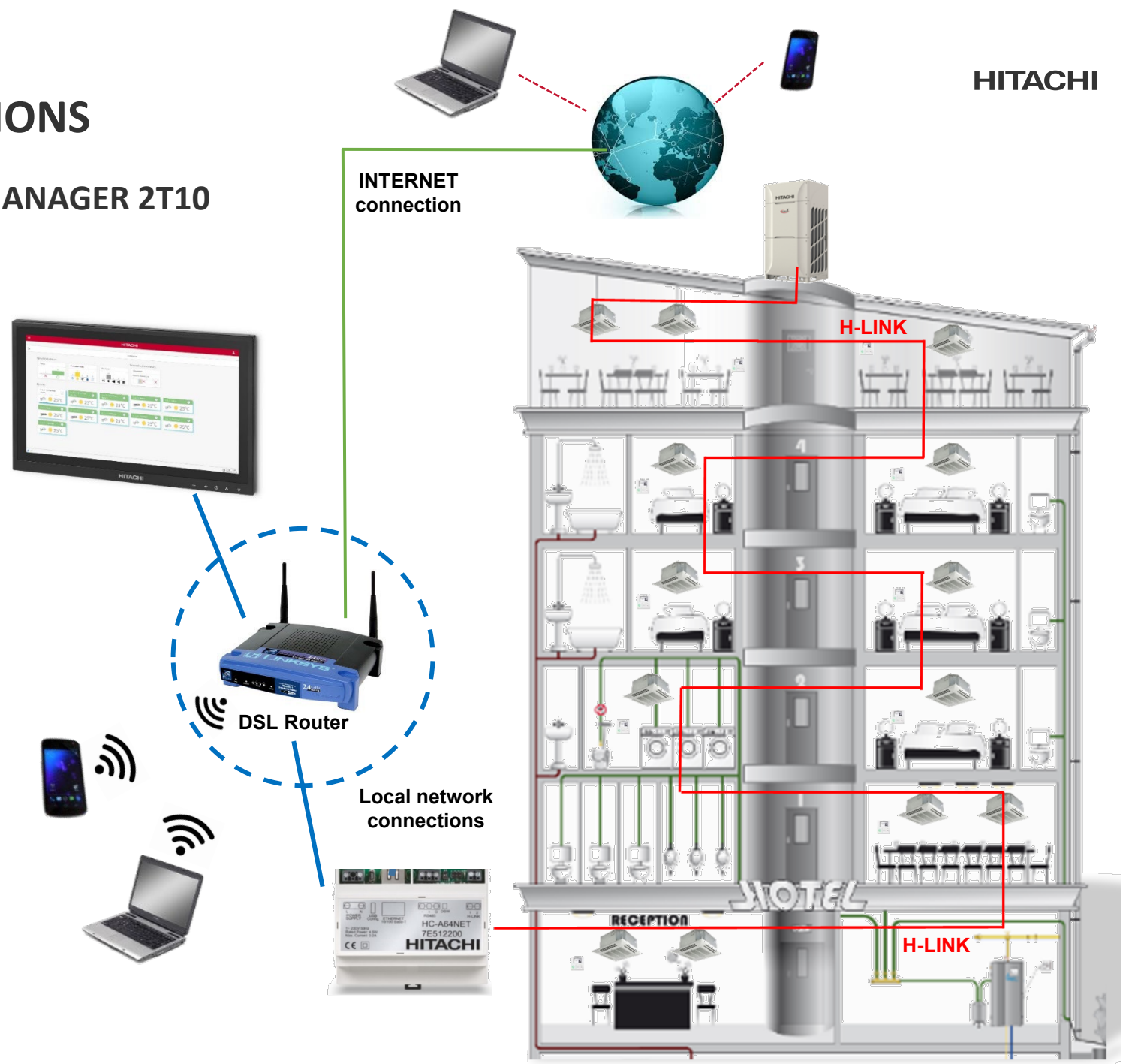
- **HC-A64NET**
- **CSNET MANAGER 2T10 or 2T15**

Connections:

- Network connection with a **DSL router**
- Network cables or Wi-Fi can be used
- **INTERNET Access** is available!

Control of the system:

- From the touch screen
- From any device (laptop, smartphone) connected to the local network or connected to Internet (DSL router setting is necessary)



## DIFFERENT TYPES OF INSTALLATIONS

Conclusion for simple installations with less than 64 indoor units



### Solution with CSNET LITE

Price attractive solution

Some limitations on the software features

Control of the units by a laptop, smartphone or tablet

Connection to CSNET Lite by network connections:

- Simple direct wired connection
- Using a DSL router: LAN, Wi-Fi & Internet

Remote access from Internet is possible!



### Solution with CSNET Manager 2T10/2T15 & HC-A64NET

Premium control from the touch screen

All the features of CSNET Manager 2 Web App

Connections between CSNET Manager and HC-A64NET:

- Only local network connections

Control of the units:

- From the touch screen
- From a laptop, smartphone or tablet, through the local network (direct connection or DSL router)
- From a remote device through Internet

Remote access from Internet is possible!

