

TinkerAccess Enclosure

Qty	Description	Manufacturer	Manufacturer PN	Vendor	Vendor PN	Cost	Notes
1	Enclosure, Metal						Existing
1	Backpanel, Custom	TinkerMill					Backplate to mount all component in enclosure
1	Faceplate, Acrylic, Custom, LCD	TinkerMill					For LCD in front of enclosure
1	Motion Detector	Bosch	DS161				
1	Magnetic Door Lock	Security Door Controls	1571				Existing
1	Push to Exit Button	Alarm Controls	TS-2				
1	Raspberry Pi 2 B	Raspberry Pi Foundation	Pi 2 B				
1	Memory Card, microSD, 16GB, Class 10	SanDisk	SDSQUAR-016G-GN6MA	Amazon	SDSQUAR-016G-GN6MA	\$9.14	
1	TinkerAccess Hat, v1.4	TinkerMill					
1	TinkerAccess RFID Adapter, v1.0	TinkerMill					
1	TinkerAccess RGB LED Driver, v1.0	TinkerMill					
1	LCD, 16x2 Basic, Black on Green, 3.3V	SparkFun	LCD-09053	SparkFun	LCD-09053	\$18.50	
1	LCD I2C Backpack	HiLetgo	03-01-1980	Amazon	03-01-1980	\$7.49	
1	Adapter, Qwiic	SparkFun	DEV-14495	SparkFun	DEV-14495	\$1.60	Needs to be soldered to LCD I2C and power pins
1	Cable, Qwiic, 200mm	SparkFun	PRT-14428	SparkFun	PRT-14428	\$1.50	Connects LCD to TinkerAccess Hat
1	Latching Push Button, 19mm, 1-NO/NC, 12VDC Blue LED	Quentacy	19Q-K17-BLUE	Amazon	19Q-K17-BLUE	\$9.99	
1	DC/DC Converter, 12/24VDC Input, 5V / 3A Output, 15W	Tobson	EA15-5V	Amazon	EA15-5V	\$9.59	
1	Relay Module, 24VDC, 1 NO/NC, with Optocoupler Isolation, High/Low Trigger Level	HiLetgo	03-01-0375	Amazon	03-01-0375	\$5.99	Bypass Detect Relay
1	Keylock Switch, 2 Position, SPST, 4A @ 125VAC, Panel Mount	E-Switch	KO128B2007	DigiKey	EG5140-ND	\$8.68	
1	Keylock Switch Cover	E-Switch	KOM1	DigiKey	KOM1-ND	\$3.56	
1	DIN Rail, Slotted, 15mm, 5.5mm height, 1m length, Plated Steel. Pkg of 2	Konnect-It	DN-R15S1-2	Automation Direct	DN-R15S1-2	\$13.00	
1	Terminal Block, Single-Level, Mini, Size 26 - 12 AWG, Gray, 20A, 300V Rated, 15mm DIN Rail Mount, Pkg of 25	Konnect-It	KN-M12GRY-25	Automation Direct	KN-M12GRY-25	\$11.00	
1	Terminal Block, Single-Level, Mini, Size 26 - 12 AWG, Blue, 20A, 300V Rated, 15mm DIN Rail Mount, Pkg of 25	Konnect-It	KN-M12BLU-25	Automation Direct	KN-M12BLU-25	\$11.00	
1	Terminal Block, Grounding, Single-Level, Mini, Size 26 - 12 AWG, Green/Yellow, 15mm DIN Rail Mount, Pkg of 10	Konnect-It	KN-MG12-10	Automation Direct	KN-MG12-10	\$23.00	
1	Terminal Block End Cover, Gray, For use with KN-M12 or KN-M10 Series Terminal Blocks, Pkg of 10	Konnect-It	KN-ECMGY-10	Automation Direct	KN-ECMGY-10	\$4.50	
1	Terminal Block End Cover, Blue, For use with KN-M12 or KN-M10 Series Terminal Blocks, Pkg of 10	Konnect-It	KN-ECMBLU	Automation Direct	KN-ECMBLU	\$4.50	
1	Terminal Block End Bracket, Snap-On Type, 8mm Wide, For use with 15mm DIN Rail, Pkg of 10	Konnect-It	KN-EB5-10	Automation Direct	KN-EB5-10	\$6.25	
4	Machine Screw, Nylon, Pan Head, Phillips, #2-56 x 1/4"	B&F Fastener Supply	NY PMS 256 0025 PH	DigiKey	H530-ND	\$0.26	Mounting RGB LED Driver to PCB Standoff
4	Hex Standoff, Aluminum, 3/16" Hex, Male-Female #2-56, 1/4" Length	RAF Electronic Hardware	4501-256-AL	DigiKey	1772-1104-ND	\$0.78	Between RGB LED Driver to Backplate
4	Machine Screw, Nylon, Pan Head, Phillips, #4-40 x 1/4"	B&F Fastener Supply	NY PMS 440 0025 PH	DigiKey	H542-ND	\$0.17	Mounting TinkerAccess Hat to PCB Standoff
4	Hex Standoff, Aluminum, 3/16" Hex, Male-Female #4-40, 5/8" Length	RAF Electronic Hardware	4507-440-AL	DigiKey	1772-1206-ND	\$0.51	Between TinkerAccess Hat and Raspberry Pi
4	Hex Standoff, Aluminum, 3/16" Hex, Male-Female #4-40, 5/16" Length	RAF Electronic Hardware	4502-440-AL	DigiKey	1772-1253-ND	\$0.43	Between Raspberry Pi and Backpanel
4	Machine Screw, Black Oxide Steel, Button Socket Head, #2-56 x 5/8"	Bolt Depot	12996	Bolt Depot	12996	\$0.26	Mounting LCD to Enclosure Cover
4	Round Spacer, Nylon, 3/16" Dia, #2, 1/4"	Bivar Inc	9913-250	DigiKey	492-1044-ND	\$0.10	Between LCD and Enclosure Cover
8	Hex Nut, Nylon, #2-56	Essentra Components	0400256HN	DigiKey	RPC7088-ND	\$0.10	Mounting LCD to Enclosure Cover
4	Machine Screw, Nylon, Pan Head, Phillips, #4-40 x 1/4"	B&F Fastener Supply	NY PMS 440 0025 PH	DigiKey	H542-ND	\$0.17	Mounting Relay Module to PCB Standoff
4	Hex Standoff, Aluminum, 3/16" Hex, Male-Female #4-40, 1/4" Length	RAF Electronic Hardware	4501-440-AL	DigiKey	1772-1230-ND	\$0.42	Between Relay Module to Backplate
						\$162.49	

