



A POWERFUL FAMILY OF UNITARY  
AND VARIABLE AIR VOLUME CONTROLLERS

## Spyder BACnet® Adds Legs To Your Control Options



# A WEB OF FEATURES

Spyder delivers powerful control, day in and day out

## Programmable

Spyder® Sylk™ Enhanced can be used on a wide variety of equipment types and will give you the flexibility to create almost any application. Just determine what you need done, then program Spyder Sylk Enhanced to control it all.

## Removable Terminal Strips

Service and wiring is fast and easy. Removable terminal strips enable wiring when the controller is mounted in hard-to-reach locations. To service, simply unplug the terminals with the wires, replace the controller and plug it all back in.

## Color-Coded Input/Output Labels

Connections and troubleshooting are easy with color-coded labels for inputs and outputs. The labels not only ensure that the controller is wired correctly, they also aid with troubleshooting because you can check specific wiring at a glance.

## Internal Real-Time Clock

Get unheard-of power in a unitary controller. With Spyder Sylk Enhanced, there's no need to add a separate timing device — a clock is built right in.

## Internal DC Power Supply

Spyder Sylk Enhanced controllers come with an internal DC power supply that saves you both the expense of external power and the additional wiring. As long as the load of the transmitter doesn't exceed the power supply's rating, you'll have the exact polarities and power you need.

## Integrated Actuator Option

With the optional integrated actuator, you'll save installation time and know you have the right actuator for your VAV application.

## Adaptive Integral Algorithm Control

Honeywell's Adaptive Integral Algorithm (AIA) Control

is the most accurate control available for space control applications. AIA Control not only reduces the overshoot during control, it ensures that customer comfort is achieved more quickly. As a result, AIA Control diminishes wear on the actuator by reducing the number of times it repositions, increasing the life of the actuator.

## The Open System Advantage

Flexibility is a hallmark Spyder Sylk Enhanced controllers. You won't be locked into closed systems. Instead, the availability of the BACnet® protocol provides the openness and interoperability to use Spyder Sylk Enhanced controllers with other devices or as a standalone system.

## Merging Technology, Comfort And Savings

Count on Spyder Sylk Enhanced controllers for:

- Reliable individual room temperature control
- Advanced control including CO<sub>2</sub>, Discharge Air Reset and VAV systems
- Wide application flexibility for unitary control
- Maximum energy savings through time-of-day control, load optimization, occupancy sensor interface with standby setpoints and demand limit control
- Automation savings through pressurization/depressurization, night purge, morning warm-up, terminal regulated air volume and more
- Pressure-independent flow control or pressure-dependent control and wide application flexibility for all VAV and constant volume terminal unit applications

## Save Space And Energy

Honeywell Spyder Sylk Enhanced unitary controllers offer flexibility in your system design, don't require a significant amount of installation space and help reduce energy costs. The operating temperature rating (-40° to 150° F) means you can mount controllers directly in the control panel of rooftop air-handling units, saving the installation costs of a separate control panel located in a conditioned space.



# THE EVOLVING SPYDER SYLK ENHANCED

Spins even tighter control.

## Enhanced Performance

Spyder Sylk Enhanced lives up to its name with plenty of enhanced features.

### Multiple Applications Supported

Multiple applications are now supported at every level of the programming architecture, meaning that programmers no longer need to worry that their work will be erased by accidentally dropping an application onto an existing program. Moreover, it means that completely dissimilar applications can coexist on the same wire sheet. For example, a VAV air handler application can exist with a boiler sequencing application. You'll have more flexibility to speed programming and reduce duplicate work.

### Full Download Support

You can save time by controlling the type of download to the controller, including full and smart (partial) downloading.

## Advanced Variable VAV Control

Spyder Sylk Enhanced VAV controllers redefine power and flexibility by providing the most advanced unitary control.

### Easy VAV Balancing

Spyder Sylk Enhanced VAV controllers use Honeywell RapidBalance™ for VAV box balancing. RapidBalance is a standalone, easy-to-use, PC-based software program with the ability to drive multiple VAVs to maximum or minimum flow setpoint, as well as drive water valves open or closed for water balancing. This allows all Honeywell Excel™ 10 VAV controllers and Spyder VAV controllers to be balanced using one simple box.

## Applications

The Spyder VAV controller is designed to meet a wide range of advanced and custom building requirements. Here are just a few of the many available features:

- VAV Box fan speed control
- Room CO<sub>2</sub> control
- VAV discharge air control and low limit
- Pressure-independent or pressure-dependent single-duct applications
- Up to three stages reheat
- Floating or pulse width modulation reheat and peripheral heat
- Series fan
- Parallel fan
- Return flow tracking
- Pressure-independent or pressure-dependent dual duct with or without flow mixing, cold and hot duct flow sensors
- Pressure-independent dual duct, constant volume, cold and hot duct flow sensors
- Pressure-independent dual duct, cold duct airflow sensor only
- Pressure-independent dual duct, constant volume, with discharge airflow sensor only

## Smart For Now. Smart For The Future.

Honeywell Spyder controllers give you affordable, flexible control for today's systems, but they're also designed for control as systems evolve. With everything from plenty of inputs and outputs to built-in DC power to programming flexibility, these controllers will give you cost-efficient control for years to come.

OS #	DESCRIPTION*
PUB6438S	Unitary BACnet 6 UI, 4 DI, 3 AO, 8 DO
PVB6436AS	VAV BACnet 6 UI, 4 DI, 3 AO, 6 DO & Actuator
PVB6438NS	VAV BACnet 6 UI, 4 DI, 3 AO, 8 DO

\*UI - Universal Input, DI - Digital Input, AO - Analog Output, and DO - Digital Output

## Increased Control Through Innovative Sensors



### Zio™ LCD Wall Module

Truly the latest in LCD digital technology, the Zio is the first LCD Wall Module compatible with a Honeywell Direct Digital Control (DDC) via a two-wire, polarity insensitive bus. Used with Spyder Sylk Enhanced controllers, the Zio delivers amazing flexibility and quick access to information. Almost any variable in the controller can be viewed and modified directly from the wall module. It's that simple — and that flexible. See the Zio in action at [customer.honeywell.com/zio](http://customer.honeywell.com/zio).



### TR20 Series Wall Modules

The TR20 family of wireless and direct-wired wall modules integrates seamlessly with a wide range of controllers, including Spyder Sylk Enhanced. Both versions add fully programmable building automation control, and the wireless models eliminate the hassles and costs of wires and conduits while also making sensor relocation a breeze. Count on TR20 wall modules for the accurate temperature readings and reliability you've come to expect from Honeywell sensors.

### Learn More

For more information on Honeywell Spyder Sylk Enhanced Controllers, call **1-800-466-3993** or visit [beyondinnovation.honeywell.com](http://beyondinnovation.honeywell.com).

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