

Comprehensive and Modular B.M.S Control Solution for various HVAC systems



About us

Meitav-tec is one of the world's leading companies in the field of intelligent HVAC temperature control.

Since its foundation in 1989, Meitav-tec has been providing innovative, tailor made solutions for temperature control.

Driven by technological innovation and guided by a veteran, top expertise R&D team, Meitav-tec has an ample experience in the design, manufacture, sale and support of temperature control solutions.

Our high quality, reliable products provide our customers with the latest, state-of-the-art technology at an affordable price.

The CTU Series

Main controller for B.M.S



Introduction

- The CTU is a highly versatile controller; Meitav-tec has especially developed this product to meet the need for a controller, readily implemented for customer's unique HVAC application
- The CTU is a "Plug & Play" communicating controller
- The CTU adaptability is an ideal solution for OEM's and Contractors who require "tailor made" controller configured according to their particular requirements at a short delivery time and at an affordable price
- The CTU controller offers advanced communication protocol capabilities, such as Modbus or BACnet for B.M.S control and selectable power supplies 24VAC, 110VAC or 230VAC



Features

Main supply 24VAC, 110VAC or 230VAC

RS-485 Communication Protocols

BACnet BTL / Modbus RTU / Maxinet

Panel interface - Wall / flush mount / IR

Inputs

8 x Digital Inputs

2 x Analog inputs (0-10VDC)

3 x Temperature Sensors 50K@77°F

Outputs

8 x Digital Outputs

2 x Analog Outputs (0-10VDC)

2 x 3-wire 24VAC (Open-Common-Close)

