

ASTRA 100

Complete component and cost tally transcribed from the project's original Annex 8. Quantities distinguish what was bought from what was used. Prices are recorded line amounts, not unit prices.

Unspecified means the source leaves the cell blank. Do not assume a missing amount is zero or infer that it is included in another line. Verify exact specifications and quantities before purchasing.

Component	Bought	Used	Cost (RMB)	Source notes
01 Aluminium Profile 20x20 L100	20	18	45.84	Bought 2 extra for redundancy
02 Aluminium Profile 20x20 L140	10	8	Not stated	Bought 2 extra for redundancy; price not specified separately
03 Aluminium Tube	3 meters	3 meters	60.00	All are used
04 Ball Bearing 625 zz	5	4	9.30	-
05 Ball Bearing 6008 zz	5	4	28.00	Broke one, still had 4
06 NEMA 17 Stepper motors (17HS8401S) from HANPOSE	2	2	56.18	-
07 Timing Pulley GT2 36T, bore 5mm, belt wide 6mm	2	2	10.00	-
08 Timing Pulley GT2 20T, bore 5mm, Belt width 6mm	5	2	16.66	Sold in 5
09 Timing Belt GT2, Wide 6mm, Length 158mm, Teeth 79	3	2	5.70	-
10 Inner bracket B-type T slot 6	45	40	23.96	Sold in 15
11 Set Screw M3 L10 DIN 914	100	16	1.82	Sold in 100
12 M4 L25 Screw	50	22	4.82	Sold in 50
13 M4 L20 Screw	50	8	4.00	Sold in 50
14 M4 L10 Screw	50	34	2.86	Sold in 50
15 M3 L12 Screw	100	4	3.34	Sold in 100

Component list, continued

Component	Bought	Used	Cost (RMB)	Source notes
16 M3 L10 Screw	100	8	2.82	Sold in 100
17 M5 Nut	100	6	2.83	Sold in 100
18 M4 Nut	200	24	4.74	Sold in 200
19 M3 Nut	200	26	3.07	Sold in 200
20 M5 Washer	200	6	3.85	Sold in 200
21 M4 Washer	200	34	3.92	Sold in 200
22 M3 Washer	200	12	3.76	Sold in 200
23 T-nut B-type slot 6 M4	100	36	4.78	Sold in 100
24 Threaded rod M5 DIN 975 INOX A2	5	2	3.28	Sold in 5
25 End stop switch	4	2	13.00	-
26 M5 L20 Screws	100	56	14.00	-
27 M2.5 L10 Screws	100	4	3.00	-
28 N-type to SMA	1	1	8.00	-
29 N type mount	1	1	5.50	-
30 Copper pin	1	1	8.60	-

Component list, continued

Component	Bought	Used	Cost (RMB)	Source notes
31 LNA + Bandpass filter	1	1	60.00	-
32 RTL SDR V2	1	1	99.00	Original prototype receiver; later identified as unsuitable for 1420.4 MHz. Replacement cost not supplied.
33 Coax Cables and Connectors	1	1	2.40	0.8/m
34 ABS 3d Filament	15 kg	7 kg	420.00	60/kg; cost covers 7 kg used
35 M8 L70 Screws	5	Not stated	4.67	-
36 M8 Nut	Not stated	Not stated	Not stated	Quantity and price not specified in source.
37 Aluminum Profiles 30x30 L350	6	6	52.26	-
38 M6 L10 Screws	100	18	6.00	-
39 M6 T-nuts	100	18	6.00	-
40 M2 L20 Screws	100	28	6.00	-
41 SBASE Driver + Controller	1	1	269.00	-
42 Miscellaneous	Not stated	Not stated	100.00	-
43 Total shipping	Not stated	Not stated	200.00	20 RMB/kg
Sum of specified line costs			RMB 1,582.96	
Total reported in the original source			RMB 1,582.96	
Difference			RMB 0.00	
Original reported SGD total			S\$300.71 (3 August tally)	

The sum includes shipping and miscellaneous costs. It mixes purchased-pack amounts with a used-material amount for filament, exactly as the source tally does. Missing-cost components remain unresolved even though the stated numbers reconcile. The SGD total is quoted from the source, not recalculated using a current exchange rate.

This is a historical build record, not a fully specified purchase-ready kit. It excludes the unpriced replacement receiver and does not establish tools, computer, power-supply, or labour costs. Source: original written report, Annex 8; receiver qualification: presentation slide 31.