What about CSNET Manager Screen Less solution...?



## DIFFERENT TYPES OF INSTALLATIONS

### Conclusion for simple installations with less than 64 indoor units

#### Solution with CSNET Manager 2 SL

Same software features as CSNET Manager Touch screen, with the control mode of CSNET Lite

Balanced price position

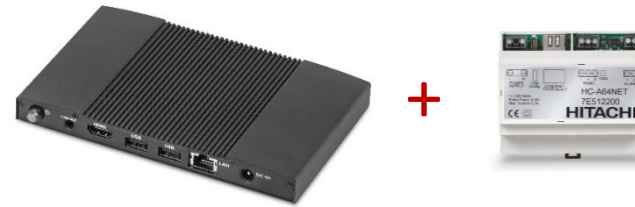
All the features of CSNET Manager 2 Web App

Control of the units by a laptop, smartphone or tablet

Connection to CSNET Manager devices by network connections:

- Simple direct wired connection
- Using a DSL router: LAN, Wi-Fi & Internet

Remote access from Internet is possible!



Interesting solution for small / medium sized systems if:

- Some specific functions (not available on CSNET Lite) are required: ex Building Layout
- Several functions are requested to run at the same time: timer + several interlock programs + Modbus output + power metering... with the maximum quantity of indoor units.

# DIFFERENT TYPES OF INSTALLATIONS

## Example 3: large VRF system with more than 64 indoor units

Office building with several floors or several buildings

Up to 1024 indoor units

CSNET devices used:

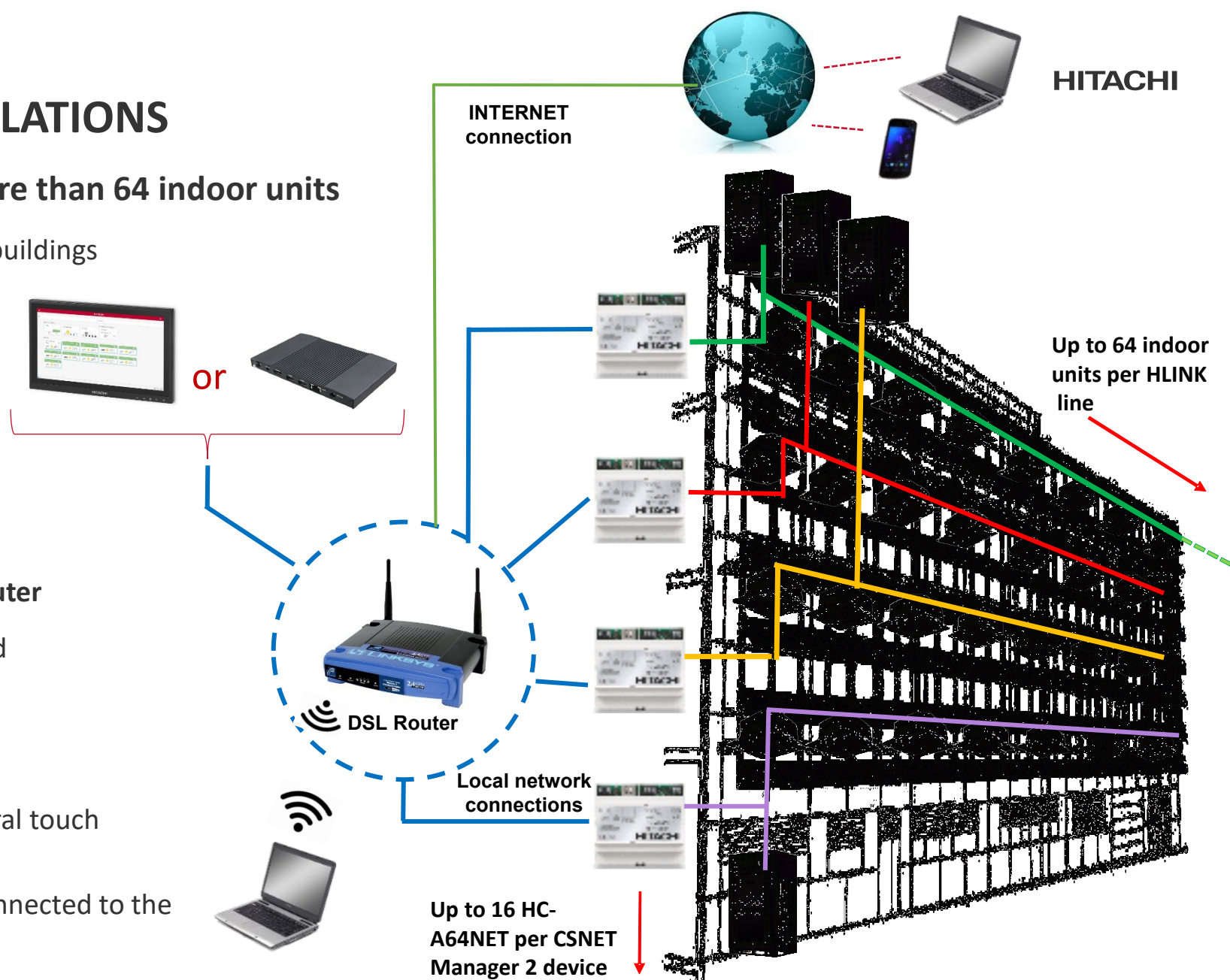
- **Multiple HC-A64NET** as HLINK interface
- CSNET Manager 2T10/2T15 or 2 SL

