



AFFORDABLE
elegance

Customizable, versatile, color touch-screen
room controller at an affordable price

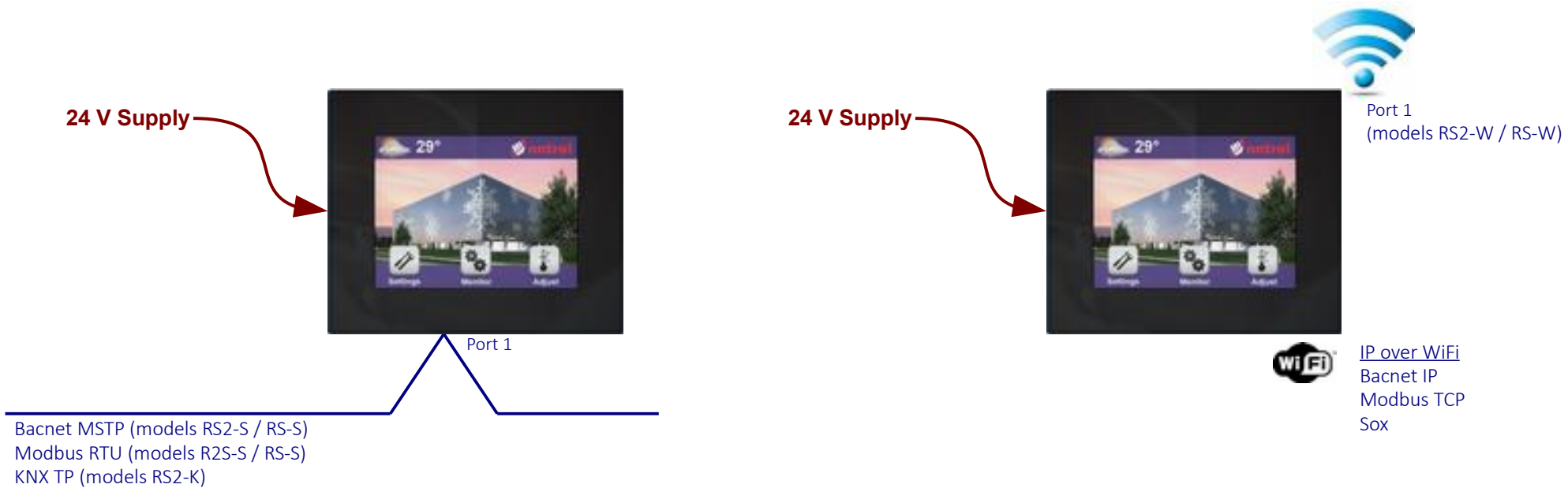
Powered by
sedona
FRAMEWORK™

R-ION

TOPOLOGIES DOCUMENT

R-ION Topologies

Basic user-interface only
with connection to local controller or supervisory system