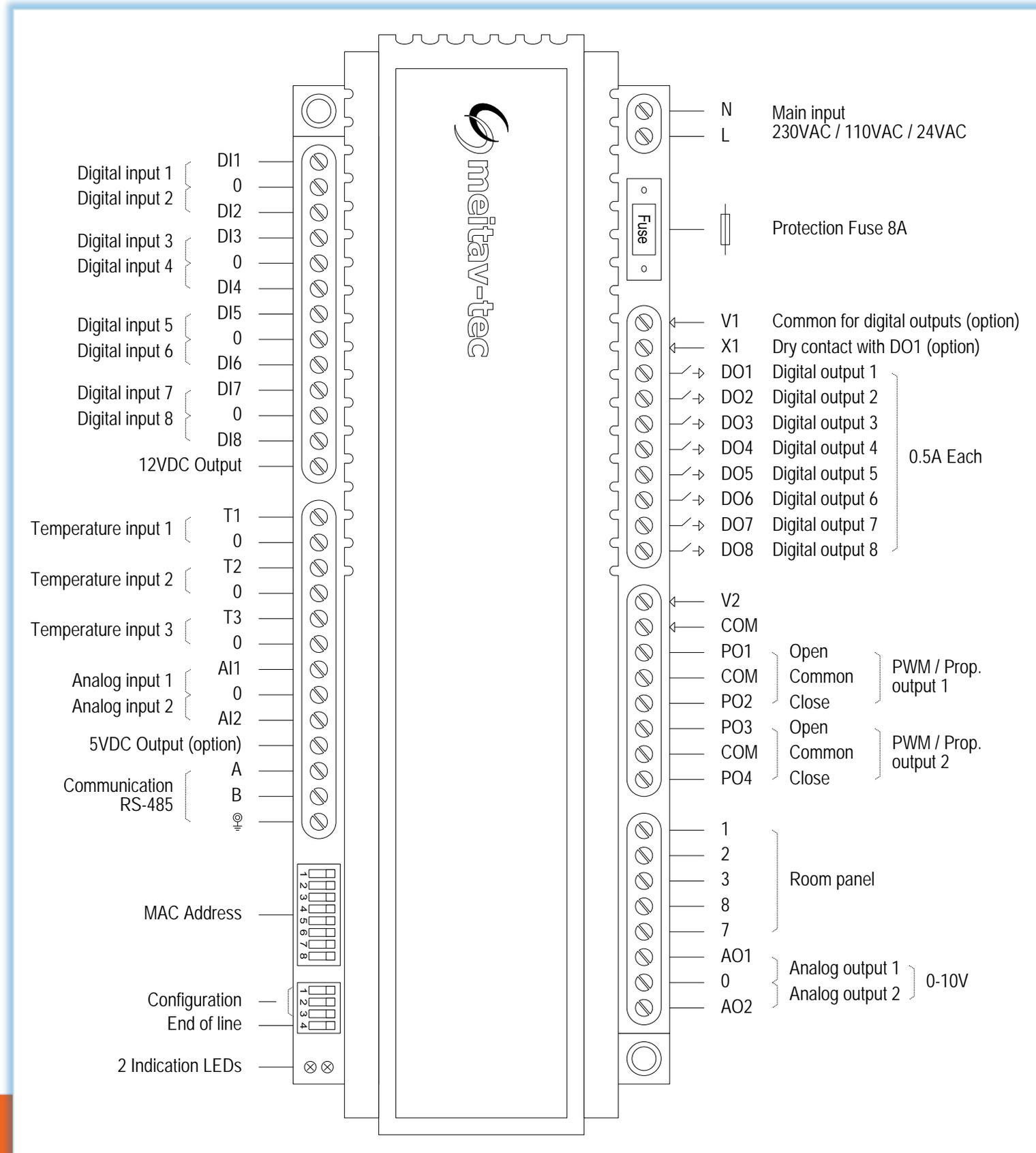
12VDC Supply for occupancy sensor

MAC Address 1-255 by DIP switch

4 Configuration DIP switches

DIN rail / 4 Screws mounting

CE certified

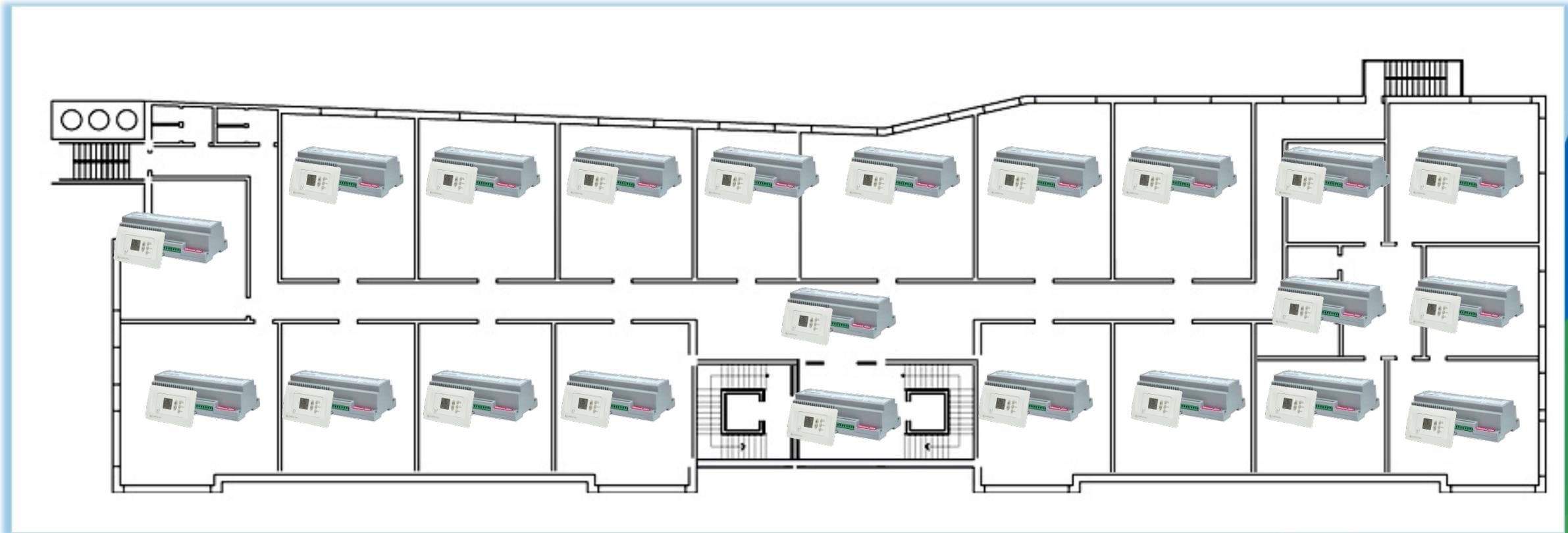


Types

CTU - Fan-Coil Controllers	Outputs
FC-SUPER	On/Off
P-FC-SUPER	0-10VDC proportional
PM2-FC-SUPER	3-Wire (Open/Common/Close) 24VAC
TA2-FC-SUPER	Thermal Actuator (110VAC)
CTU - Air Condition Controllers	Outputs
AC-SUPER	Compressors & Heat Pump outputs
WSHP	Water Source – Compressor & Heat Pump
Stand alone Fan-Coil Thermostat	Outputs
