

REQUIRED PARTS FOR PCB ASSEMBLY						
Item #	Qty	Vendor	Vendor Part #	Description	Link	Notes
1	1	OSHPark	SIS Hub PCB	SIS Hub Printed Circuit Board	https://oshpark.com/shared_projects/ptHf8wY	Custom PCB - order from OSHPark or use the Eagle files to order from another vendor.
2	1	Particle	Photon	Particle Photon WiFi Microcontroller with breadboard headers	https://store.particle.io/?product=particle-photon	The Particle Electron may be supported in the future. The PC board has extension mounting holes to accommodate the larger Electron.
3	1	Jameco	AT24C256PC	24C256; 32 KB I2C EEPROM	http://www.jameco.com/webapp/wcs/stores/ser/vlet/Product_10001_10001_200580_-1	
4	1	E-Bay	NA	315 MHz OOK Receiver	http://www.ebay.com/itm/315MHz-433MHz-Wireless-Super-Heterodyne-Remote-RX-Receiver-Module-107dBm-/181711941472?var=&hash=item2a4ee02f60	Select 315 Mhz from dropdown list. The same part is available from many Asian vendors on E-Bay and Amazon.
5	1	E-Bay	NA	433 MHz OOK Receiver	http://www.ebay.com/itm/315MHz-433MHz-Wireless-Super-Heterodyne-Remote-RX-Receiver-Module-107dBm-/181711941472?var=&hash=item2a4ee02f60	Select 433 MHz from dropdown list. The same part is available from many Asian vendors on E-Bay and Amazon.
6	10	Jameco	CF1/4W472JRC	resistor - 4.7Kohm, 1/4 watt axial lead (minimum qty = 10)	http://www.jameco.com/webapp/wcs/stores/ser/vlet/Product_10001_10001_691024_-1	Need 2 resistors
7	10	Jameco	SR205E104MAA-VP	0.1 uf Capacitor, 50 volt (minimum qty = 10)	http://www.jameco.com/webapp/wcs/stores/ser/vlet/Product_10001_10001_544868_-1	need 2 capacitors
8	10	Jameco	100UF/16V 6X5	100 uF Capacitor, electrolytic	http://www.jameco.com/webapp/wcs/stores/ser/vlet/Product_10001_10001_94289_-1	need 1 capacitor
9	1	Jameco	USB-B-S-RA-WT	USB connector, B female	http://www.jameco.com/webapp/wcs/stores/ser/vlet/Product_10001_10001_230958_-1	
10	1	Adafruit	907	Panel Mount USB cable, B male to B female	http://www.adafruit.com/products/907	
11	1	Adafruit	266	40 conductor female-female jumper wires, separable.	http://www.adafruit.com/products/266	Required only if the receivers are not mounted to the PC board. These jumpers are used to connect pin headers soldered to the board in the receiver positions to the pins on the remotely mounted receivers.
12	1	Jameco	7000-1X40SG-R	Breakaway headers, straight, male	http://www.jameco.com/webapp/wcs/stores/ser/vlet/Product_10001_10001_160882_-1	Required only if the receivers are mounted remotely from the PC board. May also be used for POWER and EXPANSION connections to the PC board.
13	2	Digi-Key	S7016-ND	18 Pin female header	http://www.digikey.com/product-search/en?keywords=S7016-ND	18 Pin headers will accommodate both Photon and Electron. 12 pin female headers may be used if only Photon support is needed.
14	1	Jameco	6100-8-R	8 pin DIP socket	http://www.jameco.com/webapp/wcs/stores/ser/vlet/Product_10001_10001_51626_-1	Alternative is to solder the Photon directly to the PC board, or to use 0.1" spaced female pin headers.
OPTIONAL PARTS FOR BOX MOUNTING AND POWERING						
1	1	Staples or on-line from Really Useful Boxes	in-store only	enclosure; 0.55 liter (1-7/16"H x 4"W x 8-1/2"L)	http://www.reallyusefulproducts.co.uk/usa/html/onlineShop/rub/b00_55litre.php	A smaller enclosure may be used if receivers are mounted to PC Board directly vs taped to the sides of the enclosure. However, range of reception may suffer if the receivers are not at least 4" apart (and apart from the Photon WiFi chip). Boxes are available in various colors.
2	4	jameco	2104-632-AL-7	standoff, female-female, 1/2", 6-32 threaded	https://www.jameco.com/webapp/wcs/stores/ser/vlet/ProductDisplay?storeId=10001&langId=-1&catalogId=10001&pa=77543&productId=77543	Use as required to mount PC board into the enclosure. Board will accommodate 4 standoffs. See below for Nylon standoffs if desired.
3	10	jameco	H654-ND	Screw, 6-32x1/4", pan head, phillips	https://www.jameco.com/webapp/wcs/stores/ser/vlet/ProductDisplay?storeId=10001&langId=-1&catalogId=10001&pa=2094418&productId=2094418	Use as required to mount PC board into the enclosure. Board will accommodate 4 screws (board to standoff) + 4 screws (standoff to enclosure). See below for Nylon screws, if desired.
4	4	Digi-Key	36-1903C-ND	standoff, female-female, 1/2", 6-32 threaded	http://www.digikey.com/product-search/en?Keywords=36-1903C-ND&WT.z_header=search_go	Nylon alternative to metals standoffs, if desired.
5	100	Digi-Key	H654-ND	Screw, 6-32x1/4", pan head, phillips	http://www.digikey.com/product-search/en/hardware-fasteners-accessories/screws/bolts/2097339?k=H554-ND	Nylon alternative to metal screws, if desired. Minimum order is 100 screws (need 8).
6	10	Jameco	0505HC-1015-R	Cable tie mount, nylon, 3/4" (minimum qty = 10)	http://www.jameco.com/webapp/wcs/stores/ser/vlet/Product_10001_10001_182942_-1	Use as required for neatness. Should only require 4 or so tie mounts
7	100	Jameco	CV-075-R	Cable tie, nylon, 3" (minimum qty = 100)	http://www.jameco.com/webapp/wcs/stores/ser/vlet/Product_10001_10001_70561_-1	Use as required for neatness. Should only require 4 or so ties
8	1	Office max	912408	Scotch Outdoor Mounting Tape - Double Sided (one roll)	http://www.officedepot.com/a/products/745021/Scotch-Permanent-Heavy-Duty-Outdoor-Mounting/	Use as required to affix receiver modules to the enclosure. Not required if receivers are mounted on the PC Board.
9	1	Jameco	10U2-02206-BK	USB Cable; A male to B male.	http://www.jameco.com/webapp/wcs/stores/ser/vlet/Product_10001_10001_222010_-1	Optional - needed to bring power to the SIS Hub
10	1	Jameco	GS05U-USB	USB Power supply; 1Amp	http://www.jameco.com/webapp/wcs/stores/ser/vlet/Product_10001_10001_2155823_-1	Optional - needed to bring power to the SIS Hub. Any USB power supply, 5 volts at 500 ma or more will work, as will USB power from