



Battery powered, portable, standalone digital radio IP gateway (hotspot)



<https://www.sharkrf.com/products/openspot4/>

info@sharkrf.com

Document version: 2022-06-06-01

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General description

The openSPOT4 is our latest battery powered, portable, standalone digital radio internet gateway (hotspot) designed mainly for amateur radio use. You can talk with others on digital radio networks by using an openSPOT4, Wi-Fi internet access, and your digital transceiver.

Compatible digital radio protocols and networks

- **DMR** (BrandMeister, DMRplus, DMR-MARC, Phoenix, XLX, TGIF and others)
- **D-STAR®** (DCS, REF/DPlus, XRF/DExtra, XLX)
- **System Fusion®/C4FM** (FCS, YSFReflector, XLX)
- **NXDN®** (NXDNReflector)
- **P25** (P25Reflector)
- **POCSAG** (DAPNET)
- **APRS® messaging and location data forwarding** (APRS-IS)

Supports cross modes (example: example: talk with your D-STAR® transceiver on DMR, and with your DMR transceiver on D-STAR® networks).

Key features

- Built-in Li-ion battery with up to 30 hours of operation**
- Built-in transcoding hardware* for the best voice quality in cross mode operation
- Built-in Wi-Fi and radio antenna
- Built-in beeper with audible status tones
- Web-based easy and fast Quick Setup
- Call audio playback on the web interface*
- No additional hardware required, works out of the box without a computer
- USB-C charger cable included in the box
- Use even in your vehicle with extreme fast bootup and USB power supply tolerance
- User manual [available online](#)
- 2 year warranty*** with official support in [email](#) / [community forum](#)
- Web interface for configuration and monitoring

- Create your own private radio network using our open source server application

** Hardware transcoding and call audio playback on the web interface is only available in the openSPOT4 Pro. The list of openSPOT4 and openSPOT4 Pro cross modes can be found here.*

*** The length of the battery discharge time is affected by the device's operation mode (transmitting or receiving, or cross mode is used), traffic on the connected Wi-Fi network (even if the traffic is not to/from the openSPOT4), Wi-Fi signal quality, web interface is opened.*

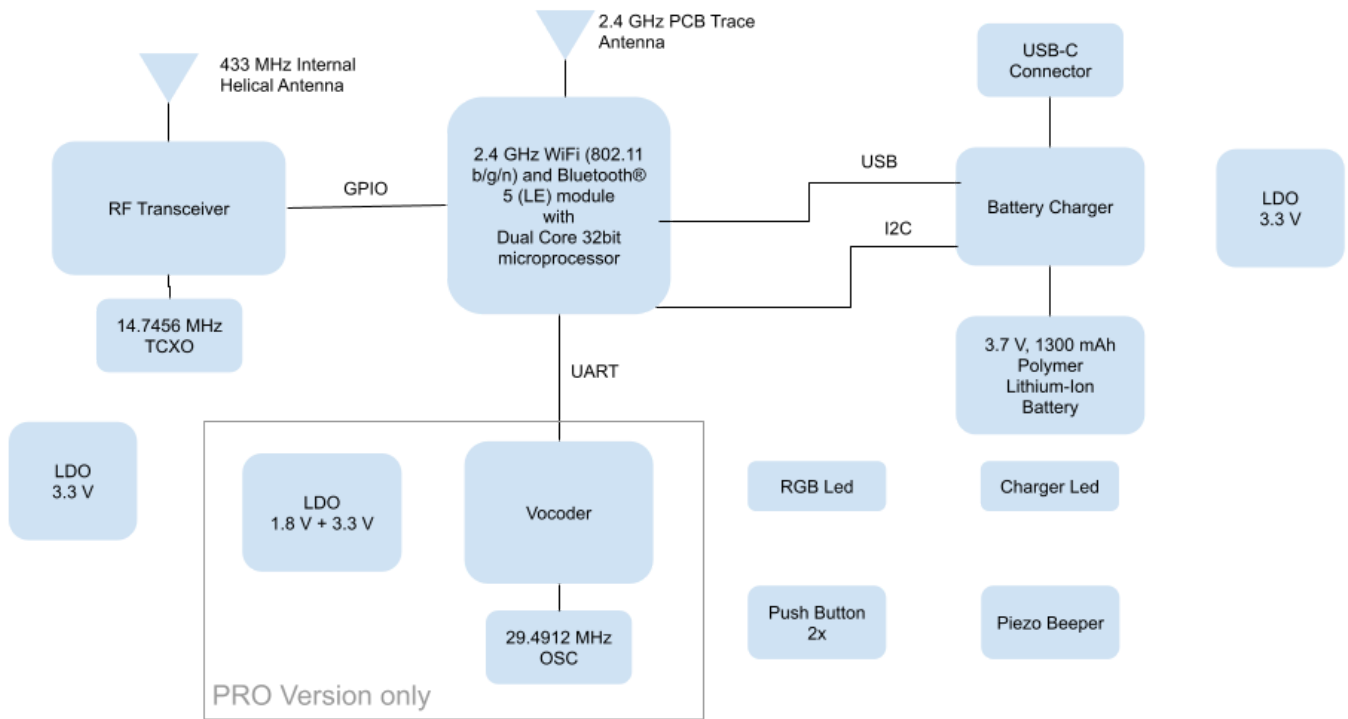
**** The battery and the USB-C charger cable have only one year long warranty period (70% battery end of warranty capacity).*

Specifications

- Dimensions: 100 x 58 x 18.5 mm
- Weight: 76 grams
- Operating temperature range:
 - During battery charge: 0 - +30 °C
 - During normal operation: -10 - +45 °C
- Battery: Polymer Lithium-Ion 1300 mAh
- Power supply: 5 V DC through the USB-C port
- Recommended power supply current rating: 2000 mA
- Power consumption: max. 1 A
- UHF modem:
 - RF power output: max. 13 dBm (20 mW, between 433-434MHz)
 - Receive/transmit frequency range: 421-458 MHz (JP: 430-440MHz, TW: 430-432MHz)
 - Receiver sensitivity (between 433-434MHz):
 - Gaussian 2FSK: -114 dBm @ 9.6 kbps
 - Raised Cosine 4FSK: -109 dBm @ 9.6 kbps
 - Oscillator frequency stability: 1ppm
 - Emission designators: A1A (CW ID), F1E/F1D (D-STAR®, System Fusion®, P25), FXE/FXD (DMR), F1E/F1W (NXDN®), F1D (POCSAG)
- Wi-Fi module:
 - Supported protocols: IEEE 802.11b/g/n
 - RF power output: 21.0 dBm (802.11b, 1 Mbps)
 - Receive/transmit frequency range: 2.412 GHz - 2.484 GHz
 - Receiver sensitivity:
 - 802.11b, 1 Mbps: -98.4 dBm
 - 802.11g, 6 Mbps: -93.2 dBm
 - 802.11n, HT20, MCS0: -92.6 dBm

Block diagrams

openSPOT4 block diagram



System block diagram

