Panasonic
BUSINESS

VRF Smart Connectivity

Ver1.0

CONNECT TO THE FUTURE
VRF Smart Connectivity

VRF Smart Connectivity Advantages

- Easy Design and Plug and Play to Reduce CapEx

- Dramatic Reduction of OpEx with Outstanding IAQ

- Ultimate Customization

- User-/Owner-friendly

The Future of Control

Date

Short Network Message

Occupancy Status

Room Indoor Temperature

Room Indoor Humidity

Outdoor Temperature*

System Mode

Fan Mode

Temperature Units

Language

Help

2016.10.11   12:54 PM

Room 1705

Occupied

Indoor °C

23.5°

Humidity 45%   Outdoor 18°C

24.0

Up Arrow
Raise temperature setpoint

Actual Setpoint

Down Arrow
Lower temperature setpoint

Extremely simple Plug and Play connection to a Building Energy Management System (BEMS) is possible.

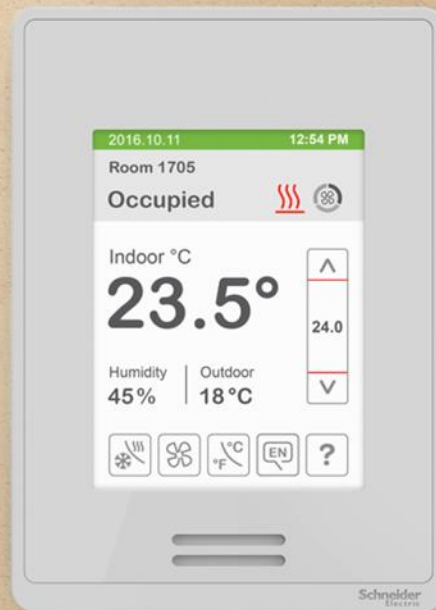Smart Struxure

BEMS

Schneider Electric

Guest Room Management Solutions

Deliver exceptional guest satisfaction while optimizing energy and operational efficiency.

At this hotel,
I have total control
over my comfort.

2016.10.11   12:54 PM
Room 1705
Occupied

Indoor °C
23.5°
24.0

Humidity | Outdoor
45% | 18 °C

Schneider
Electric

A truly comfortable experience for guests.

Schneider
Electric
enjoy your stay

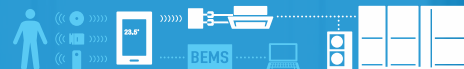You are invited to a complementary reception in the lobby at 7PM

Occupancy sensors enabling automatic control for outstanding efficiency.

Customization in approx. 20 languages possible

Smart Energy Management for Small and Medium Offices

Offer employees more comfort while reducing costs and boosting office layout flexibility.

Color and design to match office interiors

CO_2 and humidity sensors for high IAQ

VRF/PAC wireless connection

An office with optimum IAQ generates new business.

Smart Energy Management for Small and Medium Retailers

Improve customer comfort. Reduce costs. Create new possibilities.

Customer comfort and satisfaction reflect management efficiency.

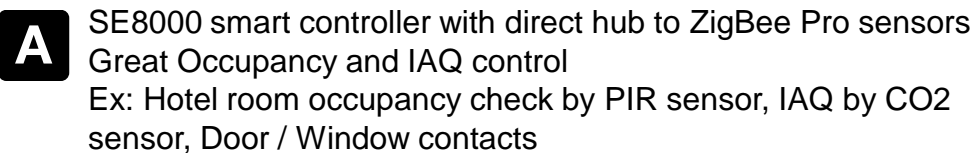Energy management for high return on investment (ROI)

Installation possible during business hours without closing the store

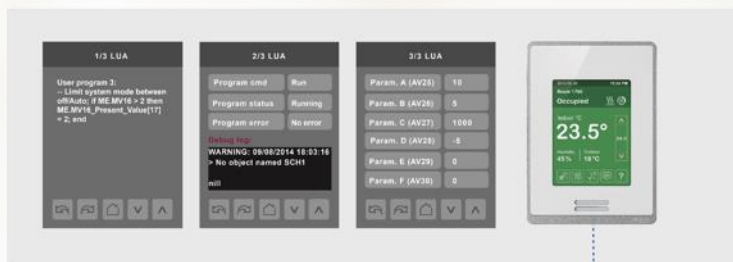Easy-to-understand Error Description

2016.10.11 | 12:54 PM

Room 1705

Occupied

Indoor °C

23.5°

24.0

Humidity 45% | Outdoor 18°C

What is VRF Connectivity?

The Smarter Solution to Simplify Energy Management, Optimize Building Efficiency and Drive Savings.