FMHC110-FC-MDB01	On/Off 110VAC



Floor Layout



The TCP/IP Web HVAC Network Controller & Viewer



Introduction

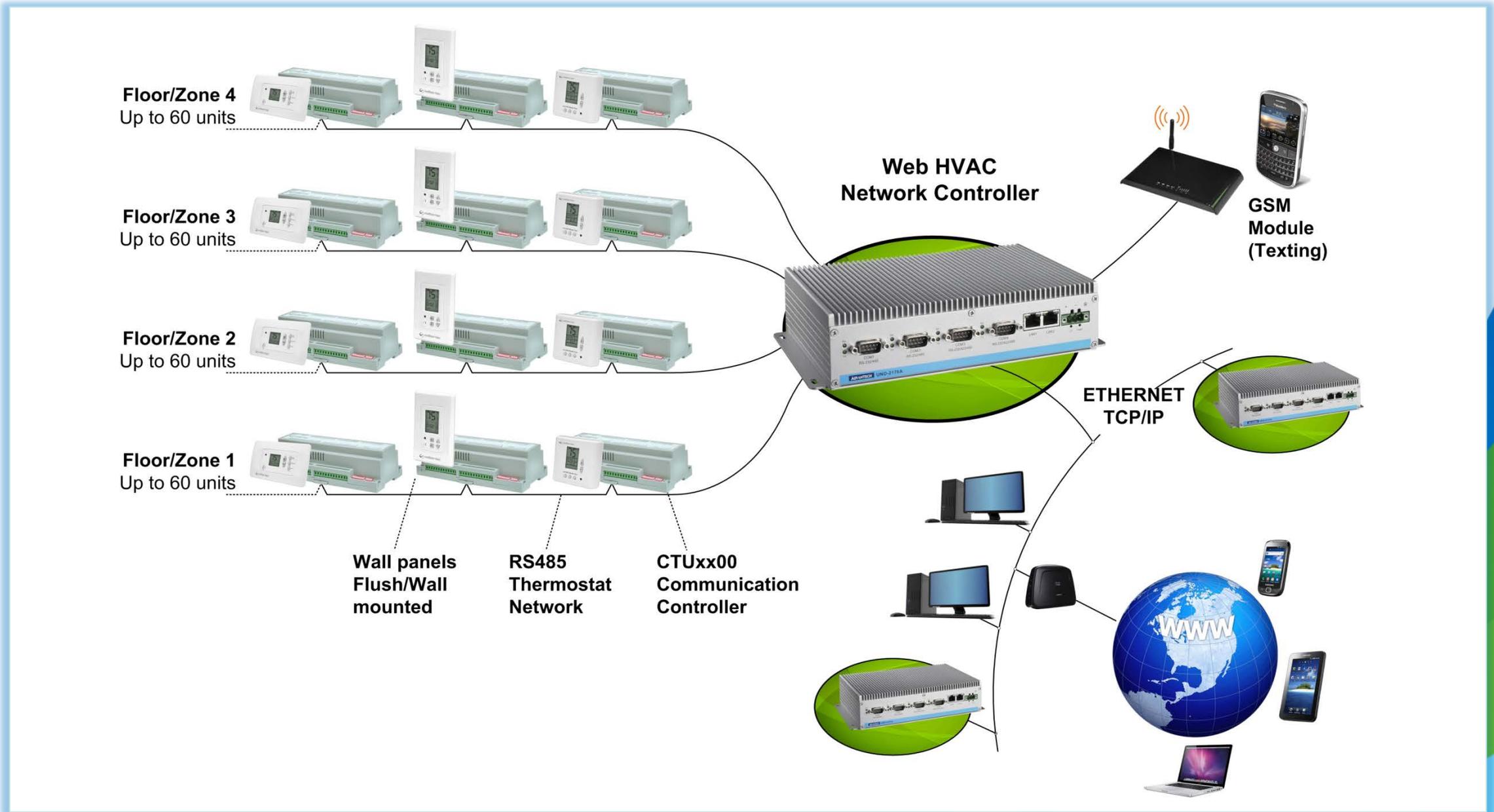
- HVAC Network Control is an ideal solution for real-time monitoring and controlling of a thermostat network
- Suitable for small to medium buildings that require a simple-to-use graphical interface and wish to save energy by using simple programming and full control over the HVAC units
- The TCP/IP Web controller is self-contained, requiring no external PC or application for its use

