



PRODUCT: BCS BASYX RFW

Product Overview

The BASYX RFW controller is a product developed for heat pumps, fan coil units, lighting and other application specific equipment. The RFW utilizes “Zigbee” wireless technology for data bus communications between controllers, eliminating costly installation of hard-wired cables. The RFW may be incorporated into a full direct digital control system with other BASYX controllers through data bus cable connection.

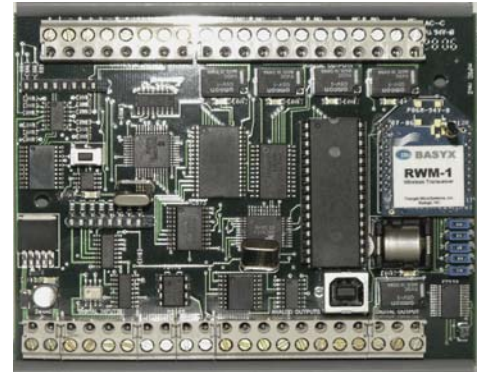
The unit provides time-of-day scheduling, temperature control and environmental monitoring along with complete electrical usage control and reporting. The RFW contains all on-board firmware, clock and memory for complete stand-alone operation, and does not rely on a central system controller for operation.

The RFW controller contains five (5) SPDT relay outputs for binary control, each with a Hand-Off-Auto jumper for local control, four (4) universal inputs for analog or binary contact monitoring, and two (2) digital meter inputs. In addition, four (4) on-board analog outputs allow control of 0-10vdc dampers, valves or other analog devices.

An on-board USB connection provides direct interface with the RFW, and allows full system communications when interconnected with additional BASYX controllers through the wireless bus or a twisted pair cable, with a maximum system configuration of 256 controllers.

An optional RF modem allows connection through laptop without access to controller or system bus.

The BASYX system is maintained and monitored through a Windows based interface program, providing total system interrogation, programming and report generation.



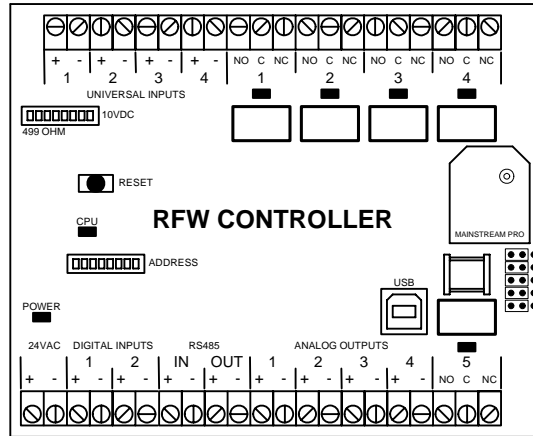
Features

- “Stand-alone” operation requires no central controller for system operation.
- IEEE 802.15.4 Wireless data bus eliminates labor intensive and costly installation of cables to each controller.
- Wireless communications ideal for control of remote modular buildings in educational facilities.
- Time-of-day schedules resident in each controller with an on-board clock, implemented through simple setup screens.
- Form C SPDT relays with HOA jumpers allow local control of board outputs for testing or emergency operation.
- Simple programming for heat pumps, rooftop units, lighting and other applications.
- Time schedule control of lighting or additional building systems.
- Monitoring of up to two (2) digital pulse meters, with load management and historical reporting.
- Windows program provides simple system setup and programming.
- Direct connection of laptop through USB port.
- Program integrity through battery backed-up RAM – Retains system programming with power off.
- System total configuration of 256 controllers allows projects exceeding 6,100 points.
- Controller network length of 4000 feet.
- 24vac power reduces installation cost.
- Snap-Track mounting.
- Complete logic and global capabilities.

Options

- IEEE 802.15.4 RF Modem for direct communications through laptop

Controller Details



View of RFW Wireless Controller

Specifications

Communication:	IEEE 802.15.4 Wireless 2.4 Ghz bus up to 300' indoor between controllers EIA RS-485 at 57.6K baud on 18AWG shielded, plenum rated cable (Recommended Belden 6300FE or equivalent)		
Power Requirements:	Power:	24VAC (-10% / 5%), 50/60/Hz	
	Current:	3.2VA	
		Recommend 7VA transformer sizing for AC power	
Universal Inputs:	(4) Universal inputs	Thermistor	10,000 ohm type II material
		0-10vdc	>/= 100 ohm input impedance
		0-20ma	</= 500 ohm input impedance
		Resistance	0-10,000 ohms
		Dry contact	>/= 50ms timing
Digital Inputs:	(2) Meter inputs	Dry contact	>/= 50ms timing
Digital Outputs:	(5) Dry contacts	SPDT pilot duty rated 1 amp at 24VAC/24VDC	
Analog Outputs:	(4) 0-10VDC	>/= 1K ohm drive impedance	
Ports:	IEEE 802.15.4 Wireless module port RS-485 communications bus USB direct connect port		
Environmental Limits:	Temperature:	32°F to 125°F.	
	Humidity (non-condensing):	95%	
Enclosure/Mounting:	4" Snap-track mounting channel		
UL Listing:	ANSI/UL 916 Pending		
Dimensions:	5.0"W x 4.0"H x 1.25"D		
Shipping Weight:	Approximately 0.75 lbs.		

Although accurate at the time of publication, data is subject to change without notice