Panasonic VRF & PAC :
- PACi
- Mini ECOi
- ECOi
- ECOg

AHU (VRF Operated)

ZigBee® Sensors

A
- Ceiling Motion
- Wall Motion Humid/Temp
- Window Door Sensors
- CO2 Sensors

ZigBee® Interface Wireless Card (IWC) (at VRF FCU)

ROOM CONTROLLER

wired connection

Ready for BEMS
with VRF dedicated GUI

B

Ethernet

TO BEMS

ASHRAE BACnet™ *

TO BEMS

* Also available MODBUS RTU

A SE8000 smart controller with direct hub to ZigBee Pro sensors
Great Occupancy and IAQ control
Ex: Hotel room occupancy check by PIR sensor, IAQ by CO2 sensor, Door / Window contacts

B BACnet (BEMS open protocol) direct connection
Can be assign BACnet address by room scale

Programmable logic

Error description

Custom display / icons

CO2 sensor ppm control

Humidity sensors

Built-in PIR sensor control

Set point boundaries

Touch screen / Full color

Multiple languages

Wireless connection between controllers and VRF FCUs

There are three types of compact, smart sensors. Batteries last for up to five years and are easy to install and replace.
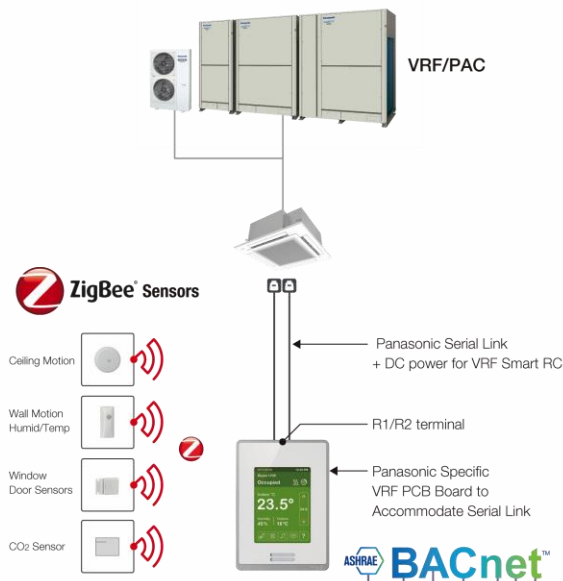
Wired solution