Connections:

- **Local network** connections with a **DSL router**
- Network cables and / or Wi-Fi can be used
- Remote **INTERNET Access** is possible!

Control of the system:

- From the touch screen (if available), several touch screens can be combined
- From any device (laptop, smartphone) connected to the local network
- From any device connected to Internet (DSL router setting is necessary)



# DIFFERENT TYPES OF INSTALLATIONS

## Example 4: multi sites remote supervision

Several independent installations with less than 64 units

Hotel, light commercial or small office building

CSNET devices used:

- **CSNET Lite on each installation**
- **CSNET MANAGER 2T10/2T15 or Screen Less at the supervision site**

Connections:

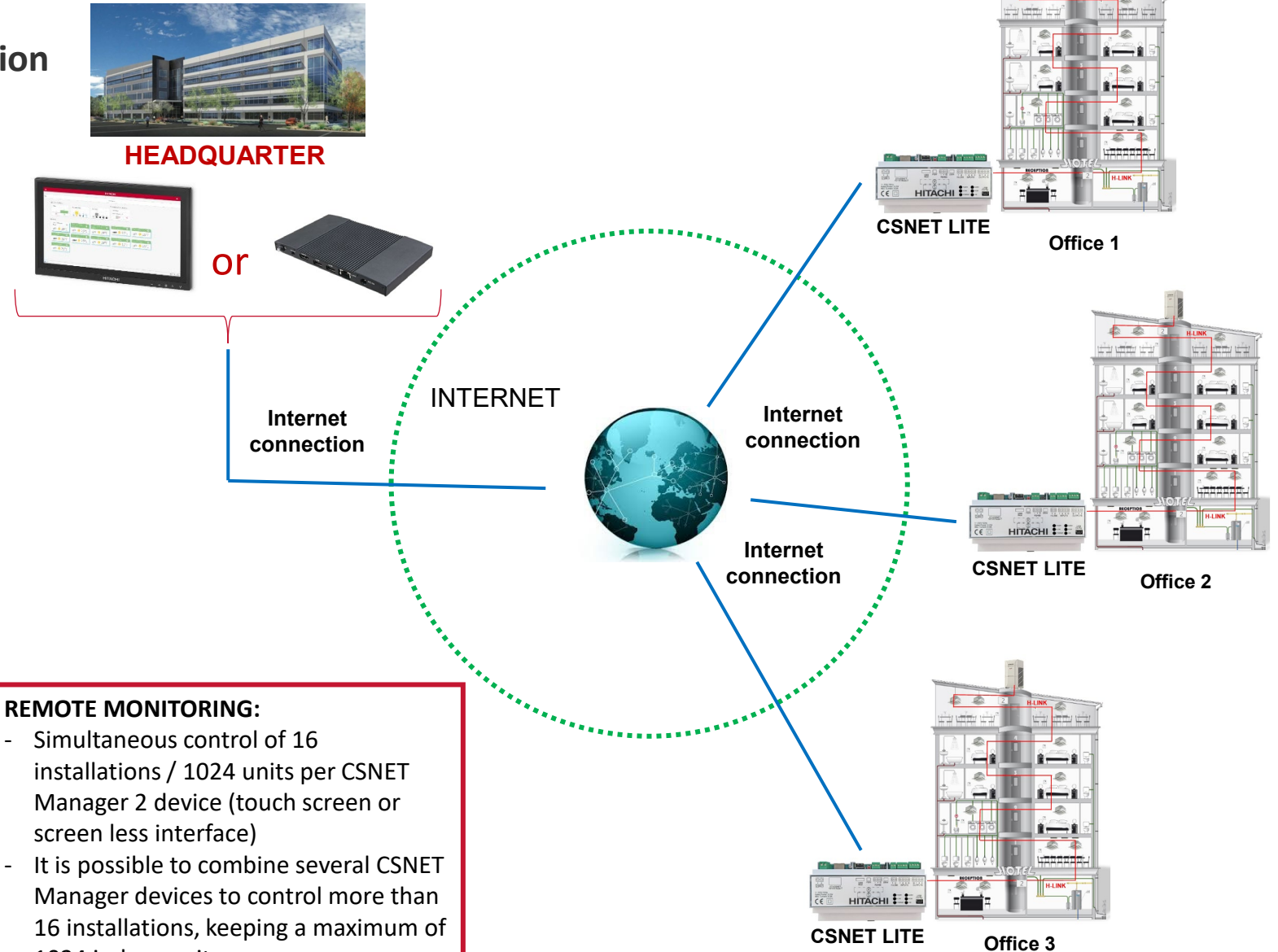
- Local network connections on each site, with Internet access
- Connection through Internet from headquarter