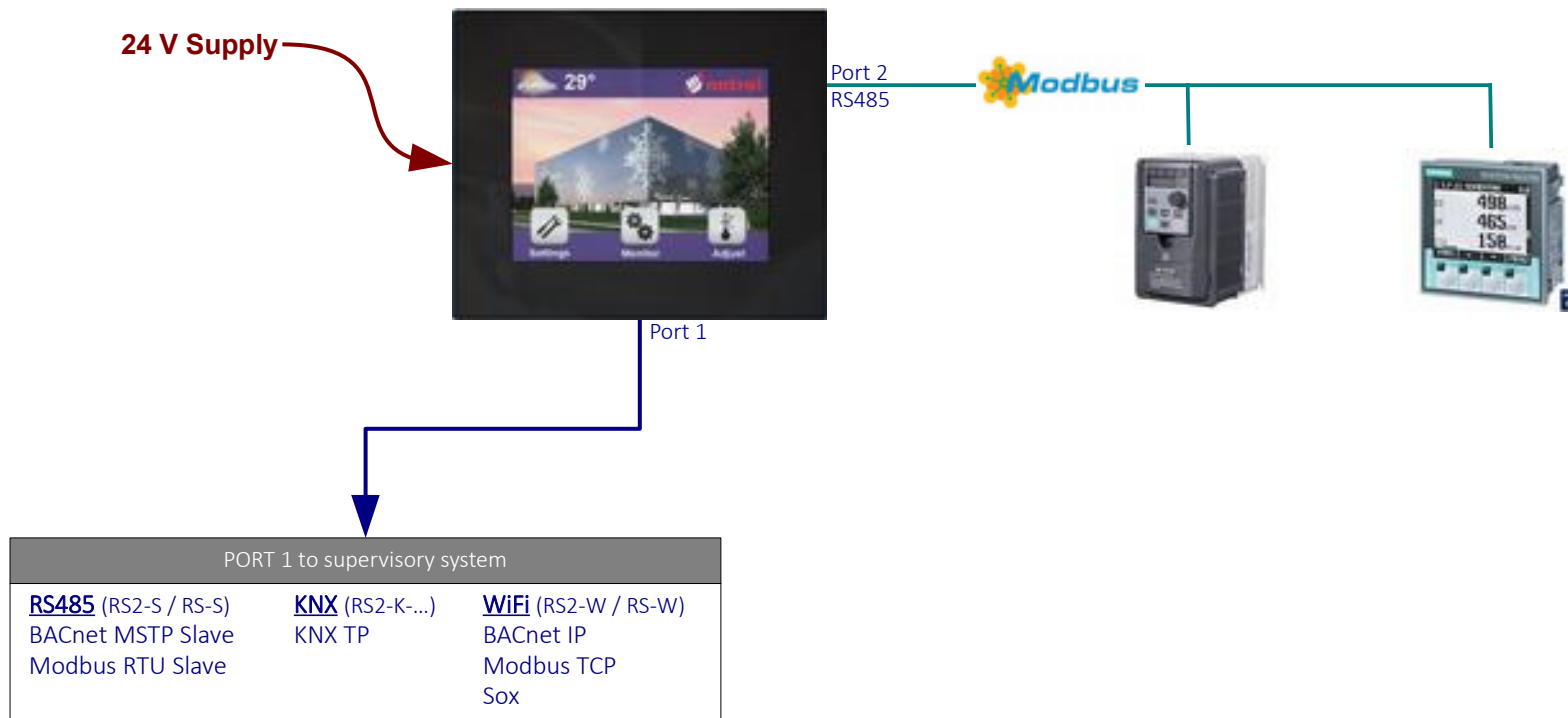


Built-in temperature sensor standard on all versions,
relative humidity optional

R-ION Topologies

Auxiliary RS485 port

- Bring in more data for display / control logic
- Convert between protocols



Built-in temperature sensor standard on all versions, relative humidity optional

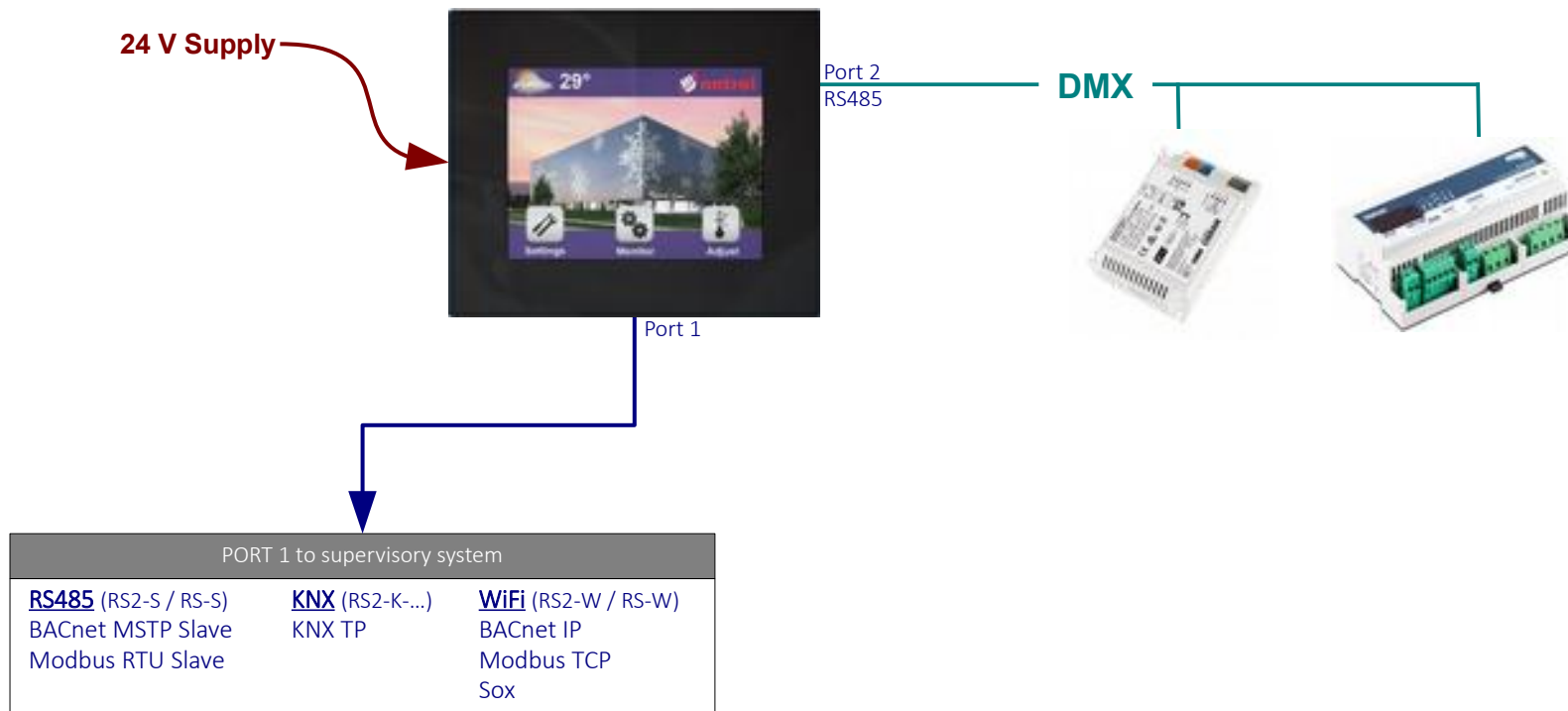
Auxiliary RS485 port standard on all versions. Port 2 can be configured as Modbus master or slave.

R-ION Topologies

Auxiliary RS485 port

For lighting control

Drive DMX lights directly from display, from BMS system, or other controllers



Built-in temperature sensor standard on all versions, relative humidity optional

Auxiliary RS485 port standard on all versions.

