#### **Overview**

Retrofit or new construction, commercial office space or school classrooms, the Echoflex Slim Line Dimming Controller is a versatile wireless switching / dimming lighting control solution for all these applications.

The Slim Line Dimming Controller is a component of Echoflex's Smart Space solutions that delivers energy savings to facilities through integrated and distributed control solutions.

The controller utilizes low power wireless radio technology to communicate with battery-free, wireless photo sensors, occupancy / vacancy sensors and wall switches. The Slim Line Controller is easily installed in the luminaire with little disruption and no extra wiring runs.

Installation of the Slim Line Dimming Controller typically takes less than 1 hour, making it one of the most affordable solutions for retrofitting existing luminaires. Installation of the controller in the ballast/driver cavity of the fixture eliminates the need to access the lighting circuits in the plenum or ceiling space. The controller has a 0 to 10 V dimming output for direct connection to the low voltage dimming wires and the onboard relay switches lighting circuits based on occupancy/vacancy detection or switch action.

Use the Slim Line Dimming Controller for simple on/ off and dimming control from a switch or for daylight harvesting when linked to a wireless photo sensor. The controller is also capable of accepting inputs to comply with demand response initiatives. With embedded remote management technology, personnel can make changes to the system through wireless communication with the devices.

The Slim Line Dimming Controllers support range confirmation technology (patent pending) that indicates the signal strength between the controller and any associated sensor, providing the installer with site specific information to ensure sensor placement for optimal communication.



#### **Features**

- Single channel 8 amp relay control with 0 10 volt dimming output
- May be used for discrete control of each fixture or to control a string of fixtures
- Integrated day-light harvesting control with Photo Inhibit mode
- Monitors linked battery-free wall switches, photo sensors, occupancy sensors
- Central Command support for BMS gateway control
- Occupancy based lighting control with auto-ON/OFF or manual ON, auto-OFF with wireless occupancy sensors
- Range Confirmation (patent pending) ability allows optimal placement of linked sensors (Resonate and 21 series sensors only)
- Available at 902MHz and 868 MHz.
- Easy commissioning options available such as embedded Smart Click and Simple Tap plus availabilty to work with Garibaldi, our remote commission package
- In-fixture mounting
- May be utilized as a radio telegram repeater
- CEC title 24 compliant

Model	Description	Part # - 902 MHz	Part # - 868 MHz
ER1S-FC(*)	Slim Line Dimming Controller 120 - 277 VAC	001-7670 * = U	001-5670 * = Y





# Wiring Diagram



# **Dimensional Diagram**



# **Block Diagram**



### Equipment Profiles - Remote Devices Supported

	••
EEP: F6-02-02	Light and Blinds Control - US/Canada application
EEP: A5-06-02	Light Sensor [range 0 - 1024 lux (0 - 102 fc)]
EEP: A5-07-01	Occupancy Sensor
EEP: A5-38-08	Central Command, switching, dimming, set point

### **Hardware Specifications**

Power Supply	120 - 277VAC, 50/	60HZ
Power Consumption	1.5 W full load, 750mW static	
Outputs	1 x N.O. Relay rati	ng 8A @ 277VAC
	1 x 0-10VDC @ 25	mA maximum, sinking current only
Maximum Load Ratings	Standard Ballast	8A@120 - 277 VAC
	General Purpose	8A@120 - 250 VAC
	Tungsten	950W@120 VAC,
		2200W@250 VAC
	Fluorescent Ballast 8A@120 - 250 VAC	

## Communications

Radio Frequency	868 MHz(Y), 902 MHz (U)
Antenna	Integrated whip
Transmission Range	24 m (80 ft) commercial office space (typical)
Inputs	LEARN and CLEAR buttons for sensor assignment

## **Mechanical Specifications**

Operating Temperature	-10 ° C to 45 ° C (14 ° F to 113 ° F)	
Relative Humidity	5% to 95% RH (non-condensing)	
Weight	114 g (4.0 oz)	
Dimensions	162 x 30 x 25 mm (6.4 x 1.2 x 1.0" )	
Mounting	2 screws, not supplied	

# Agency Listing & Compliance

- CEC Title 24 Compliant
- Safety ETL Recognized Component Conforms to UL Standard 508 Certified to CAN/CSA Std. C22.2 No.14

#### Radio Frequency (902 MHz models)

FCC Part 15.231 -Remote Control Transmitter IC RSS-210





Specifications are subject to change without

notification. | Smart Click and Simple Tap are

pending | Document 8DC-0668 | Revision 1.2

trademarks of Echoflex Solutions, Inc. Range Confirmation Technology - Patent

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