Introduction (cont.)

The TCP/IP Web offer's the following options:

- Up to 4x60 Meitav-tec controllers can be connected to each TCP/IP/WEB via RS-485 communication network
- Web Access to each controller via exclusive IP from any device with Ethernet / Internet connection
- Automatic detection of Meitav-tec controllers that are connected
- Weekly Programs / Special Events
- Data logger (can be exported to Excel)

Schematic Layout



Benefits

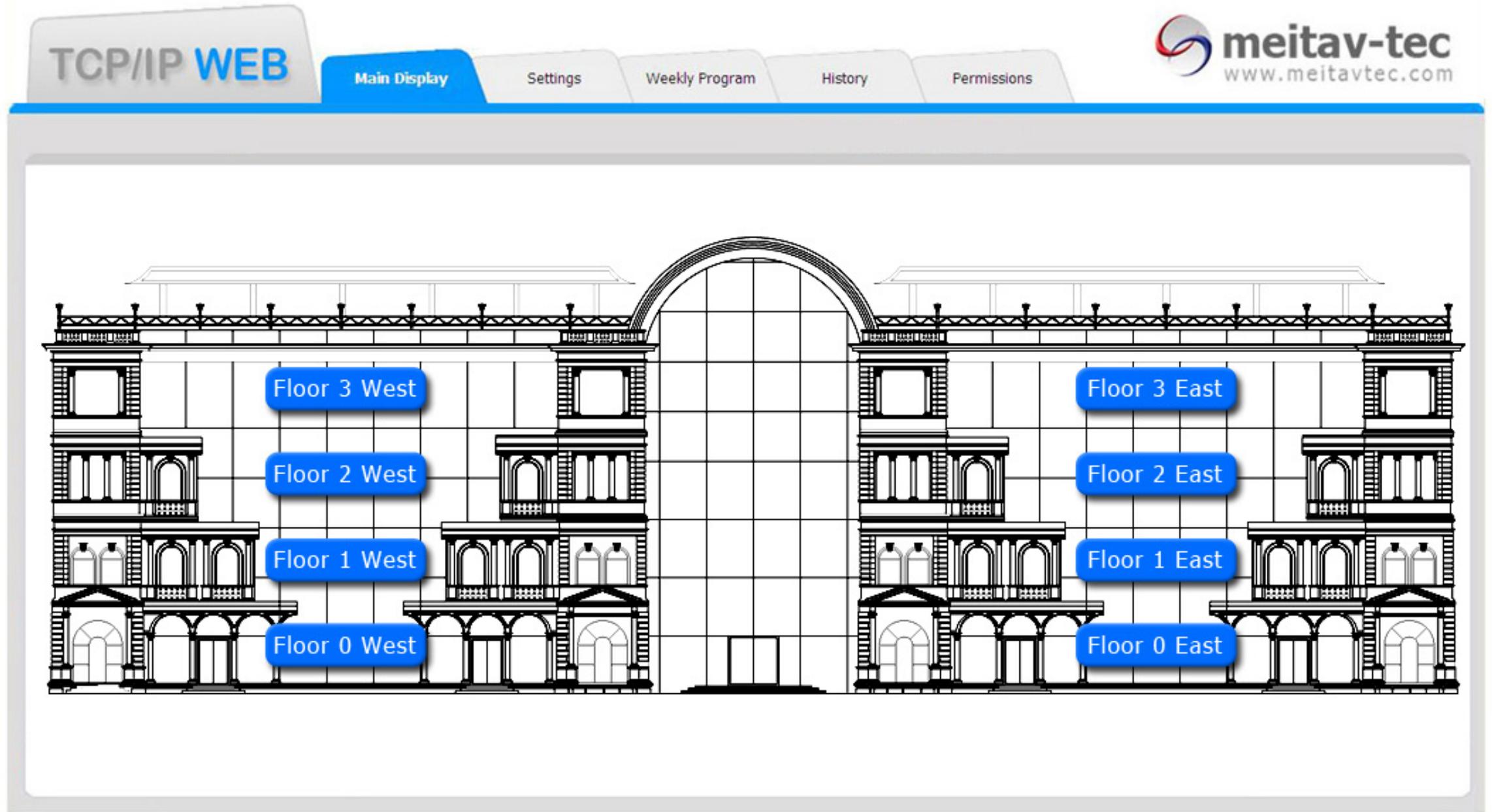
- Easy and friendly user interface over the internet explorer window
- Remotview and control of all units in the network
- Simple network build-up using a generic display and user interface
- Replaces the need for dedicated computer on site for the BMS
- System continues to work as a standalone system when disconnected from the web
- Easy troubleshooting during installation using multiple RS-485 networks