R-ION Topologies

Auxiliary DALI port

For lighting control

Drive DALI devices directly from display, from BMS system, or other controllers



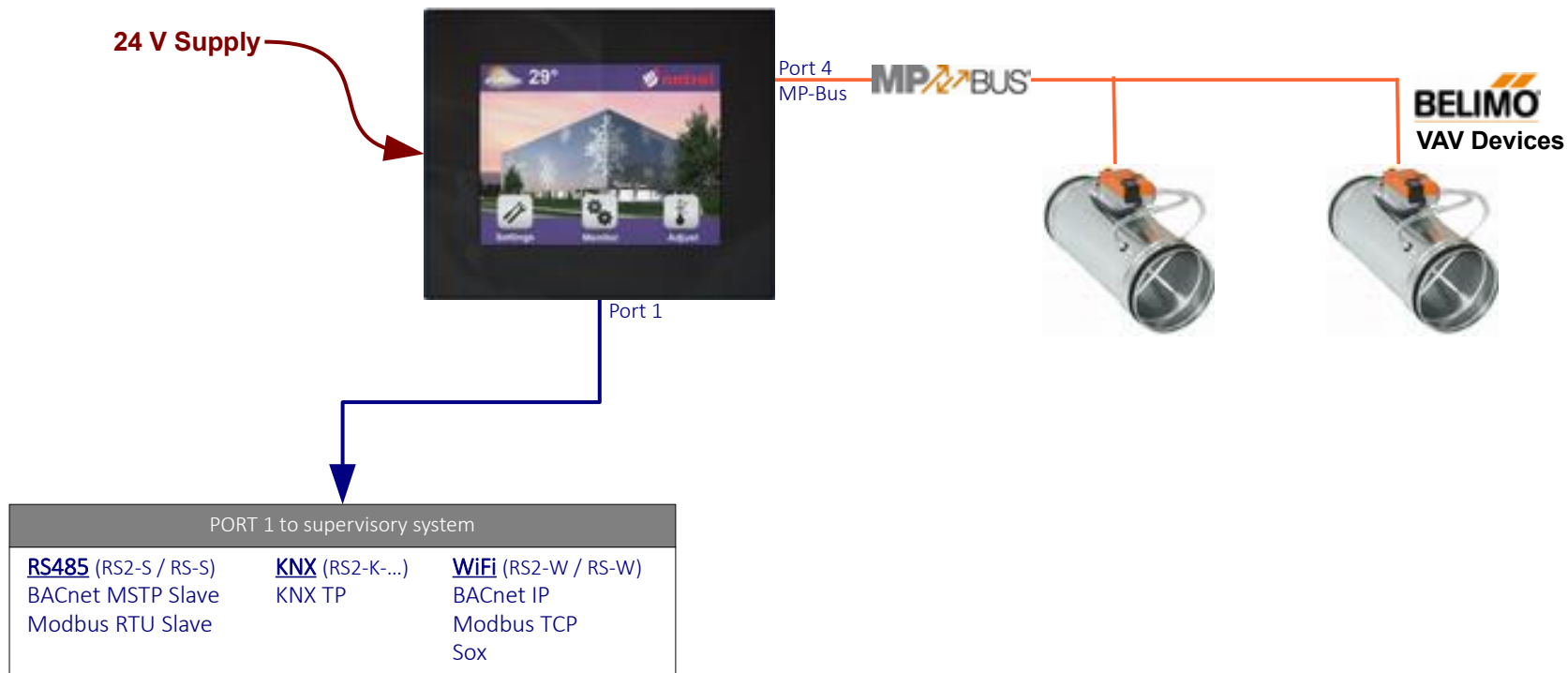
Built-in temperature sensor standard on all versions,
relative humidity optional

DALI port standard on all versions.
Can supply limited power to DALI bus for single room applications

R-ION Topologies

Auxiliary MP-Bus port

For Belimo devices (VAV controllers, EPIV, Energy-valves...)
Advanced VAV Room control solution with no physical IO



Built-in temperature sensor standard on all versions,
relative humidity optional

R-ION Topologies

Altogether now...

BACnet - Modbus - MpBus - DALI - KNX
 Display - Control – Drive - Convert

24 V Supply

YES!!! All 4 ports possible at the same time



Port 4

Port 3

Port 2

Port 1

MP-BUS

BELIMO
VAV Devices



DALI

DALI Ballasts, dimmers...



Modbus



PORT 1 to supervisory system

RS485 (RS2-S / RS-S) BACnet MSTP Slave Modbus RTU Slave	KNX (RS2-K-...) KNX TP	WiFi (RS2-W / RS-W) BACnet IP Modbus TCP Sox
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Built-in temperature sensor standard on all versions, relative humidity optional

Auxiliary RS485 and DALI ports standard on all versions, MP-Bus optional

R-ION Topologies

Another unique combination...
All major lighting protocols on the same device
Display - Control - Drive - Convert

24 V Supply



Port 3

Port 2

Port 1

DALI

DALI Ballasts, dimmers...

DMX

DMX drivers, dimmers...

KNX

KNX modules, dimmers...

