

Spyder® Sylk™ Enhanced

Honeywell



A POWERFUL FAMILY OF UNITARY
AND VARIABLE AIR VOLUME CONTROLLERS

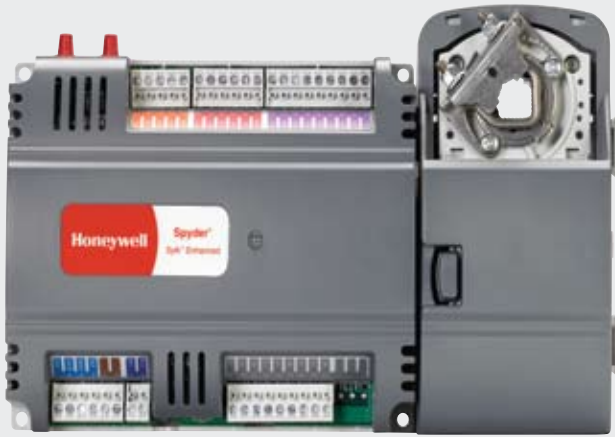
**Spyder LONWORKS® Adds Legs To
Your Control Options**

PERFECTLY SPUN CONTROL



The Power You Need For Advanced Control In The Body Of A Unitary Controller.

The Spyder® Sylk™ Enhanced family continues to grow — meeting more application demands. Select from standard size Spyder or Spyder Micro, which offers a smaller footprint for tight mounting requirements and reduced I/O count. The Spyder family reduces installation, programming and servicing time all while using a controller that adapts to your application needs rather than forcing you to buy a more expensive plant controller. A two-wire, polarity-insensitive bus lets you easily use the Honeywell Zio™ LCD wall module for even more flexibility.



CLASSIC SPYDER

All the popular features of original Spyder controllers are still here and ready to deliver powerful control

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 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, there's no need to add a separate timing device — a clock is built right in.

Internal DC Power Supply

Spyder 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 of Spyder controllers. You won't be locked into closed systems. Instead, the LonWORKS protocol provides the openness and interoperability to use Spyder Sylk Enhanced controllers with other LonWORKS devices.

Merging Technology, Comfort And Savings

Count on Spyder controllers for:

- Reliable individual room temperature control
- Advanced control including CO₂, 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 unitary controllers offer flexibility in your system design, don't require a significant amount of building 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 retains all the popular features of the original Spyder and enhances them with even more.

Now With Spyder ILC Models

Spyder Individually Licensed Controller (ILC) is the industry's first fully programmable controller from any Niagara^{AX} Framework[®] platform. Spyder ILC adds the unmatched flexibility of individual controller licensing to the existing features of the Spyder controller, providing the most open fully programmable controller on the market. The Spyder ILC controllers are ideal for expansion of any Niagara^{AX} system and are available in all the same configurations as the existing Spyder controller.

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 Air Volume Control

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

Easy VAV Balancing

Spyder 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 tool.

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 CO₂ 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 (PWM) 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



SPYDER MICRO

For applications that require a smaller footprint, the Spyder Micro has you covered with the same great features. You can't find a more powerful controller in this package size at this price.

Along with offering features in a compact unit, the Spyder Micro includes a 15 Hz Pulse Meter Input for hooking up water, sewage and electricity meters. Also available is a wiring box for meeting code requirements.

WITH EXTENDED REACH

The sensor family offers everything from the latest in LCD digital and wireless technology to the basic wall module for temperature sensing only.



ZIO LCD WALL MODULE

The Zio is the first LCD Wall Module to be compatible via a two-wire, polarity insensitive bus with a Honeywell Direct Digital Control (DDC).

Change Controller Variables

The Zio gives you control like you've never had from a wall module. Almost any variable in the controller can be viewed and modified directly from the wall module.

Two Models

Two models do it all, so you won't need to select from or purchase many different part numbers for different applications. Just remember two easy part numbers: TR70 and TR70-H with humidity output.

Customizable Display

Give end-users a meaningful home screen by configuring the Zio home screen for the specific application and end-user preferences.

Two-Wire Bus

The two-wire bus simplifies wiring and frees up inputs and outputs.

See How It Works

Go to customer.honeywell.com/zio to interact with an online demo of the 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.

