

Compatible Devices (Partial Portfolio)



Mx-RPW



Mx-ML2



Mx-EDWS



Mx-EKCS



Mx-RTS1

# Mx-MTB1

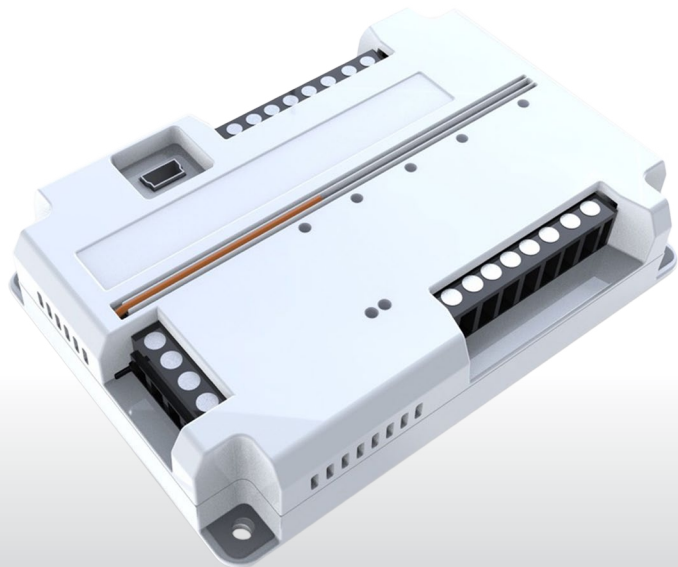
## HVAC CONTROL BOARD

### DESCRIPTION

The Magnum HVAC Control Board (Mx-MTB1) has the ability to control fan coil units, PTAC units, heat pumps, up to two cool and three heat. The Mx-MTB1 uses wireless communication to provide quick and easy implementation of the energy-saving HVAC controls. When the Mx-MTB1 receives an “occupied” signal from any of Magnum’s wireless sensors (including Mx-RPW), the user immediately gains full control of the HVAC settings. When the Mx-MTB1 receives an “unoccupied” signal, it sets the room back to the preset unoccupied temperature. When used with Magnum’s Gateway, the thermostat can also be connected to BACNet HVAC control systems.

### TECHNICAL SPECIFICATIONS

Part Numbers (Frequency Dependant)	M9-MTB1 (902 MHz - North America) M8-MTB1 (868 MHz - Europe and China) MJ-MTB1 (928 MHz - Japan)
Range	50 ft-150 ft typical
Input Voltage	24 VAC
Max Loads	24V (1.5 amp/circuit)
Temperature Monitor Range	32°F to 99.9° F (0°C to 37.7°C)
Temperature Set Point Range	60°F to 85°F(15.5°C to 29.5°C)
Operating Environment	14°F to 131°F (-10°C to 55°C) Non Condensing Humidity
Storage Environment	-4°F to 131°F (-20°C to 55°C) Non Condensing Humidity
Fan Control	Selectable: Auto Cycle, Low, Medium, High, Economy, Off
Memory	Stores up to 30 Device IDs
Accuracy	+ / - 1°F (0.5°C)
Heat / Cool Control	<ul style="list-style-type: none"> <li>• Compressor</li> <li>• Reversing Valve</li> <li>• Medium Fan</li> <li>• Auxiliary Heat</li> <li>• Low Fan</li> <li>• High Fan Relays</li> </ul>
Dimensions	3” W x 4.25” L x 0.875” H (76.2 mm W x 107.95 mm L x 22.225 mm H)
Radio Certifications	TCM300U FCC (SZV-STM300U); IC (Canada 5713A-STM300U)



