

# Distributed Direct Digital Control System

**Hawki** *ADVANCED* the unitary controller designed to manage and monitor air-handling units within the Novar Controls energy and information management system.

Hawki Advanced communicates with Novar's primary controller or in fail-safe, stand-alone mode to:

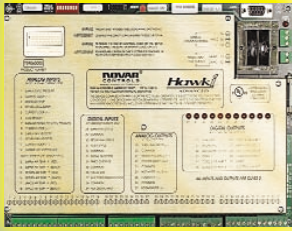
- Lower energy costs.
- Increase building comfort.
- Reduce equipment maintenance.

*Hawki Advanced provides unparalleled reliability, to optimize:*

- Comfort cooling and heating.
- Humidification and dehumidification.
- Automated start-up routines and scheduling.
- Fresh air ventilation and economizer control.



*With Novar, you know.*



## Specifications



Hawki Advanced's flexibility and enhanced technology make it the most reliable air handling unit controller available today. It is engineered to control a wide range of AHU configurations (variable air volume, variable volume and temperature, dual duct, multi-zone, etc.).

### Physical Characteristics

<b>Height:</b>	9.5 inches
<b>Width:</b>	13.22 inches
<b>Depth:</b>	2.44 inches
<b>Weight:</b>	4 lbs
<b>Mounting:</b>	Four base-slotted mounting holes allow fastening to a wall or cabinet
<b>Options:</b>	Indoor all-aluminum enclosure purchased separately

### Operating Environment

<b>Temperature:</b>	-40° to 140°F (-40° to 60°C)
<b>Humidity:</b>	0 to 95% relative, noncondensing

### Electrical

<b>Voltage:</b>	24VAC (Class 2)
<b>Consumption:</b>	15VA
<b>Analog Inputs:</b>	4 to 20mA (8) Millivolt temperature (3)
<b>Digital Inputs:</b>	Contact closure only
<b>Analog Outputs:</b>	0 to 10VDC, 1mA
<b>Digital Outputs:</b>	24VAC, 2 ampere (pilot duty)

### Special Circuits/Diagnostics

<b>Over Current:</b>	Protects against overloading of current-loop power supply
<b>Surge Suppression:</b>	All inputs/outputs protected against lightning-induced surge or voltage transients
<b>Low Limit Protection:</b>	Outputs programmable to respond to low temperature

### Network Communications

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

### Local Communications

<b>Method:</b>	RS-232, serial communication port
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### Input/Output Points

<b>Analog Inputs:</b>	<b>Total - 11</b> <ul style="list-style-type: none"><li>• Supply duct static pressure</li><li>• Building or mixed air plenum static pressure</li><li>• Supply velocity pressure</li><li>• Return velocity pressure</li><li>• Return air relative humidity</li><li>• CO<sub>2</sub></li><li>• Outside air temperature</li><li>• Supply air temperature</li><li>• Return air temperature</li><li>• Mixed air temperature</li><li>• Zone air temperature</li></ul>
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<b>Digital Inputs:</b>	<b>Total - 8</b> <ul style="list-style-type: none"><li>• Supply fan status</li><li>• Return fan status</li><li>• Filter status</li><li>• Smoke detector</li><li>• Timed override</li><li>• Low temperature limit status</li><li>• Auxiliary confirmed status</li><li>• Auxiliary input</li></ul>
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<b>Calculated Inputs:</b>	<b>Total - 2</b> <ul style="list-style-type: none"><li>• Supply cfm</li><li>• Return cfm</li></ul>
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<b>Analog Outputs:</b>	<b>Total - 6</b> <ul style="list-style-type: none"><li>• Supply fan speed signal</li><li>• Return fan speed signal</li><li>• Chilled water valve signal</li><li>• Hot water valve signal</li><li>• Humidifier signal</li><li>• Mixing dampers (economizer) signal</li></ul>
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<b>Digital Outputs:</b>	<b>Total - 11</b> <ul style="list-style-type: none"><li>• Supply fan start/stop</li><li>• Return fan start/stop</li><li>• 8 user-defined heat/cool outputs</li><li>• Auxiliary output</li></ul>
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Specifications subject to change without prior notification.



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