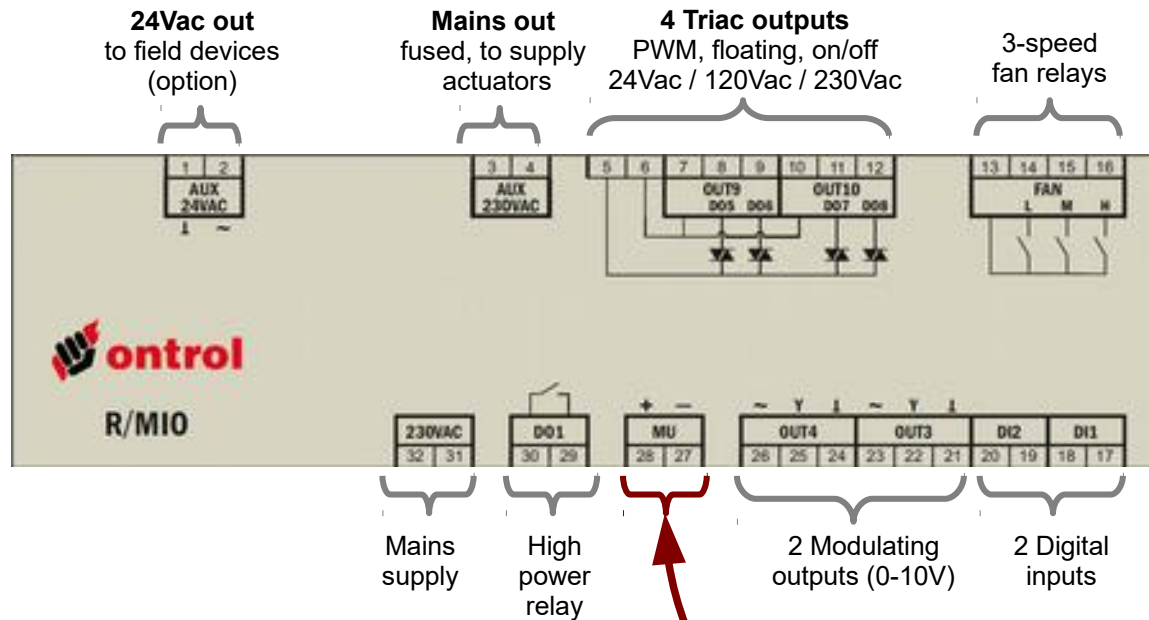
All major lighting protocols on the same device!

Built-in temperature sensor standard on all versions,
relative humidity optional

R-ION Topologies

Terminal unit control with physical I/O

Option 1: R/MIO



- 2 Digital in
 - 2 Analog out
 - 3-speed fan out
 - 5 Digital out
- Relay board expansion (up to +4 relays)



