

270-1921 VEX POE/CIM Cortex Kit vs 270-7921 VEX V5 POE/CIM Kit vs 270-8014 V5 POE/CIM Upgrade Kit Comparison

Part #	Item Description	PLTW VEX Custom POE/CIM Cortex Kit (part# 270-1921)	PLTW VEX V5 Custom POE/CIM Kit (part# 270-7921)	PLTW VEX V5 Custom Upgrade Kit (part# 270- 8014)
276-4810	V5 Robot Brain		2	2
276-2194	Cortex Robot Brain	2		
276-4840	V5 Smart Motor		5	5
276-2177	Cortex Motor 393	5		
276-4811	V5 Brain Battery		2	2
276-1456	Cortex 7.2V Robot Brain Battery 2000mAh	2		
276-4831	V5 Robot Radio		1	1
276-3245	Cortex VEXnet Key 2.0	2		
276-4820	V5 Controller		1	1
276-2192	Cortex Controller	1		
276-4812	V5 Robot Battery Charger		2	2
276-2520	Cortex Smart Charger v2	2		
276-4852	V5 Distance Sensor*		1	1
276-7043	V5 Optical Sensor**		1	1
276-6364	V5 Smart Cables (Starter Pack)		2	2
USB	USB Cable	2	2	2
228-3510	Rubber Shaft Collar (30-Pack)		1	
276-6481	1-Post Hex Nut Retainer w/ Bearing Flat (10-pack)		1	
276-6482	1-Post Hex Nut Retainer (10-pack)		1	
276-2156	Optical Shaft Encoder	1		
276-2154	Line Tracker	1		
276-2158	Light Sensor	1		
276-2155	Ultrasonic Range Finder	1		
276-2193	Cortex Motor Controller 29	4		
276-1622	8-Bay Battery Charger	1		
276-1696	AAA NiMH Rechargeable Battery (6-pack)	1		
276-2243	VEXnet Backup Battery Holder	1		
276-2520	Power Cord - North America	2		
<i>The items below are all in both the Cortex and V5 POE/CIM Full Kits (not in upgrade kit)</i>				
275-1030	3/32" Hex Key (8-pack)	1	1	
275-1031	5/64" Hex Key (8-pack)	1	1	
276-1341	Base Plate 30x15 (2-pack)	1	1	
276-1424	3-Wire Extension Cables (Large Bundle)	1	1	
276-1546	Winch and Pulley Kit	1	1	
276-1926	Linear Motion Kit	1	1	
276-1986	Heliocentris Alternative Energy Kit	1	1	
276-2161	Metal & Hardware Kit	1	1	
276-2162	3-Wire Servo	1	1	
276-2169	Gear Kit	1	1	
276-2174	Limit Switch (2-pack)	2	2	
276-2184	Advanced Gear Kit	1	1	
276-2214	Tank Tread Upgrade Kit	1	1	
276-2216	Potentiometer (2-pack)	1	1	
276-2252	High Strength Sprocket & Chain Kit - 276-6561	1	1	
276-2906	C-Channel 1x2x1x35 (2-pack)	1	1	
276-4858	Bumper Switch v2 (2-pack)	1	1	
276-2176	LED Indicator Pack	1	1	
276-2168	Tank Tread Kit (was 276-2168, 6558)	1	1	
276-1149	Drive Shaft 12" (4-pack)	1	1	
276-1496	2.75" Wheel (4-Pack)	1	1	
276-2232	Booster Kit	1	1	
276-6929	Clawbot Kit, No Motors	1	1	

*The V5 Distance Sensor is a new sensor that provides a laser based rangefinder

**The V5 Optical Sensor is a new sensor that can detect colors, grayscale, and proximity

NOTE: Kit contents above effective 1/4/2021.