#### Compatible Devices (Partial Portfolio)



Mx-RPW



Mx-ML2



Mx-EDWS



Mx-EKCS

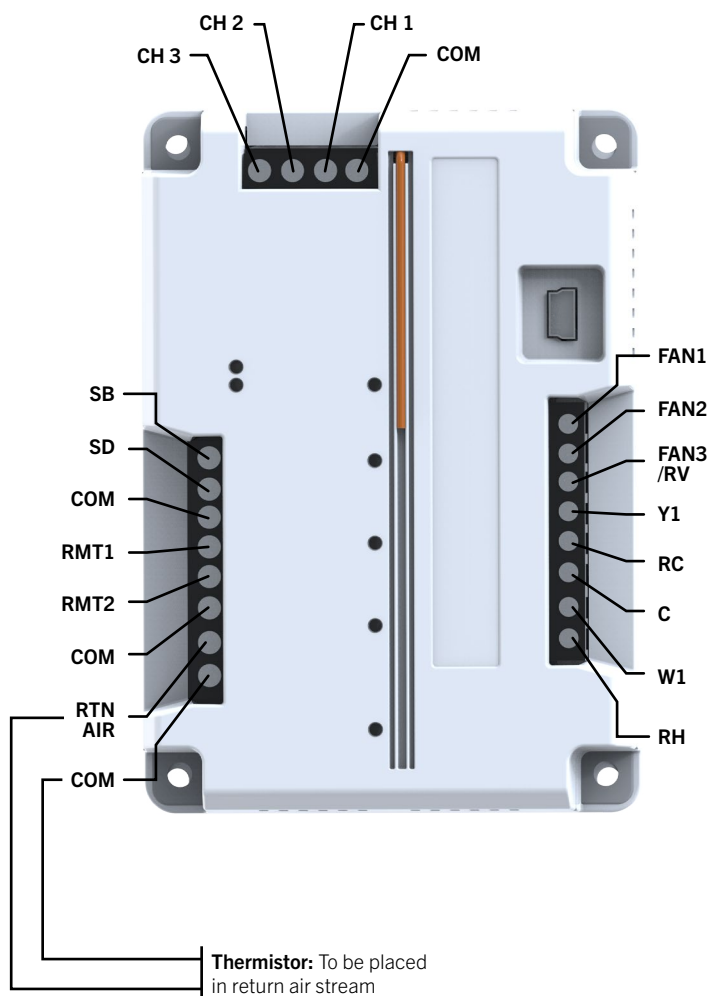


Mx-RTS1

# Mx-MTB1

## HVAC CONTROL BOARD

### CONNECTION OVERVIEW

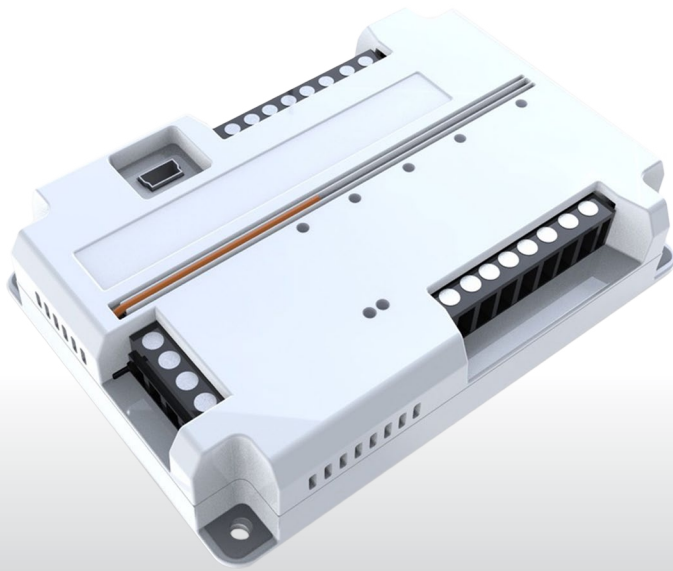


### COMPATIBLE DEVICES

- Mx-RPW (Room Control Panel / Occupancy Sensor)
- Mx-MRC1 (Window / Door Sensor)
- Mx-EDWS (Window / Door Sensor)
- Mx-EKCS (Key Card Reader)
- Mx-KC1 (Key Card Reader)
- Mx-ML2 (Motion / Lux Sensor)
- Mx-EOSC (Motion / Lux Sensor)
- Mx-EOSW (Motion / Lux Sensor)
- Mx-RTS1 (Single Channel Remote Temp Sensor)
- Mx-RTHS1 (1 Channel Remote Temp / rH Sensor)
- Mx-RTS3 (Three Channel Remote Temp Sensor)
- Mx-RTS1-SP (Single Channel Remote Temp Sensor with Set Point Dial)
- Mx-RTHS1 (1 Channel Remote Temp / rH Sensor with Set Point Dial)

### APPLICATIONS

- Hotels & Resorts
- Colleges & Universities
- New Construction
- Executive Offices
- Perimeter Zones
- Daylight Harvesting
- Restrooms
- Private Offices
- Retrofits
- Conference Rooms
- Lighted Hallways
- Cruise Ships
- Classrooms
- Daycare Facilities



Compatible Devices (Partial Portfolio)



Mx-RPW



Mx-ML2



Mx-EDWS



Mx-EKCS



Mx-RTS1

# Mx-MTB1

## HVAC CONTROL BOARD

### ADDITIONAL AVAILABLE MTB1 WIRED CONNECTIONS

Name	Signal	Type	Connections	Allowable Usage (Must be so configured)
SB	Dry Contact	NO, NC	SB - COM	Wired Entry Door Switch Wired Motion Sensor
SD	Dry Contact	NO, NC	SD - COM	Wired Balcony Door Wired Window Sensor
RMT1	10K Thermistor, Type 2		RMT1 - COM	Pipe Temperature Sensor (AquaStat) Return Air Temperature Sensor Supply Air Temperature Sensor Outdoor Temperature Sensor
RMT2	10K Thermistor, Type 2		RMT2 - COM	Pipe Temperature Sensor (AquaStat) Return Air Temperature Sensor Supply Air Temperature Sensor Outdoor Temperature Sensor
RTN AIR	10K Thermistor, Type 2 (Provided)	Required	RTN AIR - COM	Required Return Air Temperature Sensor Required for Any and All Configurations Not Configurable
CH1	0-10V Assignable Output	Analog	CH1 - COM	Function and Polarity are Assignable Using AirConfig
CH2	0-10V Assignable Output	Analog	CH2 - COM	Function and Polarity are Assignable Using AirConfig
CH3	0-10V Assignable Output	Analog	CH3 - COM	Function and Polarity are Assignable Using AirConfig

*Notes: All "COM" terminals are electrically connected to the "C" power connection.*