24V supply & comms



R-ION Topologies

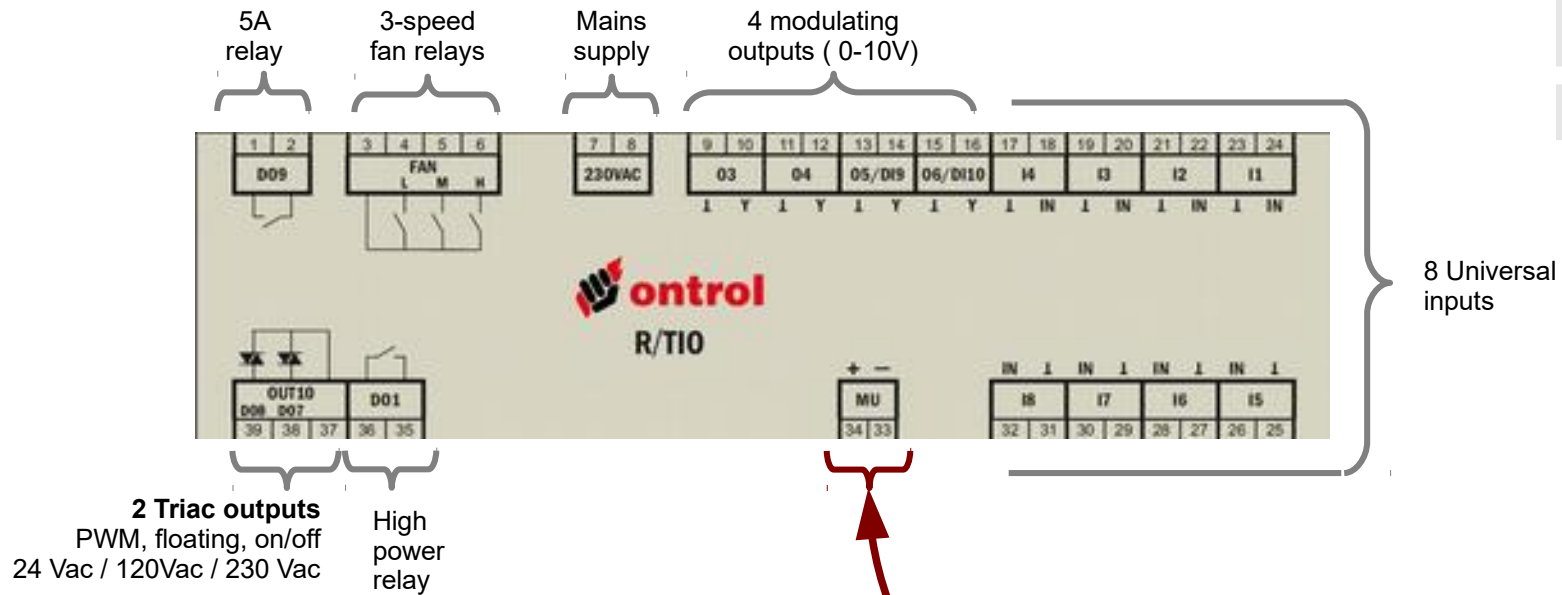
Terminal unit control with physical I/O

Option 2: R/TIO

- 8 Universal in
- 4 Analog out
- 7 Digital out

- Relay board expansion (up to +8 relays)

- Real-time-clock



R-ION Topologies

Multiple ports still available together with I/O modules

- Supervisory connection
- DALI- Mp-Bus



24V supply & comms



Port 1

Port 4

Port 3

MP-BUS

BELIMO
VAV Devices



DALI

DALI Ballasts, dimmers...



