



Bareboat Necessities vs OpenPlotter

mgrouch

Version 2025-04-08, 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 |

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|--------------------------------|---|---|
| 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 |

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|--|--|-------------------------------|
| 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 |

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|---------------|--|--------------------------|
| Documentation | fewer pictures, more complete, more complete supported hardware list | more pictures, more gaps |