Features

- Texting to mobile phone numbers by Texting - optional
- Administrative privileges allow control for each unit in different levels (administrator, viewer, maintenance)
- Multi-lingual interface
- Multiple simultaneous users
- Automatic detection of all the units in the network without the need to load Object lists – quick setup
- AlarmCollect runtime and trend data, helping to analyze the system performance and improve the energy savings
- Remote access via the internet, without the need to be at site saves time and money

TCP/IP WEB Screens

Main display – Floor view



TCP/IP WEB Screens

Main display – Floor view

The screenshot displays the 'Main Display' interface for 'Floor 1 West'. The interface includes a navigation bar with tabs for 'Main Display', 'Settings', 'Weekly Program', 'History', and 'Permissions'. The top right corner features the 'meitav-tec' logo and website address 'www.meitavtec.com'. Below the navigation bar, there are dropdown menus for 'English' and 'Floor 1', and a toggle for 'Table display / Floor diagram'. On the left side, a control panel contains buttons for 'Check All', 'Check Group', and 'Uncheck', along with dropdown menus for 'On/Off', 'Set point', 'Fan speed', 'Lights', 'Mode', and 'Lock'. At the bottom of this panel are 'Send' and 'Clear' buttons, a 'Legend' section, and a red 'Errors' button. The main area shows a floor plan with numbered rooms (100-119) and their status. Room 100 is checked, while room 119 is red with 'X X X'. Each room contains a light icon and a fan speed icon. At the bottom, a legend shows 'ON' and 'OFF' states for two fan speed settings, SF-1 and SF-2, with corresponding light and fan icons.

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TCP/IP WEB

Main Display Settings Weekly Program History Permissions

English Floor 1 Table display / Floor diagram

Floor 1 West

100 101 102 103 104 105 106 107 108 109
110 111 112 113 114 115 116 117 118 119

ON SF-1 OFF ON SF-2

TCP/IP WEB Screens

Main display – Table view

The screenshot displays the 'Main Display' tab of the TCP/IP WEB interface. The interface includes a navigation bar with tabs for 'Main Display', 'Settings', 'Weekly Program', 'History', and 'Permissions'. The 'Main Display' tab is active, showing a table of room settings and control options. The table has columns for Address, Port, Adaptor, Room Name, Floor, On/Off, Mode, Fan, SetPoint, T_Ambient, OCC, Light, Alarm, and Lock. The table is scrollable, and a 'Table display/ Floor diagram' toggle is visible above it. On the left side, there are control panels for 'On/Off', 'Set point', 'Fan speed', 'Lights', 'Mode', and 'Lock', each with a dropdown menu and a 'Send' button. The 'On/Off' dropdown is set to 'On', 'Set point' to '74', 'Fan speed' to 'Med', 'Lights' to 'On', 'Mode' to 'Auto Change', and 'Lock' to 'Unlock'. The table contains 21 rows of data, with the second row (Address 1, Port COM11) selected.

