# PELICAN

# **TCM1** Wireless 24VAC Controller

The TCM1 has two primary applications:
1) For hotel rooms with PTAC units which currently do not have wire ran between the unit and a thermostat. Use the TCM1 to control the 24VAC PTAC unit and an RT1-DC as a battery-powered remote wireless thermostat on the wall.
2) Applications where there are zone dampers, but no wire running from the damper actuator to a thermostat. Use the TCM1 to control the 24VAC damper actuator and either an RT1-AC or RT1-DC remote wireless thermostat on the wall.

**+ MESH WIRELESS NETWORK**
The TCM1 communicates wirelessly with a GW400 to reach the Internet. Each TCM1 has built-in state-of-the-art wireless mesh network communication and repeating.

**+ FAULT ALARMING**
Built-in system and space analytics with automated email or text message alerts when a fault is detected.

**+ WEB APP**
Connecting a TCM1 to a RT1-DC or RT1-AC is done online through the Pelican Web App. Management and scheduling is also available through the Web App.

**+ HISTORICAL TREND DATA**
Online viewable historical data on space temperature, setpoints, HVAC demand, and fan demand.

**+ INSTALLATION**
The TCM1 is a 24VAC control module that can be installed directly inside a PTAC unit or at a 24VAC damper actuator. The TCM1 will control the connected devices and is configured through the Pelican Web App.

NOTE: This device cannot be installed inside of a metal rooftop HVAC unit. Metal enclosures block wireless signals.

**Designed and assembled in the USA
5-Year Limited Warranty**

FC
CONTAINS FCC ID
OA3MRF24J40MA

## Specifications

POWER
| | |
|---|---|
| Hardwire: | 24VAC, 60Hz; 50 mA |
| Voltage Range: | 23 - 30VAC |
| Relay Current: | 1.0A running |

WIRING
| | |
|---|---|
| Conventional: | R, RC, W, W2, Y, Y2, G, C |
| Heat Pump: | R, RC, O/B, AUX, Y, Y2, G, C |
| Damper Actuator: | Y/Y2 - 24VAC CONTROL |
| | W/W2 - 24VAC REHEAT |

SYSTEM PROTECTION
Four-minute Compressor Short-cycle Protection
Temporary Schedule Override
Auxiliary/Emergency Heat Efficiency Algorithm
Keypad Lockout
Trend Data Analytics and Fault Monitoring

COMPATIBILITY
24VAC gas, electric, or oil heating systems.
Conventional and Heat Pump

TCM1 RANGE
| | |
|---|---|
| Operating Range | -4°F to 122°F |
| Differential Temperature | ±0.5°F |
| Operating Humidity (%RH) | 5 to 90% RH; non-condensing |
| Storage Temperature | -20°F to 160°F |

SIZE
| | |
|---|---|
| Inch | H 3.5 x W 5.9 x D 1.5 |
| mm | H 89 x W 150 x D 38 |
| Vertical Mounting | |

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