Control of the system:

- Independent control on each installation from CSNET Lite (Laptop, smartphone...)
- From headquarter, control or monitoring from Touch screen or laptop

### REMOTE MONITORING:

- Simultaneous control of 16 installations / 1024 units per CSNET Manager 2 device (touch screen or screen less interface)
- It is possible to combine several CSNET Manager devices to control more than 16 installations, keeping a maximum of 1024 indoor units.



## DIFFERENT TYPES OF INSTALLATIONS

### Conclusion for large installations with more than 64 indoor units

One large building at on installation site, with local network connection:

- CSNET Manager Touch Screens or Screen less interfaces + several HC-A64NET
- CSNET Lite can be used as HLINK interface for special features (optional functions settings)
- Control of the units from the Web App, through a Touch Screen, laptop, tablet...



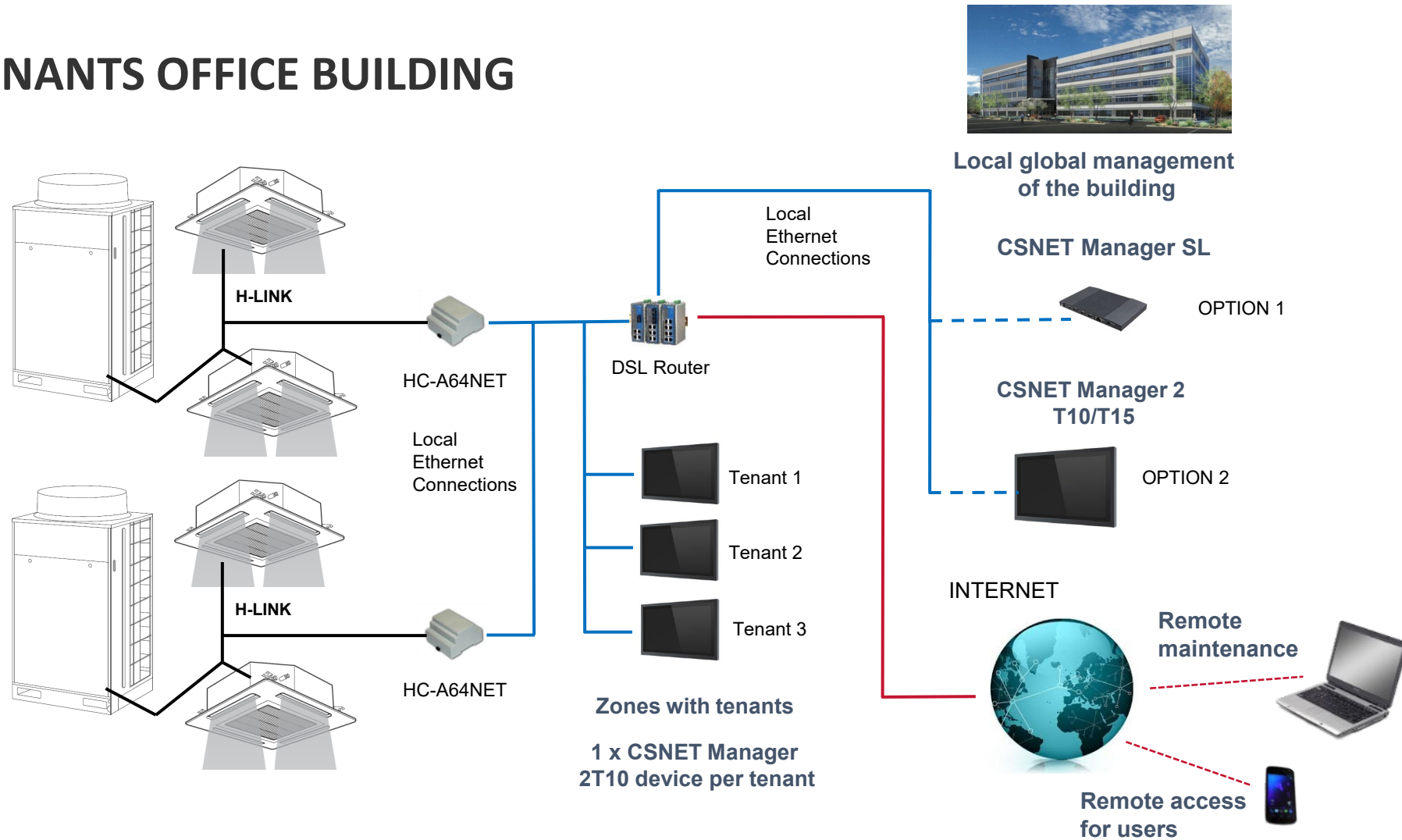
Several small or medium sized installations over the world, with Internet connection available at each location:

- CSNET LITE on each independent installation, control with CSNET LITE features at each site
- Possible remote monitoring from Headquarter through Internet, using a Touch Screen or a Screen Less interface
- Control of the units from the Web App, through a Touch Screen, laptop, tablet...
- Remote supervision of 16 installations and 1024 indoor units per CSNET Manager 2 devices

**THE MOST FLEXIBLE CENTRAL CONTROL SYSTEM OF THE MARKET!**

**SUITABLE FOR ANY INSTALLATION SIZE WITH ALL THE FUNCTIONS OF CSNET MANAGER 2 WEB APP!**

# MULTI TENANTS OFFICE BUILDING



- CSNET Manager devices for tenants will get the data from the main CSNET Manager
- CSNET devices for tenants can be replaced by a software control: web browser, RCS WEB, using a tablet from the market



# FEATURES & BENEFITS

## Key features for Multi tenants office applications



### Access to the system

- Individual user's account with specific rights
- Selective access to the indoor units: one tenant can see only the units of his area
- Different views available to match each users' preference

### Control of the units

- From CSNET Manager Touch screen
- From a laptop, tablet with Web App or RCS WEB software
- Web App and RCS Web can be run from any touch panel from the market: each tenant can select a control panel with a specific design
- Each tenant can create his own weekly schedules

### Installation features

- Flexible control of the units with Copy RCS function
- Using the local network, the Web App CSNET Manager can be used from any place in the building
- Connection to an existing BMS system can be done easily thanks to the Modbus IP output available as standard feature

### Smart maintenance

- Specific user account for the maintenance manager to see all the units of all the zones
- Alarm notification by email
- Alarm logs, historical data, live check mode to assess the status of the installation remotely
- Emergency stop of all the units can be managed with the input contact of CSNET Lite interface

### Power metering

- Power calculation per tenant and per zone
- Power distribution for indoor units can be done by CSNET Manager with or without integrated power meters
- Electricity consumption of 3<sup>rd</sup> party system can be displayed by CSNET Manager, using a power meter communicating through Modbus IP



## LARGE INSTALLATION WITH SEVERAL BUILDINGS CONTROLLED FROM A CENTRAL DEVICE

### SUCCESS STORY CLUB MED

#### KEY PRODUCT FEATURES



0,4 HP



Set Free Mini S & L

- ✓ **1,1 kW wall mounted** for bedroom (-18% of installed capacity / Melco or Daikin)
- ✓ **Discreet ODU** : compact, low noise and 30 Pa ESP to hide ODU
- ✓ **High number of connectable IDU** (8 IDU on 4 HP ODU, 28 IDU on 12 HP ODU )
- ✓ **Small pipes diameters**, adapted to copper tube in rings
- ✓ **Low refrigerant charge**

#### BENEFITS FOR CUSTOMER



- ✓ **Lower equipment price**
- ✓ **Less piping work and earth work**
- ✓ **EN378 compliance**

## LARGE INSTALLATION WITH SEVERAL BUILDINGS CONTROLLED FROM A CENTRAL DEVICE

### KEY PRODUCT FEATURES



30 x HC-A64NET



2 x CSNET SCREENLESS



1 CSNET Manager

- ✓ **Centralized vision** on whole installation with failure logs
- ✓ **GentleCool (anti cold draft)** : critical for cottages where wall mounted blow directly on bed
- ✓ **Noise reduction on schedule** with central supervisor (CSNET MANAGER)
- ✓ **1 Modbus adapter for all installation** (vs 1 for each sub station for Daikin : 50 k€ price difference)

### BENEFITS FOR CUSTOMER



- ✓ **Better centralized control**
- ✓ **More comfort** for users
- ✓ **Lower equipment price**

## SUCCESS STORY CLUB MED



Total quantity of devices:

- 30 x HC-A64NET
- 50 ODUs
- 320 IDUs

Average values:

- 1 or 2 ODUs per HC-A64NET
- 10~12 IDUs per HC-A64NET



H-LINK



H-LINK

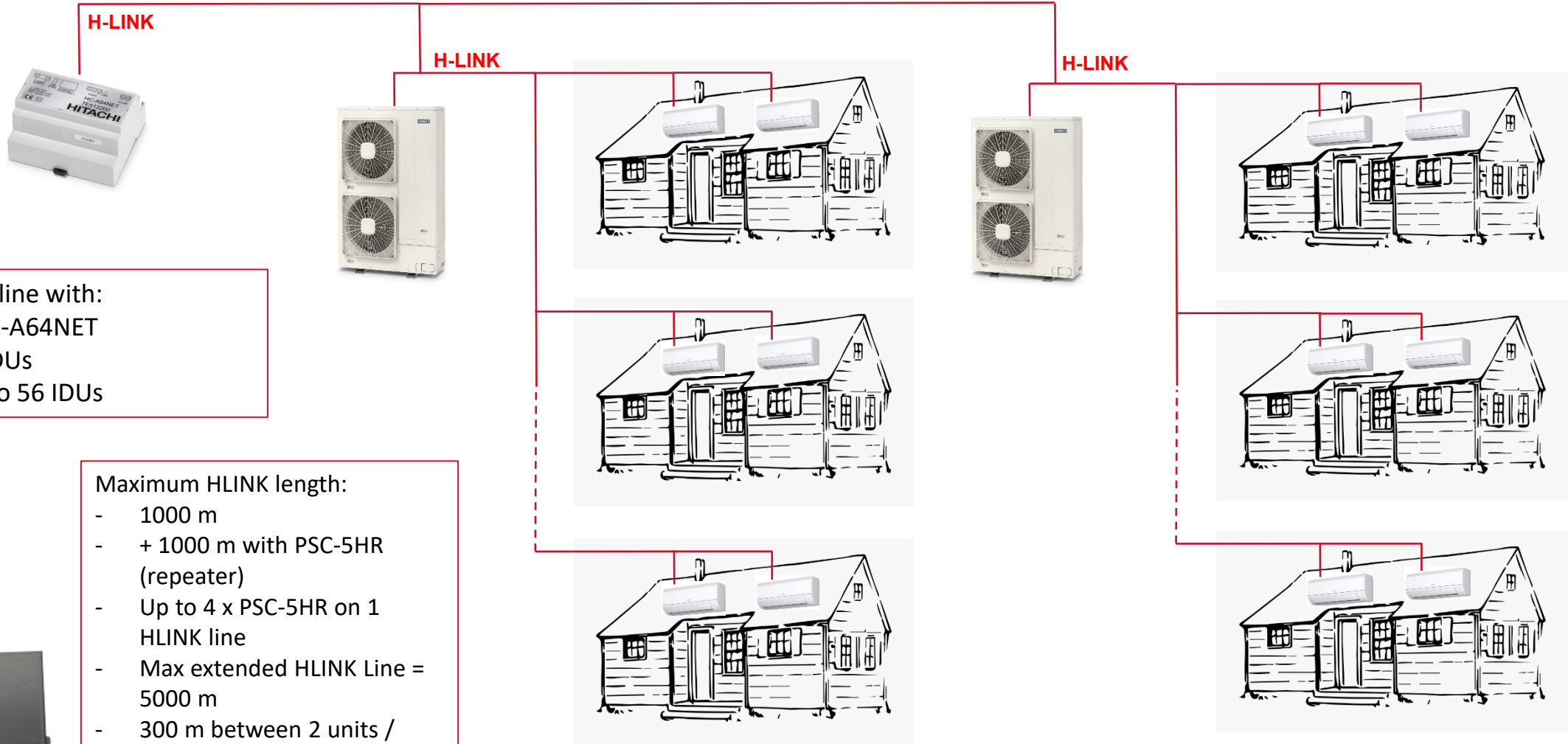
1 x HC-A64NET with 1 HLINK line:

- 1 ODU
- Up to 28 IDUs

1 ODU for up to 14 cottages  
= 1 HLINK line with 1 ODU and  
up to 28 IDUs



# SUCCESS STORY CLUB MED



- 1 HLINK line with:
- 1 HC-A64NET
  - 2 ODUs
  - Up to 56 IDUs

- Maximum HLINK length:
- 1000 m
  - + 1000 m with PSC-5HR (repeater)
  - Up to 4 x PSC-5HR on 1 HLINK line
  - Max extended HLINK Line = 5000 m
  - 300 m between 2 units / HLINK devices
  - Caution: max. qty of units per HLINK line is reduced when PSC-5HR is used



PSC-5HR: H-LINK relay

Number of PSC-5HR	Maximum length of H-LINK	Maximum number of indoor and outdoor units
0	1000 meters	176
1	2000 meters	160
2	3000 meters	144
3	4000 meters	128
4	5000 meters	112

# SUCCESS STORY CLUB MED

30 systems with 1 x HC-A64NET + Indoor/Outdoor units



IT infrastructure  
(Switch / DSL  
Router)

Local  
Network  
Connection



Local  
Network  
Connection

Local  
Network  
Connection

Local  
Network  
Connection

1 x CSNET Manager 2 SL can control 16 HLINK interfaces, e.g. 16 x HC-A64NET or 16 x CSNET Lite

In this case: 1 x CSNET Manager 2 SL with

- 15 or 16 x HC-A64NET
- 20~25 ODU's
- ~160 IDUs

Network connections: maximum length of the network cable depends on the type of wire