Built-In Features

The family features include:

- Space sensor, 20K ohms NTC on most models
- Clean-looking, unobtrusive style
- Easy to adjust

COST-EFFECTIVE CONTROL AND ABSOLUTE ACCESSIBILITY

When a large medical technology company began constructing new buildings in the Minneapolis area, it had some specific requests. The two sites needed to have reliable indoor CO₂ measurements and a system that allowed them to bring in outdoor air without over-ventilating the buildings. They also wanted a cost-effective standalone controller that could operate independently of the network. Metropolitan Mechanical Contractors (MMC) had the answer.



“ Updates and adjustments are easy to make with this controller. It’s a huge advantage to be able to say that our customers have full off-site support with Spyder. ”

*Chris Koenig
Metropolitan Mechanical Contractors, Inc.
Minneapolis, MN*



SPYDER MICRO WIRING BOX

A simple enclosure designed specifically for the Spyder Micro Controller, this wiring box is a perfect fit for applications where a single controller requires extra protection or the wiring cannot be exposed.

The Spyder Micro Wiring Box is designed for:

- Screw-less controller mounting
- Conduit connections via four, 1/2-inch knockouts
- Access to the Controller Service Pin, Service Jack, Controller status LED and VAV Air Sensor Bridge with or without the cover
- Use with all Spyder Micro Controllers (Unitary, VAV – with or without actuator)



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*
PUL1012S**	Unitary LonWorks 1 UI, 0 DI, 1 AO, 2 DO
PUL4024S**	Unitary LonWorks 4 UI, 0 DI, 2 AO, 4 DO
PUL6438S	Unitary LonWorks 6 UI, 4 DI, 3 AO, 8 DO
PUL1012S-ILC**	ILC Unitary LonWorks 1 UI, 0 DI, 1 AO, 2 DO
PUL4024S-ILC**	ILC Unitary LonWorks 4 UI, 0 DI, 2 AO, 4 DO
PUL6438S-ILC	ILC Unitary LonWorks 6 UI, 4 DI, 3 AO, 8 DO
PVL0000AS	VAV LonWorks 0 UI, 0 DI, 0 AO, 0 DO & Actuator
PVL4022AS**	VAV LonWorks 4 UI, 0 DI, 2AO, 2 DO & Actuator
PVL4024NS**	VAV LonWorks 4 UI, 0 DI, 2 AO, 4 DO
PVL6436AS	VAV LonWorks 6 UI, 4 DI, 3 AO, 6 DO & Actuator
PVL6438NS	VAV LonWorks 6 UI, 4 DI, 3 AO, 8 DO
PVL0000AS-ILC	ILC VAV LonWorks 0 UI, 0 DI, 0 AO, 0 DO & Actuator
PVL4022AS-ILC**	ILC VAV LonWorks 4 UI, 0 DI, 2AO, 2 DO & Actuator
PVL4024NS-ILC**	ILC VAV LonWorks 4 UI, 0 DI, 2 AO, 4 DO
PVL6436AS-ILC	ILC VAV LonWorks 6 UI, 4 DI, 3 AO, 6 DO & Actuator
PVL6438NS-ILC	ILC VAV LonWorks 6 UI, 4 DI, 3 AO, 8 DO
WB10707	Spyder Micro Wiring Box

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

** One Universal Input (UI-1*) is user selectable as a fast digital pulse meter



BUILDINGS FORUM

Along with technical support and sales materials, Spyder Sylk Enhanced is a key component of the Buildings Forum, established by Honeywell to help channel partners benefit from each other's experience and knowledge. You'll find discussion forums, downloadable information and files shared by other contractors.

Get your questions answered, see how other contractors are using Spyder and get tips for getting the most from your Spyder installations by visiting the Buildings Forum at buildingsforum.honeywell.com.

ONLINE TRAINING

The more you know, the more your business can grow. And Honeywell is committed to your success with new Honeywell eLearning Modules available online 24/7, including training on the Spyder controller. Technical training modules for Spyder Sylk Enhanced and other Honeywell commercial products are added frequently, so check back often.

To begin, visit customer.honeywell.com/buildingsuniversity.



**HONEYWELL ELEARNING ONLINE
MODULES MAKE SPYDER SYLK
ENHANCED TRAINING AVAILABLE 24/7.**

Learn More

For more information on Honeywell Spyder Sylk Enhanced Controllers, call **1-800-466-3993** or visit beyondinnovation.honeywell.com.

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