Outdoor Remote RFID Enclosure

Qty	Description	Manufacturer	Manufacturer PN	Vendor	Vendor PN	Cost	Notes
1	Enclosure, NEMA 4X, 6.732" L x 4.764" W x 2.165" D, Plastic, Gray Body, Clear Cover	Bud Industries	PN-1324-CMB	DigiKey	377-1892-ND	\$22.20	
1	Faceplate, Acrylic, Custom	TinkerMill					
1	TinkerAccess Remote RFID, v1.0	TinkerMill					
4	Hex Standoff, Aluminum, 3/16" Hex, Male-Female #4-40, 1/4" Length	RAF Electronic Hardware	4501-440-AL	DigiKey	1772-1230-ND	\$0.42	Between TinkerAccess Remote RFID and Faceplate
4	Hex Standoff, Aluminum, 1/4" Hex, Male-Female #4-40, 1-1/4" Length	Keystone	8407	DigiKey	36-8407-ND	\$1.02	Between Faceplate and Enclosure
4	Machine Screw, Nylon, Pan Head, Phillips, #4-40 x 1/4"	B&F Fastener Supply	NY PMS 440 0025 F	DigiKey	H542-ND	\$0.17	Mounting Faceplate to PCB Standoff
4	Machine Screw, Nylon, Pan Head, Phillips, #4-40 x 3/8"	B&F Fastener Supply	NY PMS 440 0038 F	DigiKey	H544-ND	\$0.22	Mounting Faceplate to Enclosure Standoff
4	Hex Nut, Nylon, #4-40, 1/4"	B&F Fastener Supply	NY HN 440	DigiKey	H616-ND	\$0.17	Mounting TinkerAccess Remote RFID to PCB Standoff
1	Light Pipe, Round Domed, Clear, Diffused, 3mm Dia, 0.25" Length	Visual Communications Company	LFB025CTP	DigiKey	LFB025CTP-ND	\$0.71	
						\$30.91	

Lock Button Enclosure

Qty	Description	Manufacturer	Manufacturer PN	Vendor	Vendor PN	Cost	Notes
1	Enclosure, Pushbutton, 1 hole, 22mm, 70 x 70 x 74mm (HxWxD), Wall Mount, Thermoplastic ABS, Gray, Screw cover	Pilot Devices	SA103SL	Automation Direct	SA103SL	\$8.50	
1	Pushbutton, 22mm, 6V RGB, Momentary	Elewind	PM221-11E/42RGB/12V/S	Adafruit	3423	\$16.50	
2	Quick Connect Female Terminals, 18-22 AWG Crimp Connector Fully Insulated	Panduit	DNF18-111FIB-M	DigiKey	298-10548-ND	\$0.56	
2	Crimp Housing, 0.100" Spacing, 2-position	Molex	0050579002	DigiKey	WM2800-ND	\$0.43	
4	Crimp Terminals, 22-24AWG	Molex	0016020103	DigiKey	WM2512-ND	\$0.26	
						\$28.02	