- Soft wires: 5-10-20 m
- Rigid wires: 50-100 m
- Optic fiber: several km

H-LINK

H-LINK

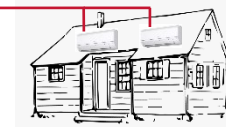
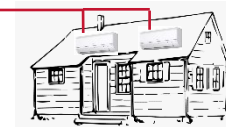
H-LINK

H-LINK

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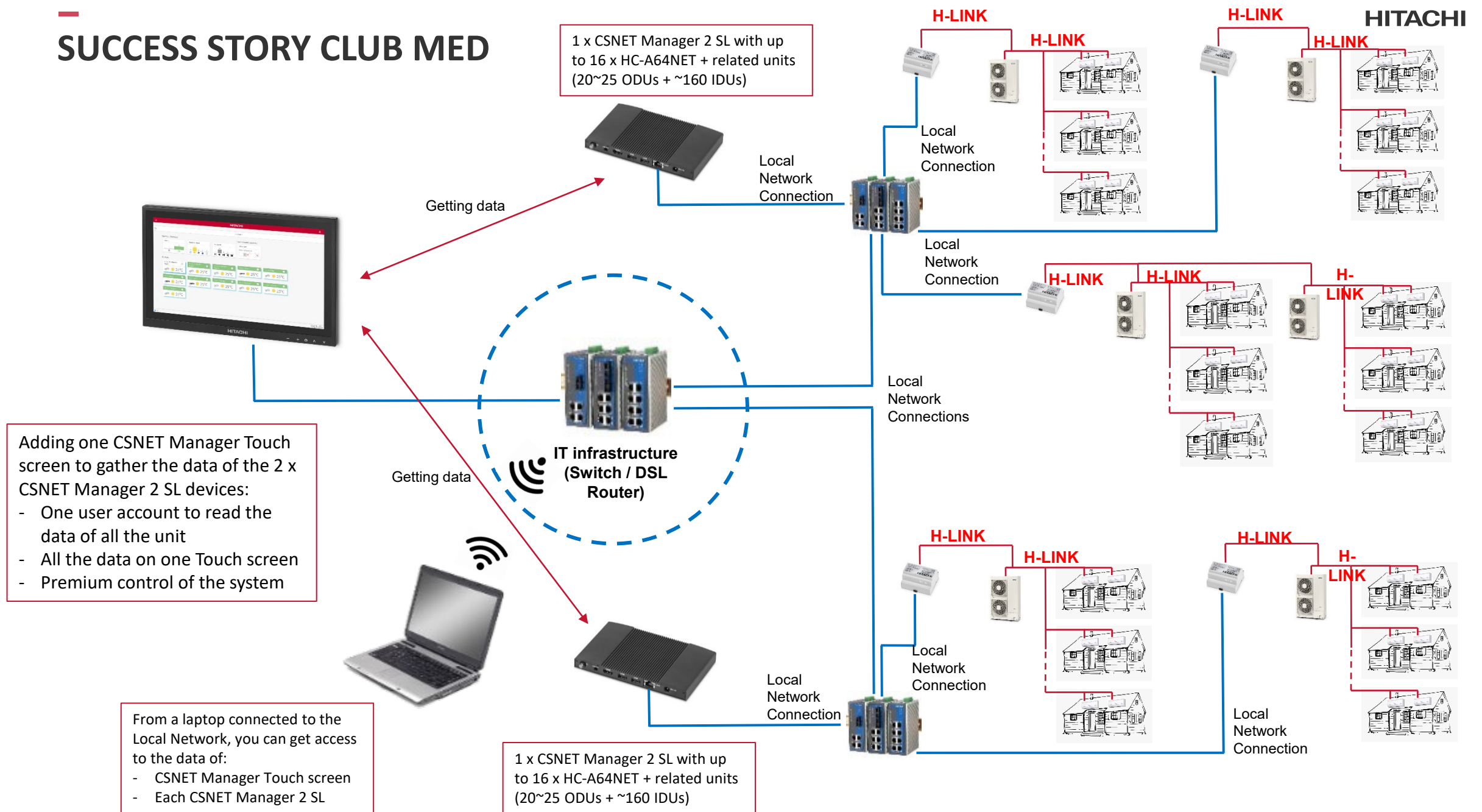
H-LINK

