

Bill of Materials

Table 2 – eAS Components

Designator	Component	Number	Cost per unit - currency	Total cost - currency	Source of materials	Material type
<i>Microcontroller</i>	<i>Arduino Uno</i>	1	16	16	https://www.filipeflop.com/produto/placa-uno-r3-cabo-usb-para-arduino/	Other
Real Time Shield	RTC DS1307	1	2.5		https://www.filipeflop.com/produto/real-time-clock-rtc-ds1307/	Other
Micro SD Card Shield	SD CARD	1	2.35	2.35	https://www.filipeflop.com/produto/modulo-cartao-micro-sd/	Other
PCB card	PCB card	1(10cm x10)	1.5	1.5		Composite fiberglass and copper
PVC Pipe	PVC hot water pipe 1"x 1,5m	8				PVC
Rope	Thin rope 3mm	15m				Polypropylene or similar
Tag RFID	Tag coin 25mm	70				
Battery	NiCad Battery 12V - 7Ah	1	47		https://www.minhacasasolar.com.br/produto/painel-solar-10w-kyocera-solar-kst10-79220?atributo=178:UNICA&atributo=25:U&atributo=26:UNICA	Other
Energy Generator	Solar Panel 10W	1			https://www.minhacasasolar.com.br/produto/controlador-de-carga-de-10a-12v-24v-ep-solar-ls-e-ls1024e-78507?atributo=178:UNICA&atributo=25:U&atributo=26:UNICA	Other
Power controller	Charge controller 10A/ 12V	1	25	25	https://www.minhacasasolar.com.br/produto/controlador-de-carga-de-10a-12v-24v-ep-solar-ls-e-ls1024e-78507?atributo=178:UNICA&atributo=25:U&atributo=26:UNICA	Other
waterproof case	0.40m x 0.25m x 0.15m (approximately)	1				polycarbonate
PVC pipe	40mm x 0.50m	1				PVC
Epoxy resin	200 g	1				Epoxy
Fiberglass fabric	0.5m	1				Fiberglass