# Part 1. Wireless Split Duplex Controller

* 1. WIRELESS CONTROLLER
		1. Duplex Controller
			1. The Duplex Controller shall be the Echoflex ERNR-xxU Series Split Duplex Controller by Echoflex Solutions, Inc., or approved equal.
			2. Mechanical
				1. The Controller shall mount in a standard single-gang wall box
				2. The Controller shall have learn and clear buttons for manual linking of switches and sensors

The buttons shall be accessible when the Controller is mounted, prior to mounting the faceplate.

* + - * 1. The Controller shall have two LED indicators to display power and linked device information
				2. The Controller shall have LED arrows pointing to controlled side of receptacle so that controlled side is permanently marked and easily visible in dark locations
				3. The Controller shall have an embossed icon so that the controlled side is permanently marked

* + - 1. Electrical
				1. The Controller shall support 120VAC power input
				2. The Controller shall provide a single normally open relay contact, fully rated for 15 amps to switch power to the controlled receptacle

The Controller shall have an auxiliary output controlled from the internal relay for wiring directly to other duplex receptacles

* + - * 1. The Controller shall use a 902 MHz EnOcean radio. Systems that use other radio frequencies shall not be acceptable
				2. The internal radio shall have a range of at least 80 feet through walls (laterally), up to 300 feet in open space
				3. The Controller shall be ETL listed, conform to UL 508, and certified to CAN/CSA Standard C22.2 No.14
				4. The Controller shall comply with FCC Part 15.231 and IC RSS-210
			1. Functional
				1. The Controller shall provide switching control for an individual load plugged into the controlled receptacle

##### The Controller shall support wireless Echoflex switches and sensors for relay control

###### The Controller shall support linking of at least 20 wireless devices in any combination of Echoflex stations and sensors. Systems that do not support at least 20 stations or sensors shall not be acceptable

##### The Controller shall provide the option of single or dual-hop wireless signal repeating to other controllers. Systems that do not provide signal repeating shall not be acceptable

##### The Controller shall support Central Command functions for use with integrated control systems

##### The Controller shall support commissioning and linking through software and/or mechanical means. Controllers that do not support both shall not be acceptable

##### The Controller shall provide configuration variables that allow customization of the controllers operation with linked sensors and switches

##### The Controller shall provide the option of reporting relay status wirelessly

##### The Controller shall save all configuration settings and linked device details in non-volatile memory

The Controller shall provide the option of saving user-defined configuration settings as recoverable default settings

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