



***ETM***

Electronic  
Thermostat  
Module

Wall-Mount  
Series



**ETM** dedicated digital controllers manage rooftop or unitary HVAC equipment. They are ideal for upgrading from conventional thermostats to fully distributed digital control.

*LOGIC ONE® – technology you can rely on*

Novar's LOGIC ONE Advanced Building Control System delivers better reliability, greater versatility and more standard features than any other building control system on the market. LOGIC ONE technology is designed to maximize the operational efficiency of any HVAC or lighting system. The result: lower energy costs, increased comfort, and reduced equipment maintenance.

*Bottom Line: With Novar You Know It Performs*

**NOVAR®**  
CONTROLS

*With Novar, you know.*

LOGIC ONE



# Specifications

**ETM**

Electronic Thermostat Modules are generally installed in the same location as a standard thermostat within the controlled space. The basic ETM configuration consists of internal temperature sensors and schedule-override buttons.

IOM/2

Hawki

ETC

ETM

HPC+

UVC

VAV

## Physical Characteristics

<b>Height:</b>	4.875 inches.
<b>Width:</b>	7.093 inches.
<b>Depth:</b>	1.75 inches.
<b>Weight:</b>	1 lb.
<b>Mounting:</b>	Base-mounting holes allow fastening directly to an interior wall or an electrical junction box. Six-inch pigtail leads provide easy connection to equipment control wiring. Requires 4 inches minimum clearance on all sides for proper air circulation.

## Operating Environment

<b>Temperature:</b>	32° to 122° F (0° to 50° C).
<b>Humidity:</b>	0 to 95% relative, noncondensing.

## Electrical

<b>Voltage:</b>	24VDC (Class 2).
<b>Consumption:</b>	120mA.
<b>Analog Inputs:</b>	4 to 20mA.
<b>Digital Inputs:</b>	Contact closure only.
<b>Digital Outputs:</b>	24V. Triac - 1 ampere (pilot duty). AC only. Relay - 1 ampere (pilot duty). AC or DC.
<b>Status Indication:</b>	One schedule-status indicator LED and six output status LEDs.

## Special Circuits/Diagnostics

<b>Low Voltage Detect:</b>	Senses proper operating voltage.
<b>Temperature Sensor Monitor:</b>	Verifies operation of temperature sensors.
<b>Watch Dog:</b>	Monitors and ensures ETM timing and operation.
<b>Fail Safe:</b>	Programmed setpoints held in nonvolatile PROM.
<b>Surge Suppression:</b>	All inputs/outputs protected against lightning-induced surge or voltage transients.

Specifications subject to change without prior notification.

## Network Communications

<b>Method:</b>	RS-485.
<b>Cable (network):</b>	2-wire, shielded cable. Belden 8761 or equivalent.

## ETM-1010, ETM-1020

For general purpose, staged HVAC packaged units, makeup-air heaters, staged single-zone fan coil units, etc.

<b>Inputs:</b>	<b>Total - 3.</b> Zone temperature (analog, built-in). Airflow detection (digital). Timed override (digital, built-in).
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<b>Digital Outputs:</b>	<b>Total - 6.</b> Heat 1. Heat 2. Cool 1. Cool 2. Fan. Damper (or third heat).
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<b>Output Type:</b>	ETM-1010 is triac. ETM-1020 is relay.
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## ETM-2040

For staged HVAC system applications requiring a second temperature sensor (typically discharge air or second zone), dirty filter indication and outside damper enthalpy lockout.

<b>Inputs:</b>	<b>Total - 5.</b> Zone temperature (analog, built-in). Discharge air temperature (analog). Airflow detection (digital). Dirty filter indication (digital). Timed override (digital, built-in).
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<b>Digital Outputs:</b>	<b>Total - 6.</b> Heat 1. Heat 2. Cool 1. Cool 2. Fan. Damper (or third heat).
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<b>Output Type:</b>	Triac.
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<b>Options:</b>	Remote Temperature Sensors: 20° to 120° F (-7° to 49° C) or 20° to 170° F (-7° to 77° C).
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