



# Savvy™

ENERGY INFOSYSTEM

Smarter  
Faster  
Digital  
Communicator

**Savvy** It's the highest performance single building processor now available to you. Savvy is powerful, easy to install, easy to use – and, because of its reliability, we offer the best warranty in the business.

### *Advanced Ethernet Capabilities*

This new Energy Infosystem provides greater memory, processing power and communications speed – to maximize control of both energy demand and supply side energy management.

*Bottom Line: With Novar, You Know It's Smart*

**NOVAR®**  
CONTROLS

*With Novar, you know.*

W  
N  
O  
C  
L  
O  
L

Input  
Output

Howki

VAV

ETM

UVC

ETC

HPC+



# Specifications

**Savvy**<sup>™</sup>  
ENERGY INFOSYSTEM

Savvy is the smart communicator at the heart of LOGIC ONE<sup>®</sup>. Its powerful processing speed allows for fast monitoring of crucial systems such as temperature, electrical use and air quality. Up to 31 inputs and outputs can be user-configured for custom controlled loads.

## Physical Characteristics

<b>Height:</b>	30 inches.
<b>Width:</b>	13.3 inches.
<b>Depth:</b>	2.5 inches.
<b>Weight:</b>	15.6 lbs. (All-aluminum enclosure).
<b>Mounting:</b>	Four slotted mounting holes on base with enclosed terminal strips for I/O and power connections and knockouts for 1/2-inch and 3/4-inch conduit fittings.

## Operating Environment

<b>Temperature:</b>	32° to 140° F (0° to 60° C).
<b>Humidity:</b>	0 to 95% relative, noncondensing.

## Electrical

<b>Voltage:</b>	24VAC (Class 2).
<b>Consumption:</b>	40VA.
<b>Analog Inputs:</b>	4 to 20mA.
<b>Digital Inputs:</b>	Contact closure only.
<b>Digital Outputs:</b>	24VAC Triac: 2 ampere (pilot duty), AC only. Relay: 2 ampere (pilot duty), AC or DC.
<b>Output (Fault):</b>	24VAC or VDC, 2 ampere (pilot duty).

## Special Circuits/Diagnostics

<b>Over Current:</b>	Protects against overloading of current loop power supply.
<b>Low Voltage Detect:</b>	Senses proper operating voltage.
<b>Temperature Sensor Monitor:</b>	Verifies outdoor temperature sensor operation.
<b>Memory Test:</b>	Verifies memory size and functionality.
<b>Watch Dog:</b>	Monitors and ensures Savvy timing and operation.
<b>Surge Suppression:</b>	All inputs/outputs protected against lightning-induced surge or voltage transients.
<b>Real-Time Clock:</b>	Quartz crystal provides day, month, date, years, hours, minutes and seconds; automatic synchronization.
<b>Built-in Rechargeable Battery Backup:</b>	One hour UPS. 5 year full memory and clock.

## Novar Network Communications

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

## Local Area Network (LAN) Communications

<b>Method:</b>	Ethernet (IEEE 802.3), RJ45 interface jack.
----------------	---

## Remote Communications

<b>Network:</b>	Ethernet (IEEE 802.3) LAN/WAN, RJ45 interface jack.
<b>Phoneline:</b>	Industry standard modem, RJ11 interface jack.

## Memory

<b>Fully Configured Memory:</b>	16M bytes RAM, 8M bytes flash memory.
---------------------------------	---------------------------------------

## Local Controls

<b>Electrical Override:</b>	8 On/Off/Auto switches to manually (electrically) override outputs.
<b>Remote Override:</b>	8 override inputs to activate output operation during scheduled off periods.
<b>Local Access:</b>	RS-232 direct connect via laptop.

## Input/Output Points (User-Definable)

<b>Inputs:</b>	8, analog or digital.
<b>Outputs:</b>	8, digital (discrete on/off or pulse width modulation).
<b>Input/Output Range:</b>	7, 15, 31 modules. Up to 500 points.

## Dedicated Inputs/Output (Global)

<b>Inputs:</b>	Outdoor Light Sensor, Outdoor Temperature Sensor, Demand Pulse, Phase Loss Sensor, Emergency Status.
<b>Output:</b>	System Fault Output.

Specifications subject to change without prior notification.

© Copyright  
Novar Controls  
Corporation,  
1999

<sup>™</sup> Savvy is a  
Trademark of  
Novar Controls  
Corporation

<sup>®</sup> Registered  
Trademark of  
Novar Controls  
Corporation

**NOVAR**<sup>®</sup>  
CONTROLS

www.novar.com  
3333 Copley Road, Copley, OH 44321  
330-670-1010

