



# Bareboat Necessities vs OpenPlotter

mgrouch

Version 2025-05-04, Bareboat Necessities vs OpenPlotter

Feature	BBN	OpenPlotter
Open Source	yes	yes
Free	yes	yes
Touchscreen Support	advanced (OpenCPN, two finger zoom, long touch right click, three finger scroll)	basic
On-screen keyboard	advanced	basic
On-screen App Launcher	yes	-
Touchscreen usability	higher	lower
Headless mode	available with the same OS image with simple config changes	available by downloading separate image
Touchscreen UI	requires keyboard and mouse during set up	requires keyboard and mouse during regular operation
SignalK	yes	yes (plugins are not pre-installed)
PyPilot	yes	yes (not pre-configured)
AvNav	yes	adhoc install
QtVlm	adhoc install	-
Chart Formats	All available opensource plugins pre-installed	adhoc install
GPSd	yes, pre-configured	-
KPlex	yes, bundled, disabled on start	adhoc install
OpenCPN	yes	yes (plugins are not pre-installed)
O-Charts Plugins	yes, bundled	adhoc install
OpenCPN Weather Routing Plugin	yes, bundled	adhoc install
OpenCPN Polar Plugin	yes, bundled	adhoc install
OpenCPN Tides/Currents	yes	yes
Weather GRIB	yes	yes
Radar Support	yes, pre-installed OpenCPN plugin	adhoc

Feature	BBN	OpenPlotter
WiFi hotspot	yes, pre-configured	needs setup
Firewall	yes	-
NMEA 0183	yes, mostly preconfigured	yes, requires configuration
NMEA 2000, Can	bundled, requires configuration	adhoc install, requires configuration
SeaTalk1	bundled, requires configuration	adhoc install, requires configuration
NavTex	yes	-
Radio Decoders	Inmarsat STD-C, NavTex, WeatherFax, WinLink, NOAA Satellite Weather, AIS - bundled	WeatherFax, NOAA Satellite Weather, AIS via adhoc install
SDR/Ham support	extensive	basic
AirMail	via wine	-
GIS	SAS.Planet via wine, imgkap	-
Autopilots Control	AutoHelm(?), pyPilot, NMEA 2000	NMEA 2000 (adhoc), pyPilot
i2c	on by default, IMUs are auto-detected	needs configuration
Serial Ports	mostly autoconfigured via udev rules	manual config via utility
Hardware OpenGL acceleration	on by default	needs setup
Support of opensource hardware	MCS marine server, SailorHat, Maiana AIS (most pre-installed and some adhoc)	require adhoc install
Kernel	64-bit by default	32 or 64-bit
Hardware	Raspberry Pi4, Pi400, and CM4 and Pi3B+ (last two require /boot/config.txt changes before first boot)	More wide hardware support with additional DIY config changes
Backup Tools	plenty (timeshift, restic, rsync, rclone, rpi-clone, etc)	some
SSD Imaging	yes, rpi-clone	DIY
Android Mirroring	yes, scrcpy	-
Remote Desktop	yes, VNC client and server	VNC adhoc install
Web Browser	yes	yes

Feature	BBN	OpenPlotter
FB, FB Messenger	yes	-
WhatsApp	yes	-
Text-to-speech	adhoc	-
Offline Wikipedia	kiwix	-
YouTube	yes	via browser
Cameras	yes, MotionEye, Cam	-
Augmented Reality	Stellarium	-
Drones support	yes, APM Planner 2	-
Media Library	Jellyfin (adhoc), SAMBA share, Mopidy	-
Playing Music	yes, Mopidy, AirPlay (Shairplay), Spotify (raspotify), Bluetooth	Bluetooth?
Windy, Lightning Map, Dock Finder, BoatSetter, CrewFinder, Sailing Education, Marine Traffic, Marine Life Identification	on-line	DIY
Power Monitoring	yes (SolarThing, HomeAssistant, etc)	DIY
Victron support	yes (via SignalK, HomeAssistant, NodeRed, Venus Web UI)	DIY
Marine Publications	ColReg, Check lists, Knots, Sailing Directions Enroute (adhoc)	-
Automation	NodeRed built-in, Mosquitto MQTT built-in, HomeAssistant/EspHome (adhoc)	Mosquitto MQTT, NodeRed adhoc
Data Analytics	Grafana, Kapacitor, InfluxDB (built-in, disabled on start)	Grafana, InfluxDB adhoc
Release Frequency	about monthly	1-2 yearly
GitHub feedback: (stars, watchers, forks)	more	less
Distro Image Size	2.8 Gb	1.4 Gb
Download locations	2 Cloudsmith and GitHub	1 Private Cloud

Feature	BBN	OpenPlotter
Documentation	fewer pictures, more complete, more complete supported hardware list	more pictures, more gaps