	Address	Port	Adaptor	Room Name	Floor	On/Off	Mode	Fan	SetPoint	T_Ambient	OCC	Light	Alarm	Lock
<input type="checkbox"/>	1	COM13	10.0.0.136	301	1	0	0	1	74	75	0	0	0	0
<input checked="" type="checkbox"/>	1	COM11	10.0.0.136	101	1	1	0	2	74	72	0	1	0	0
<input type="checkbox"/>	1	COM12	10.0.0.136	201	1	0	0	1	74	75	0	0	0	0
<input type="checkbox"/>	2	COM13	10.0.0.136	302	1	0	0	1	74	75	0	0	0	0
<input type="checkbox"/>	2	COM11	10.0.0.136	102	1	0	0	3	74	74	1	0	0	0
<input type="checkbox"/>	2	COM12	10.0.0.136	202	1	0	0	1	74	75	0	0	0	0
<input type="checkbox"/>	3	COM13	10.0.0.136	303	1	0	0	1	74	75	0	0	0	0
<input type="checkbox"/>	3	COM11	10.0.0.136	103	1	0	0	1	74	72	0	0	0	0
<input type="checkbox"/>	3	COM12	10.0.0.136	203	1	0	0	1	74	75	0	0	0	0
<input type="checkbox"/>	4	COM13	10.0.0.136	104	1	0	0	1	74	72	0	0	0	0
<input type="checkbox"/>	4	COM11	10.0.0.136	204	1	0	0	1	74	75	0	0	0	0
<input type="checkbox"/>	4	COM12	10.0.0.136	304	1	0	0	1	74	75	0	0	0	0
<input type="checkbox"/>	5	COM13	10.0.0.136	105	1	0	0	1	74	75	0	0	0	0
<input type="checkbox"/>	5	COM11	10.0.0.136	205	1	0	0	1	74	75	0	0	0	0
<input type="checkbox"/>	5	COM12	10.0.0.136	305	1	0	0	1	74	75	0	0	0	0
<input type="checkbox"/>	6	COM13	10.0.0.136	106	1	0	0	1	74	75	0	0	0	0
<input type="checkbox"/>	6	COM11	10.0.0.136	206	1	0	0	1	74	75	0	0	0	0
<input type="checkbox"/>	6	COM12	10.0.0.136	306	1	0	0	1	74	75	0	0	0	0
<input type="checkbox"/>	7	COM13	10.0.0.136	107	1	0	0	1	74	75	0	0	0	0
<input type="checkbox"/>	7	COM11	10.0.0.136	207	1	0	0	1	74	75	0	0	0	0

TCP/IP WEB Screens

Main display – Room details

TCP/IP WEB **Main Display** Settings Weekly Program History Permissions

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COM Port : COM13 Adaptor : 10.0.0.136 Floor : 1 Unit Address : 1 Room Number : 100

Back Next

Settings

Set Temp	60	▼
On/Off	On	▼
Fan Speed	High	▼
Set Limit Cool	75	▼
Set Limit Heat	90	▼
Lights	On	▼

Unit Communication Settings

Floor	1
Unit Address	10.0.0.136;1;COM13
Room Number	100
Save Unit Details	Save
Clear Unit Details	Clear

Send

Back

TCP/IP WEB Screens

Units Settings / Groups

TCP/IP WEB

Main Display

Settings

Weekly Program

History

Permissions



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Adaptors Selection

IP Address	Del
10.0.0.136	

Add +

Group Settings

Group Name	Color	Del
Administration		
Development		
Managment		
Marketing		
Production		

