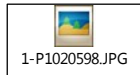


Picture of the board



Bill of Material

What	Where	Cost (euro) @ dec 2016	Free shipm.	#	Total cost	Remarks	Link
Pan / tilt platform	Aliexpress	0,37	Y	1	0,370		https://www.aliexpress.com/item/Hot-Sale-PT-Pan-Tilt-Pan-Tilt-for-Aircraft-FPV-Dedicated-Nylon-PTZ-20g-for
SG90 servo	Aliexpress	1,12	Y	2	2,240		https://www.aliexpress.com/item/Free-Shipping-1PCS-LOT-SG90-9g-Mini-Micro-Servo-for-RC-for-RC-250-450-
Duck	Aliexpress	0,23	Y	1	0,229	Sold per 40. Now sold out	
Arduino nano	Aliexpress	2,31	Y	1	2,310		https://www.aliexpress.com/item/Nano-CH340-ATmega328P-MicroUSB-Compatible-for-Arduino-Nano-V3-0/
Nano expansion board	Aliexpress	1,51	Y	1	1,510		https://www.aliexpress.com/item/Freeshipping-NANO-and-UNO-multi-purpose-expansion-board-FOR-ARDUINO
Joy stick	Aliexpress	0,47	Y	1	0,470		https://www.aliexpress.com/item/Free-Shipping-Higher-Quality-Dual-axis-XY-Joystick-Module-PS2-Joystick-Cc
9V power supply	Aliexpress	1,69	Y	1	1,690		https://www.aliexpress.com/item/ALLISHOP-9v-1a-dc-power-adaptor-eu-5-5mm-2-1mm-interface-Power-Sup
Buttons	Aliexpress		Y	2	0,380	price is for 10. Note 3.	https://www.aliexpress.com/item/New-10-x-Tactile-Push-Button-Switch-Momentary-6x6x4mm/32307209787
Red LED 10 mm	Aliexpress		Y	1	0,930	price is for 10. Note 4.	https://www.aliexpress.com/item/10mm-Red-LED-Round-Light-Emitting-Diode-Transparent-Ultra-Bright-Lam
Green LED 5 mm	Aliexpress		Y	2	0,570	price is for 10. Note 4.	https://www.aliexpress.com/item/5mm-LED-Emerald-Green-Diffused-Round-Light-Emitting-Diodes-Lamp-Bea
Right angle connector - 10 pins	Aliexpress		Y	1	0,890	price is for 10x40 pins	https://www.aliexpress.com/item/DSHA-New-Hot-10-Pcs-1-x-40-Pin-2-54mm-Pitch-Single-Row-Right-Angle/3
Dupont shell 10 pins	Aliexpress		Y	1	0,023	Note 1	https://www.aliexpress.com/item/100pcs-2-54mm-10P-Pitch-Dupont-Jumper-Wire-Cable-Housing-Female-Pir
Dupont shell 6 pins	Aliexpress		Y	1	0,022	Note 1	https://www.aliexpress.com/item/50Pcs-2-54mm-6Pin-6P-Dupont-Connector-Dupont-Plastic-Shell-Plug-Dupo
Dupont shell 3 pins	Aliexpress		Y	1	0,018	Note 1	https://www.aliexpress.com/item/50Pcs-2-54mm-3pin-3P-Pitch-Dupont-Plastic-Shell-Head-Plug-Dupont-Hous
Dupont wire 10 cm F/F	Aliexpress	0,64	Y	1	0,640	only 1/4 needed	https://www.aliexpress.com/item/40pcs-lot-10cm-2-54mm-1pin-feMale-to-feMale-jumper-wire-Dupont-cable
USB cable microUSB 1 meter	Aliexpress	0,48	Y	1	0,480		https://www.aliexpress.com/item/New-1m-3FT-Micro-USB-Charger-Charging-Sync-Data-Cable-for-Samsung-G
180 ohm resistor. 1/4 W	Aliexpress		Y	3	0,570	price is for 100.	https://www.aliexpress.com/item/Free-Shipping-100pcs-180-ohm-1-4W-180R-Metal-Film-Resistor-180ohm-0
1 kohm resistor. 1/4 W	Aliexpress		Y	3	0,570	price is for 100.	https://www.aliexpress.com/item/Free-Shipping-100pcs-1k-ohm-1-4W-1k-Metal-Film-Resistor-1kohm-0-25W
Perspex base plate 11x14 cm	Kunststofplatenshop.nl		N	1	0,640	Note 2	https://kunststofplatenshop.nl/product/plexiglas-helder-3-mm/
PCB board 3x7	Aliexpress	0,64	Y	1	0,640	Note 5	https://www.aliexpress.com/item/Free-Shipping-1set-5x7-4x6-3x7-2x8-cm-double-Side-Copper-prototype-pci
spacers M2	Aliexpress		Y	8	0,765		https://www.aliexpress.com/item/25-Pcs-Nylon-Standoff-Spacer-M2-Male-x-M2-Female-5mm/32365215325
spacers M3	Aliexpress		Y	8	0,970		https://www.aliexpress.com/item/Wholesale-25-pcs-set-Cheapest-Universal-Black-Nylon-Standoff-Spacer-M3
nuts M2	Aliexpress		Y	8	0,840	price is for 50.	https://www.aliexpress.com/item/50Pcs-lot-M2-Nuts-2mm-Screw-Nut-Hexagon-Nut-Match-Copper-Cylinder-
nuts M3	Aliexpress		Y	8	0,730	price is for 50.	https://www.aliexpress.com/item/20Pcs-lot-M3-Screw-Nut-Hexagon-Nut-Match-M3-Copper-Cylinder-3mm/3
countersunk screws M2 x 5	Aliexpress		Y	8	1,500	price is for 100.	https://www.aliexpress.com/item/70Pcs-M2-black-countersunk-head-machine-screws-Flat-head-machine-scr
countersunk screws M3 x 5	Aliexpress		Y	8	1,200	price is for 100.	https://www.aliexpress.com/item/M3-x-5mm-Cross-Flat-Head-Countersunk-Bolts-Machine-Screws-100Pcs/32
Powered USB hub	Elektronica Online		N	1	2,000	Not strictly needed. Note 6	http://www.elektronica-online.nl/
Not calculated: soldering tin							
Total					23,20		

- Note 1 Dupont shells are not strictly needed when building a few pieces. Cost is taken at the item price when ordering 50 or 100
- Note 2 The cost is when ordering minimally 10 euro. On top there is 14 euro shipping cost. However it is not strictly needed for building single pieces. You could use a piece of cardboard, MDF etc.
- Note 3 Not the same as in the setup. Those are 8,26 euro / 100
- Note 4 Costs are lower when ordering more
- Note 5 This is the cheapest to get a single piece. Better price is 2,34 euro / 10
- Note 6 Running out. Free shipment (in The Netherlands) above 100 euro