

10 LED EMF Meter -r2 BOM

Reference	Description	Value	Quantity	Dat sheet or Part Link	Column1	Column2
BT1	AA Battery pack	6v Battery Pack	1	AllExpress		
C1,C3	Capacitor, 0805 SMT	0.1uf	2	MLCC substitute or Jameco		
C2	Electrolytic Capacitor, Radial	1uf	1	Mouser/Jameco/AllExpress		
C4	Electrolytic Capacitor, 0805 SMT	2.2uf	1	Mouser/Jameco/AllExpress		
C5	Electrolytic Capacitor, 0805 SMT	10uf	1	Mouser/Jameco/AllExpress		
C6	Electrolytic Capacitor, Radial	10uf	1	Mouser/Jameco/AllExpress		
D1	1.8,3mm, 0805 Blue/Purple LED TH/SMT	PROG_LED	1	Mouser/Jameco/AllExpress		
D2	Signal diode	1N914/1N4148	1	Mouser/Jameco/AllExpress		
D3	Power diode, SOD-123FL SMT	SL1A	1	Mouser/Jameco/AllExpress		
D10, D11, D12, D13, D4, D5, D6, D7, D8, D9	RED Ultra Bright LED, 5mm	LED	10	AllExpress		
H1,H2	6/32 mounting screw and nut	Ant Mount	2	Any hardware store		
H3,H4,H5,H6	M3 or 4-40 Screws,nuts, 10mm standoff	Battery Mount	4	AllExpress		
LS1	30x20x4.6mm 2W mini speaker	Speaker	1	AllExpress. https://www.aliexpress.us/item/3256807204066808.html		
R6	0805 SMT	330	1	Mouser		
R7	0805 SMT (Optional Reset Pullup)	10k	1	Mouser		
R8, R11	1/4w Resistor	100k	2	Mouser		
R9	0805 SMT	1.8k	1	Mouser		
R10	1/4w Resistor	1.8k	2	Mouser		
R12	1/4w Resistor	1.2k	1	Mouser		
R13	1/4w Resistor	1.5k	1	Mouser		
R14	1/4w Resistor	33	1	Mouser		
RV1	Variable Resistor	1k	1	Mouser		
SW1	Rotary BCD Switch	PT65501	1	Mouser / Digikey		
SW3,SW4,SW5	6mm Push button sw	Tactile Switches,6X6	3	Mouser/AllExpress		
U1	ATTiny1604, SOIC14, SMT	ATTiny1604-SS	1	Mouser, http://ww1.microchip.com/downloads/en/DeviceDoc/atmel-2586-avr-8-bit-microcontroller-attiny25-attiny45-attiny85_datasheet.pdf		
U2	DFPlayer Mini/MP3-TF-16P	MP3-TF-16P	1	AllExpress		
U3	5v LDO regulator. TO-252/DPAK LF50CDT/TC1262-5.0	LF50CDT	1	Mouser		
U5	LED VU Display IC, DIP18	LM3914N	1	AllExpress		
VU1	DC Meter 0-15 VDC (Base 55x49mm, 47mm Dia Hole)	MU-45	1	MU-45 DC Meter 0-15v (52x58mm, 47mm hole size), AllExpress: https://www.aliexpress.us/item/3256808562128482.html		
ANT1	5 Section Metal Full-Channel Telescopic Antenna, 8.3cm (3.27"), Extended 25cm (9.84")		1	https://www.aliexpress.us/item/3256806930715477.html		
AA Battery Pack Holder	3D printed part	6v Battery Pack Mount, 3D printed	1			
MS-M3_6	Mechanical screw, Battery Holder	M3 x 5mm	5	AllExpress		
MS-M3_10	Mechanical Standoff- Male/Female, Battery Holder	M3-10mm	4	AllExpress		
MN-M3	Mechanical Nut, M3	M3	5	AllExpress		
Magnet Wire	26 AWG (.415mm) red enameled wire. 2 layers of wire wrap, cosmetic only	26 AWG	1	AllExpress		
SD Card	Micro SD Card, 1 to 4 GB	1/4 GB	1	AllExpress		
PCB	10 LED EMF Meter r2 PCB		1	PCBWay		
Misc Colored wire	Various wire routes, cosmetic only	24 AWG	1	Jameco		
* RL1-2	Low signal relay (12.5x7.5x10 mm), cosmetic only	GSV-1, 5VDC	2	AllExpress: https://www.aliexpress.us/item/3256808790911517.html		
*U6-11	Misc ICS 2x 14p, 3x 16p, 1 x 18p, cosmetic only		6	TBD		
*XC1-9	Surface mount crystals HC-495, cosmetic only	10.240MHz + Mixed	10	Mouser/AllExpress		
* Items are cosmetic only				Approximate part cost \$45.00		