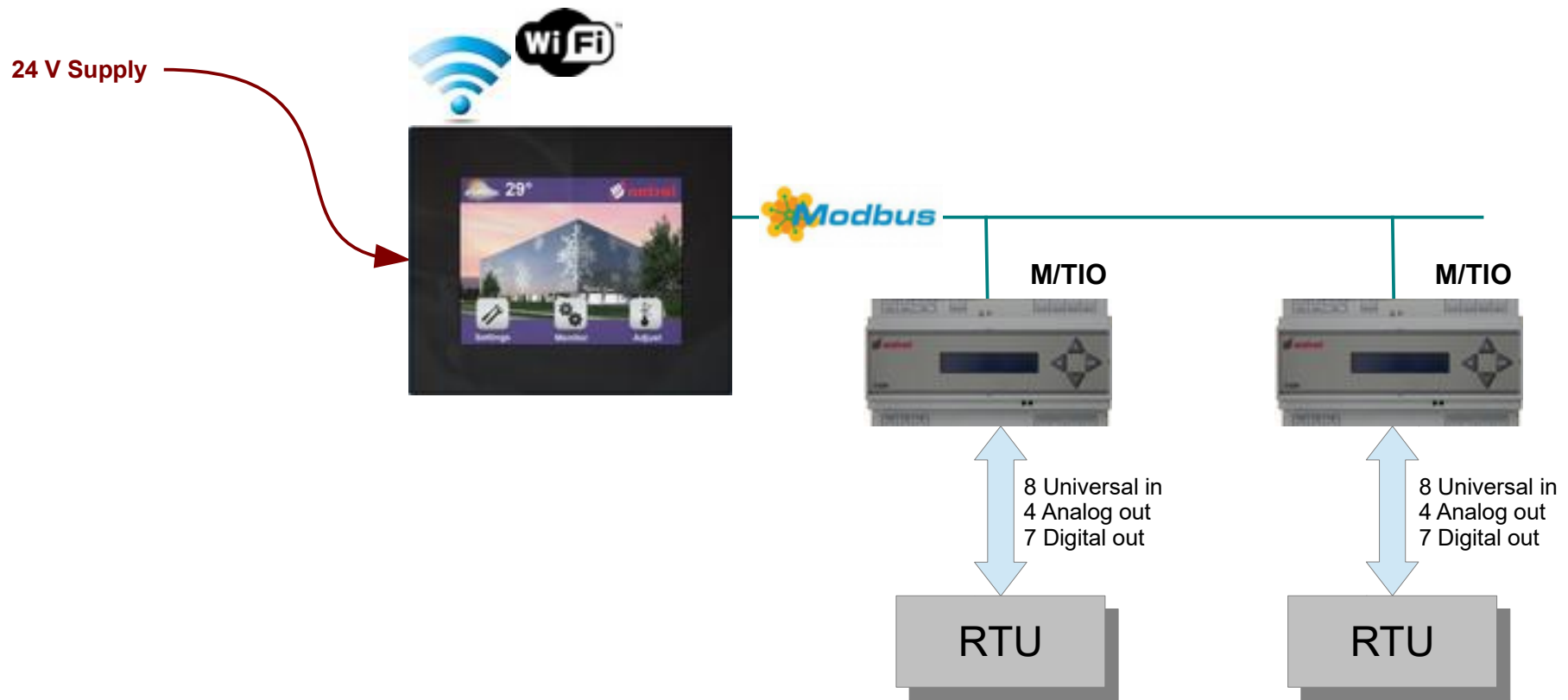
PORT 1 to supervisory system

RS485 (RS2-S / RS-S) BACnet MSTP Slave Modbus RTU Slave	KNX (RS2-K-...) KNX TP	WiFi (RS2-W / RS-W) BACnet IP Modbus TCP Sox
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R/TIO or R/MIO connection disables Port 2 (auxiliary RS485)

R-ION Topologies

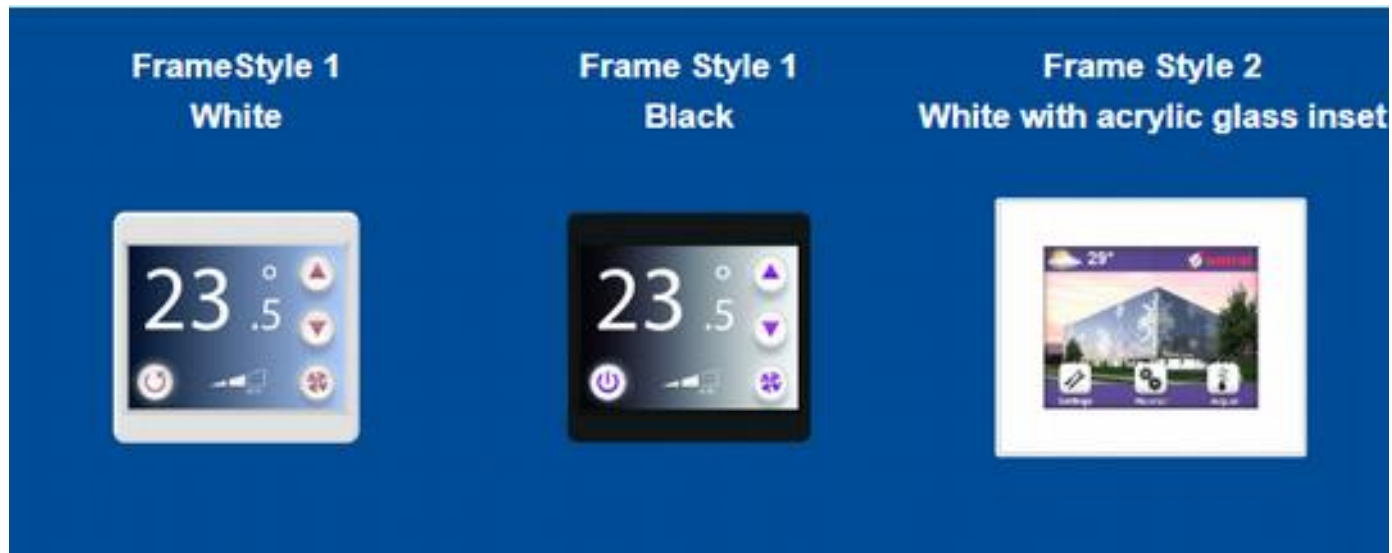
Small building RTU control solution



R-ION Topologies

Two Frame Styles

Basic specs the same for both types¹



Both styles are available in white or black

¹ KNX available only with frame style 2

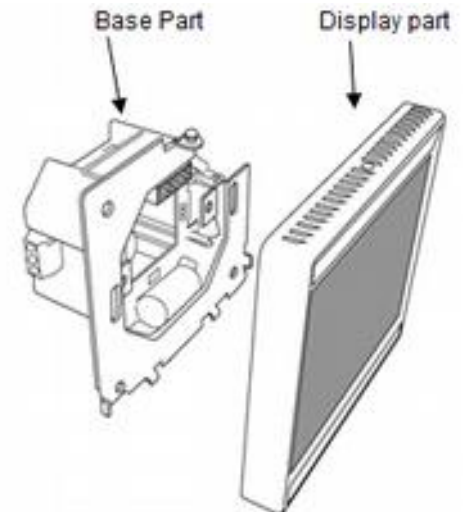
R-ION Topologies

Confused with all the different options?
Check this table when ordering.

