

Basic Parts

Name	Value	Article number	Distributor	Price	Notes
GLND	Cable gland M12	S597061	Voelkner	0,57 €	
SW1	Toggle switch	A710773	Voelkner	1,27 €	
CAP1	Switch cap, waterproof	S644451	Voelkner	1,79 €	
PRES	Pressure compensation membrane	157881	ELV	0,83 €	
ANTJ	Antenna jack N – u.fl	1005009183078993	Aliexpress	5,96 €	
ANTC	Antenna cable, N jack to plug	1005007557334565	Aliexpress	6,19 €	
ANT	Antenna, 868MHz	AOA-868-5ACM	Alfa	13,85 €	Alternative: Aliexpress 1005008900515614
CHRG	Solar MPPT charge controller	-	MP	13,31 €	
BAT	Lithium Battery 1S2P, 3.7V	W957623	Voelkner	23,35 €	Alternative: PKENERGY ICR18650-4400
NODE	RAK4631 + RAK19003	1005006901039995	Aliexpress	30,00 €	Alternative: Heltec T114, mounting plate, screws
SOLP	Solar panel 5W	3-01-002960	Offgridtec	8,76 €	
SOLC	Cable for solar panel	-	-	1,00 €	
SOLB	Blind plug for solar panel	-	MP	0,50 €	3D printed ABS
CBLS	Other cable stuff	-	-	1,00 €	
JST	JST plugs & jacks	-	-	2,00 €	
				Total:	110,38 €

Small Case

Name	Value	Article number	Distributor	Price	Notes
CASE1	G368MF	Y380522	Voelkner	11,99 €	
PLATE1	Mounting plate (FR4)	-	MP	5,00 €	
				Total:	16,99 €

Big Case

Name	Value	Article number	Distributor	Price	Notes
CASE2	G313MF	Y380982	Voelkner	10,99 €	
PLATE2	Mounting plate (FR4)	-	MP	5,00 €	
				Total:	15,99 €

Mechanical Parts

Name	Value	Article number	Distributor	Price	Notes
SCR1	Screws M3x5, 4pcs	001.64.319	Ettinger	0,61 €	For mounting plate
TIE	Velcro cable tie 150x12mm	-	-	0,50 €	For battery
BLT1	Distance bolt M3x5, 4pcs	005.03.053	Ettinger	1,36 €	For charge controller
SCR2	Screws M3x5, 8pcs	001.64.319	Ettinger	1,22 €	For charge controller
BLT2	Distance bolt M2,5x5, 3pcs	005.02.055	Ettinger	0,87 €	For RAK node
SCR3a	Screws M2,5x4, 3pcs	001.64.202	Ettinger	0,39 €	For RAK node
SCR3b	Screws M2,5x3, 3pcs	001.64.207	Ettinger	0,59 €	For RAK node
BLT3	Distance bolt M2x5, 4pcs	005.01.053	Ettinger	1,52 €	For SAW filter
SCR4a	Screws M2x4, 4pcs	001.64.102	Ettinger	0,43 €	For SAW filter
SCR4b	Screws M2x3, 4pcs	001.64.106	Ettinger	0,40 €	For SAW filter
BLT4	Distance bolt M3x12	005.13.121	Ettinger	0,46 €	For BMP280
SCR5a	Screws M2,5x6, 4pcs	001.51.222	Ettinger	0,10 €	For INA219
SCR5b	Screw M3x6	001.64.322	Ettinger	0,16 €	For INA219
SCR6a	Screws M2,5x6, 4pcs	001.51.222	Ettinger	0,10 €	For reset circuit
SCR6b	Screw M3x6	001.64.322	Ettinger	0,16 €	For reset circuit
Total:				8,87 €	

Optional Parts

Name	Value	Article number	Distributor	Price	Notes
CURS	INA219 current sensor	1005007925648957	Aliexpress	1,00 €	
CURM	Mounting plate for current sensor	-	MP	1,00 €	3D printed ABS
TRK	MPPT FOCV PCB	-	MP	8,99 €	
RSTC	Mesh node reset circuit	-	MP	7,50 €	
RSTM	Mounting plate for reset circuit	-	MP	1,00 €	3D printed ABS
SENS	BMP280 temp. / pres. Sensor 3.3V	1005008144770788	Aliexpress	1,00 €	
FLTR	SAW filter PCB, 868MHz	-	MP	7,50 €	
FLTC	u.fl cable for SAW filter	1005003102128230	Aliexpress	0,23 €	
Total:				28,22 €	

Sheet1

Complete Project (Small case)

Basic Parts	110,38 €
Small Case	16,99 €
Mechanical Parts	8,87 €
Optional Parts	28,22 €
Mechanics	?
Total: 164,46 €	