Add +

Room Selection

Adaptor	Port	MAC Address	Room No	Room Name	Group	Floor	Del
10.0.0.136	COM13	1	100	301	Marketing	1	
10.0.0.136	COM11	1	101	101	Marketing	1	
10.0.0.136	COM13	2		302	Development	1	
10.0.0.136	COM11	2	103	102	Development	1	
10.0.0.136	COM12	2		202	Development	1	
10.0.0.136	COM13	3		303	Administration	1	
10.0.0.136	COM11	3	104	103	Administration	1	
10.0.0.136	COM12	3		203	Administration	1	

Submit FullScan

Add +

TCP/IP WEB Screens

Weekly program – main display

TCP/IP WEB Main Display Settings **Weekly Program** History Permissions

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Units Selection

All	Adaptor	Port	MAC Address	Room Name	Room No	Group	Floor
<input type="checkbox"/>	10.0.0.136	COM13	1	301	100		1
<input type="checkbox"/>	10.0.0.136	COM11	1	101	101		1
<input type="checkbox"/>	10.0.0.136	COM12	1	302	102		1
<input type="checkbox"/>	10.0.0.136	COM13	2	102			1
<input type="checkbox"/>	10.0.0.136	COM11	2	202	103		1
<input type="checkbox"/>	10.0.0.136	COM12	2	303			1
<input type="checkbox"/>	10.0.0.136	COM13	3	103			1
<input type="checkbox"/>	10.0.0.136	COM11	3	203	104		1
<input type="checkbox"/>	10.0.0.136	COM12	3	104			1
<input type="checkbox"/>	10.0.0.136	COM13	4	204	105		1
<input type="checkbox"/>	10.0.0.136	COM11	4	304			1
<input type="checkbox"/>	10.0.0.136	COM12	4	105			1
<input type="checkbox"/>	10.0.0.136	COM13	5	205			1
<input type="checkbox"/>	10.0.0.136	COM11	5	305			1
<input type="checkbox"/>	10.0.0.136	COM12	5	106	106		1

Add New special program
+

Add New weekly program
+ WP1

Weekly Programs

Disable	Program	Type		Del
<input type="checkbox"/>	AHR DEMO	SE	Select Edit	Del
<input type="checkbox"/>	AHR DEMO1	SE	Select Edit	Del
<input checked="" type="checkbox"/>	AHR DEMO2	WP	Select Edit	Del
<input type="checkbox"/>	AHR DEMO3	WP	Select Edit	Del

TCP/IP WEB Screens

Weekly program – Program details

TCP/IP WEB

Main Display

Settings

Weekly Program

History

Permissions



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Weekly Program Name: AHR DEMO

January 2012		Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Mo	Tu	We	Th	Fr	Sa	Su		
26	27	28	29	30	31	1		
2	3	4	5	6	7	8		
9	10	11	12	13	14	15		
16	17	18	19	20	21	22		
23	24	25	26	27	28	29		
30	31	1	2	3	4	5		

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
0 ⁰⁰							
1 ⁰⁰		se10 (01:00 - 07:30) ✕					
2 ⁰⁰							
3 ⁰⁰	se10 (03:30 - 10:00) ✕				se10 (03:00 - 09:30) ✕		
4 ⁰⁰							
5 ⁰⁰			se10 (05:00 - 12:00) ✕	se10 (05:30 - 10:30) ✕			
6 ⁰⁰							
7 ⁰⁰							
8 ⁰⁰							
9 ⁰⁰							
10 ⁰⁰							
11 ⁰⁰	se10 (11:30 - 16:30) ✕						
12 ⁰⁰							
13 ⁰⁰							
14 ⁰⁰							
15 ⁰⁰							
16 ⁰⁰							

New Back

Energy Saving

Repeat Every: 0.5 hrs. ▾

From: 19:00 ▾

Till: 07:00 ▾

Apply



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Summary

Meitav-tec offer's a state of the art solution for all your HVAC control requirements.

The CTU pre-programmed B.M.S controllers are offered in various configurations to meet any field application.

Together with the TCP/IP WEB H.M.I software, it will enhance your projects to the edge of todays technologies and beyond.

We'll be more than happy to see you join our honorable list of satisfied partners and look forward to a successful cooperation.

Meitav-tec Ltd

Contel group

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