

	id design ref	package	qty description	supplier	reference	Price (250+)	total
1 basic	1	PCB	1	Eurocircuits	MjS rev2	€ 2,240	€ 2,240
	2 R3,R4,R5,R8,R10	resistor	5 1kΩ, ¼W	Farnell	9339051	€ 0,015	€ 0,076
	3 R1,R2,R6,R7,R9,R11,R13	resistor	7 10kΩ, ¼W	Farnell	9339060	€ 0,015	€ 0,107
	4 R12	resistor	1 100kΩ, ¼W	Farnell	9339078	€ 0,030	€ 0,030
	5 C1,C3,C5	ceramic 2.5mm	3 100nF	Farnell	2112751	€ 0,042	€ 0,125
	6 C2,C4	electrolytic radial	2 100µF, 10V	Farnell	9452435	€ 0,034	€ 0,068
	7 D1	LED 3mm	1 LED	Farnell	1581113	€ 0,053	€ 0,053
	8 Q1,Q2	TO-251 (IPAK)	2 STU60N3LH5 N-channel FET	Farnell	1752192	€ 0,034	€ 0,067
	9 U3	TO-92	1 MCP1700-3302/TO VDO	Farnell	1296588	€ 0,263	€ 0,263
	10 U2	breakout board	1 RFM95W transceiver	Ideetron	RFM95W-868-S2	€ 7,050	€ 7,050
	11 U1	DIP-28	1 ATMEGA328P-PU MCU	Farnell	1715487	€ 1,820	€ 1,820
	12 U1	DIP-28	1 socket 7.62mm	Farnell	2445626	€ 0,460	€ 0,460
	13 P2	pin header	1 straight 1x06	Farnell	1022255	€ 0,129	€ 0,129
	14 JP1	pin header	1 straight 1x03	Farnell	1022249	€ 0,059	€ 0,059
	15 reset	pin header	1 straight 1x02	Farnell			
	16 P5,P6,P7	socket strip	3 straight 1x02	Farnell	1593458	€ 0,065	€ 0,194
	17 JP1	jumper	1 jumper	Farnell	2396303	€ 0,075	€ 0,075
	18 U4	breakout board	1 Si7021	Antratek	SFE13763	€ 5,560	€ 5,560
	19 P3	pin header	1 straight 1x04	Farnell	1022251	€ 0,078	€ 0,078
	20 P3	socket strip	1 4-pin straight	Farnell	1593460	€ 0,364	€ 0,364
	21 U5	external module	1 GP-20U7 GPS module	Antratek	SFE13740	€ 14,360	€ 14,360
	22 P4	JST connector	1 s3b-ph-kl (3-pin angled)	Farnell	9491910	€ 0,095	€ 0,095
	23 AE1	wire	1 82mm antenna				€ 0,000
1 extras	24 P5		1 piezo element	Farnell	2443199	€ 0,591	€ 0,591
	25 P6	DIP-2	1 BPW34 photodiode	Farnell	1045425	€ 0,526	€ 0,526
1 power1	26 P1	battery holder	1 Keystone 2479	Farnell	1339843	€ 1,250	€ 1,250
	27 P1	AAA	3 NiMH or alkaline battery	Farnell	2503724	€ 0,257	€ 0,772
1 casing	28	tube	1 Ø80x200mm white	pvcvoordeel.n2117		€ 0,504	€ 0,504
	29	tube	1 Ø60x200mm grey	pvcvoordeel.n2130		€ 0,247	€ 0,247
	30	lid	1 Ø110mm white	pvcvoordeel.n996851		€ 1,140	€ 1,140 *
	31	mounting plate	2 lasercut PLA 2mm	kunststofshop21102003111			€ 0,000 *
	32	locking plate	1 lasercut PLA 2mm	kunststofshop21102003111			€ 0,000 *
	33	screw	2 M5x20mm PH	Farnell	1420003	€ 0,052	€ 0,104
	34	screw	4 M3x10mm PH nylon	Farnell	7070597	€ 0,060	€ 0,240
	35	nut	2 M5	Farnell	1419450	€ 0,023	€ 0,047
	36	nut	4 M3 nylon	Farnell	2472687	€ 0,037	€ 0,148
	37	washer	4 M5	Farnell	2506010	€ 0,011	€ 0,045
	38	spacer	2 M5x8mm	Farnell	891526	€ 0,077	€ 0,154
	39	screw	3 M4x20mm PH	Farnell	1419996	€ 0,040	€ 0,121 *

	40	riveting nut	3 M4 neoprene	Borenco	N25M04CO0401	€ 0,198	€ 0,593
	41	G-hook	1	Karwei	123532	€ 1,810	€ 1,810
1 packaging	42	antistatic bag	2	Farnell	1503144	€ 0,037	€ 0,075
	43	antistatic foam	1	Farnell	1687846	€ 0,034	€ 0,034
power2	44 P1	JST connector	1 s2b-ph-kl (2-pin angled)	Farnell	9491902	€ 0,079	€ 0,000
	45 P1		1 LiPo battery 1000mAh			€ 10,000	€ 0,000
power3	46 P1	DC socket	1 DC socket	Farnell	1217037	€ 0,720	€ 0,000

<b>cost per piece</b>	<b>ex VAT</b>	<b>€ 41,67</b>
	<b>in VAT</b>	<b>€ 50,425</b>

\* needs additional work, i.e. painting, lasercutting or sharpening