H-LINK



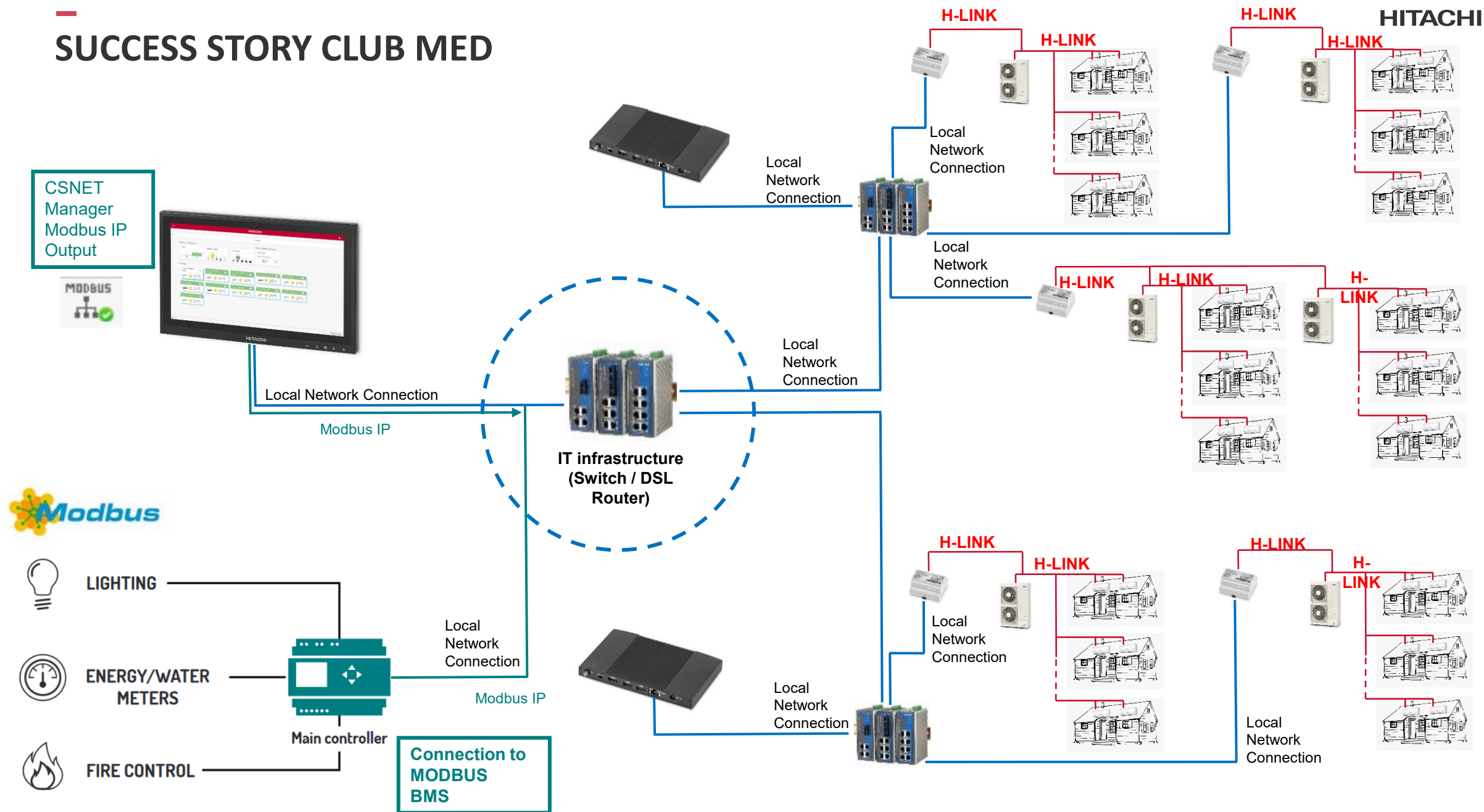


# SUCCESS STORY CLUB MED

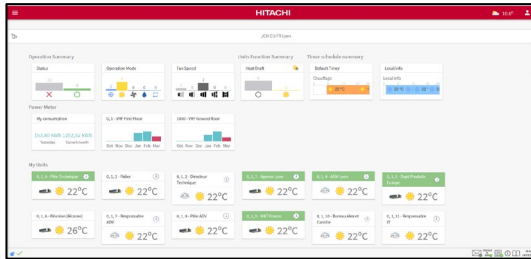




# SUCCESS STORY CLUB MED



# FEATURES & BENEFITS



## General features

New hardware with upgraded performances

Touch screen with excellent user experience

Wide range with devices to match any type of installation

Web application including all the functions (no additional license to purchase)

Easy to use Web interface with dashboard view

Different views available to control the units (list, building layout)

## Control features

Standard control functions of the indoor units

Daily/weekly/monthly/yearly schedule

Comfort function for indoor units: gentlecool, heatdraft

Power monitoring features: with or without integrated power meters

Power distribution for multi tenants systems

Export of power data files



## Advanced functions

Interlock control: If This Then That concept

Actions managing the input contact of indoor units: computer room or hotel room specific control can be set up

Input and output contacts available on CSNET Lite: specific actions through dry contact can be done (emergency stop...)

Link to existing BMS system thanks to the Modbus output available, KNX and BACnet with a dedicated gateway

## Maintenance features

Alarm notification by email

Alarm log, historical data, live data (check mode)

Outdoor unit control functions: night mode (noise reduction) & demand function

Optional function settings from CSNET interface: easy and fast configuration