Two parts need to be ordered to make-up a R-ION:
RS or RH... Display
B... Base

Replace last 'x' in part number with color code:
W: White B: Black

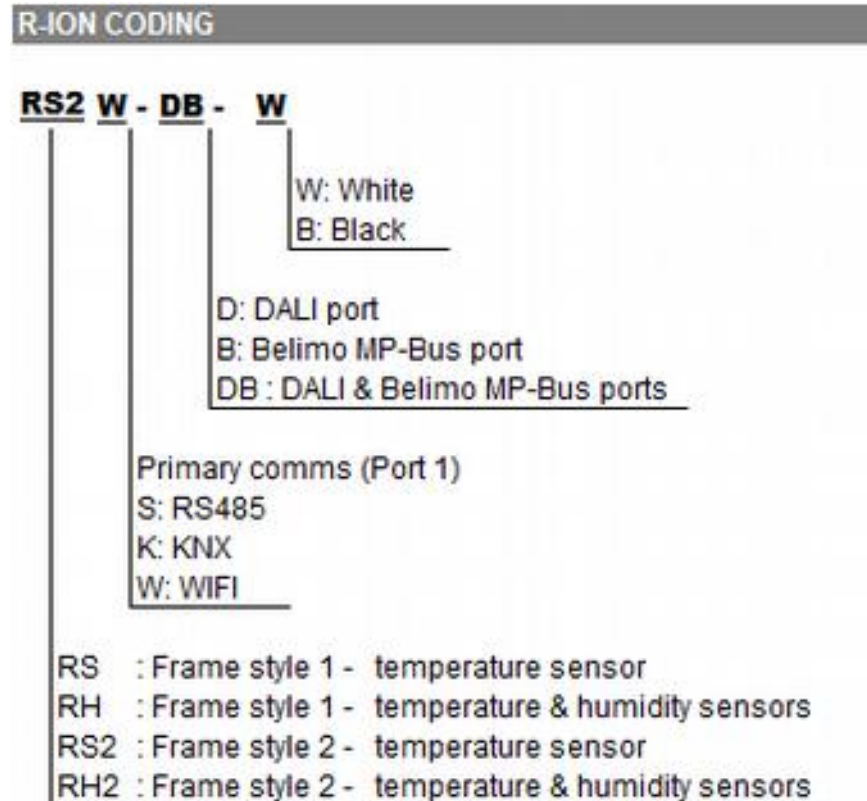
	ports					sensor		Frame Style 1	Frame Style 2
	1	2	3	4	Temperature	Humidity			
DISPLAY PART	Primary Comms: RS485	RS485						RS-S-D-x	RS2-S-D-x
		KNX						RH-S-D-x	RH2-S-D-x
		WiFi						RS-S-DB-x	RS2-S-DB-x
		RS485 / MU						RH-S-DB-x	RH2-S-DB-x
	Primary Comms : KNX	Dali							RS2-K-D-x
		MP-Bus							RH2-K-D-x
		Temperature							RS2-K-DB-x
		Humidity							RH2-K-DB-x
	Primary Comms : WiFi							RS-W-D-x	RS2-W-D-x
								RH-W-D-x	RH2-W-D-x
								RS-W-DB-x	RS2-W-DB-x
								RH-W-DB-x	RH2-W-DB-x
BASE	In-wall (flush) mounting base (compatible with serial & WiFi displays)							BF-W	B2F-W
	In-wall (flush) mounting base (for serial displays only)							BF	B2F
	Surface mount base (specify color: white or black)							Not available /	B2S-X-x



KNX versions will be available for delivery in Q3/2018.
(Bases for use in KNX installations available now)

R-ION Topologies

Another way of looking at the available types:



R-ION Topologies

Contact Ontrol for any inquiries



www.ontrol.com