VRF/PAC

ZigBee® Sensors

Ceiling Motion

Wall Motion
Humid/Temp

Window
Door Sensors

CO₂ Sensor

Panasonic Serial Link
+ DC power for VRF Smart RC

R1/R2 terminal

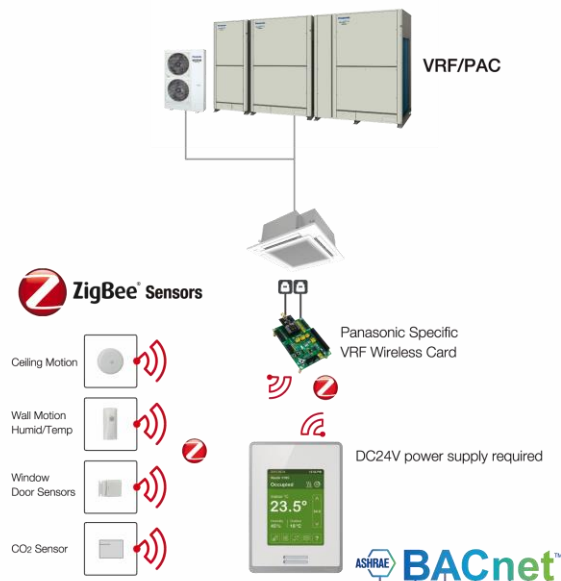Panasonic Specific
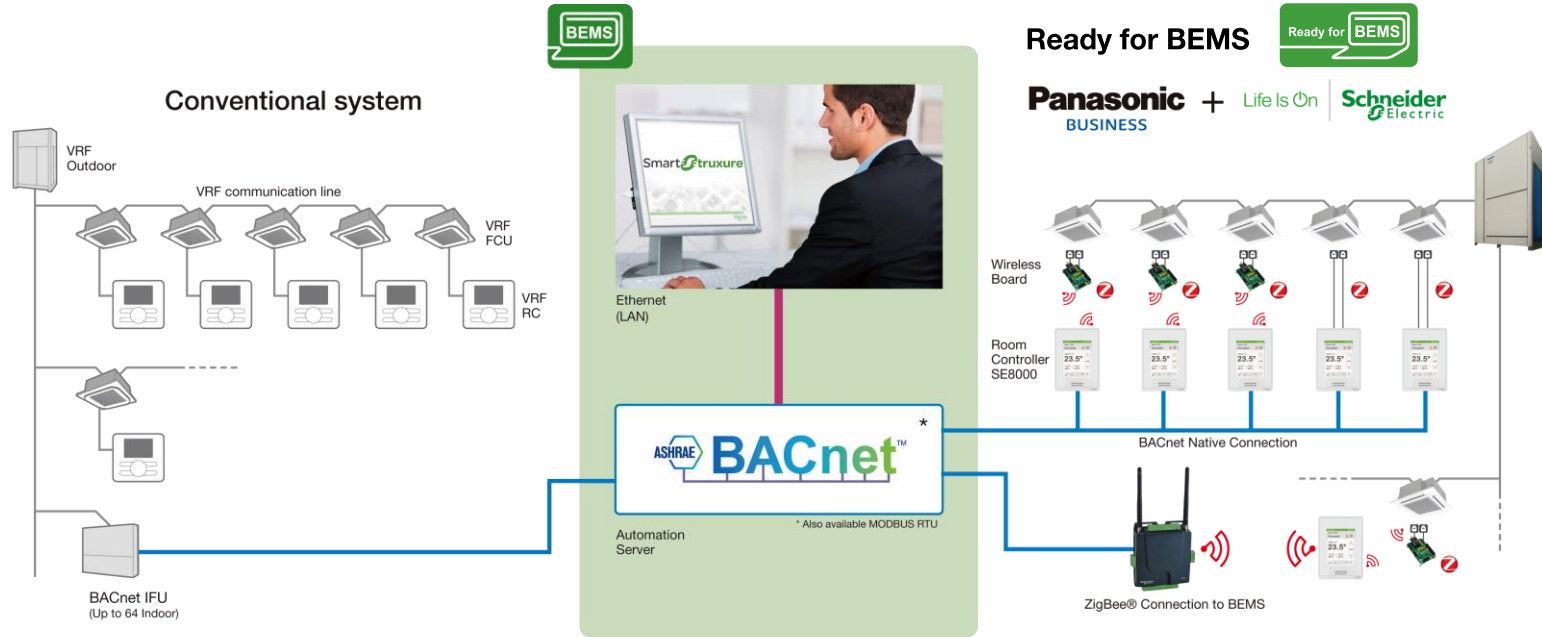VRF PCB Board to
Accommodate Serial Link

23.5°

ASHRAE BACnet™

VRF Smart application and HMI
Powered Over Communication Serial Link
BACnet, MODBUS, ZigBee®
One RC to one VRF FCU

Wireless solution

VRF/PAC

ZigBee® Sensors

Ceiling Motion

Wall Motion
Humid/Temp

Window
Door Sensors

CO₂ Sensor

Panasonic Specific
VRF Wireless Card

DC24V power supply required

23.5°

ASHRAE BACnet™

VRF Smart application and HMI
Normal Power Supply
BACnet, MODBUS, ZigBee®
One RC to one VRF FCU

Product Code

Part Number

Product name
Schneider Electric brand - SE8000

Remote Controler Part Number	Description	Brand
SER8150A0B1194P	Panasonic Net Con, RH, No PIR, ZigBee®	Schneider Electric
SER8150A5B1194P	Panasonic Net Con, RH, PIR, ZigBee®	Schneider Electric
SER8150R0B1194	Panasonic Net Con, RH, No PIR, R1/R2	Schneider Electric
SER8150R5B1194	Panasonic Net Con, RH, PIR, R1/R2	Schneider Electric

Interface Part Number	Description	Brand
VCM8000R5094	Panasonic R1/R2 to ZigBee® I/F	-

Sensor Part Number	Description	Brand
SED-WMS-P-5045	SED SEN OCC WALL ZP	Schneider Electric
SED-WDS-P-5045	SED SW DOR/WIN ZP	Schneider Electric
SED-CMS-P-5045	SED SEN OCC CEIL ZP	Schneider Electric

Wireless Sensors for Room Controllers

SED-WDS-P-5045 Door/window contact	**SED-CMS-P-5045** Ceiling motion sensor
	Available from 2017. 2nd Quarter
SED-WMS-P-5045 Wall motion sensor	**CO2 sensor**

Features:
- Up to 10 sensors per SE8000
- Up to 5-year battery life, batteries included
- Battery level is a point
- Sensor points visible in SBO when SE8000 is integrated via BACnet MS/TP
- Sensor status and battery level visible in SBE when SE8000 is integrated via ZigBee® Pro
- Integration to SBE only recommended when each MPM is connected to Ethernet and are set as ZigBee® Coordinator nodes