Dans Ship Board Net

Keeping the Full Sail on course

Components

Componet	Role	Cost	Draw/mA	Vendor	Notes
RaspberryPi 3 B+	Core computer system	$ 30.00	1400	MicroCenter	
Globalsat BU-353-S4	GPS	$ 30.00	55	Amazon	
dAisy AIS 2+ Reciver	AIS	$ 89.00	20	Wegmatt (Tindie.com)	without +2 removes the NMEA 0183 and cost $59 or as RPI Hat @ $65
AIS Antenna	Antenna	$ 30.00	0		Various suppliers (range from $15 - 200)
Display	7" Touch Screen Display	$ 59.00	1800	Microcenter	(Display is not needed for Wireless operation but some display & KB will be needed to setup)
Tripmate Nano	Central Connection	$ 20.00	500	Amazon	HooToo Wireless Travel Router with 10400 mA Battery N300 $40
Buck Power (8-35v) - USB		$ 10.00		Amazon	up to 8000mA supply
OpenPlotter	Core Software	$ -		http://www.sailoog.com/openplotter	
Micro SD Card	Mass Storage	$ 10.00		Many	Min is 8GB no Max I use 32Gb based on price
Maps	US Maps	$ -			Downloadable
USB Cables	power connections	$ 10.00		Many	USB A to Mico fro dAISy and HooToo USB A to mini for PI
Ubiquiti Bullet M BM2HP	LR Wifi	$ 80.00	7000	optional	Long Range WiFi reciver up to 50km
Totals		$ 368.00	10775		3.8 A @ 5v

Interconnect

Core of the Plotter is an ARM based Raspberry Pi running Linux and the Openplotter software load.

Full Sail has a built in 7" touch screen display located at Nav station, but normal access is via iPad using RealVnc app

The HooToo router provides on-board Wi-Fi and allows mobile devices to act as remote desktop access to the system.

The dAISy device provides AIS info
The GPS puck provides Lat/Long
The Pi provides serial IO to the various seatalk and NMEA networks

A LR Wi-Fi receiver connects to the on-board router to supply INET from up to 30 miles away