

openSPOT•2

Standalone digital radio IP gateway / hotspot



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General description

The openSPOT2 is a standalone digital radio internet gateway (hotspot) designed mainly for amateur radio. You can talk with others on digital radio networks by using an openSPOT2, Wi-Fi internet access, and your radio.

Compatible digital radio protocols and networks*

- **DMR** (BrandMeister, DMRplus, XLX)
- **D-STAR** (DCS, REF/DPlus, XRF/DExtra, XLX)
- **System Fusion/C4FM** (FCS, YSFReflector)
- **NXDN** (NXDNReflector)
- **P25** (P25Reflector)
- **POCSAG** (DAPNET)

Supports cross modem modes (example: talk with your C4FM radio on DMR, and with your DMR radio on System Fusion networks).

* More supported networks and features will be available with new firmware releases.

Key features

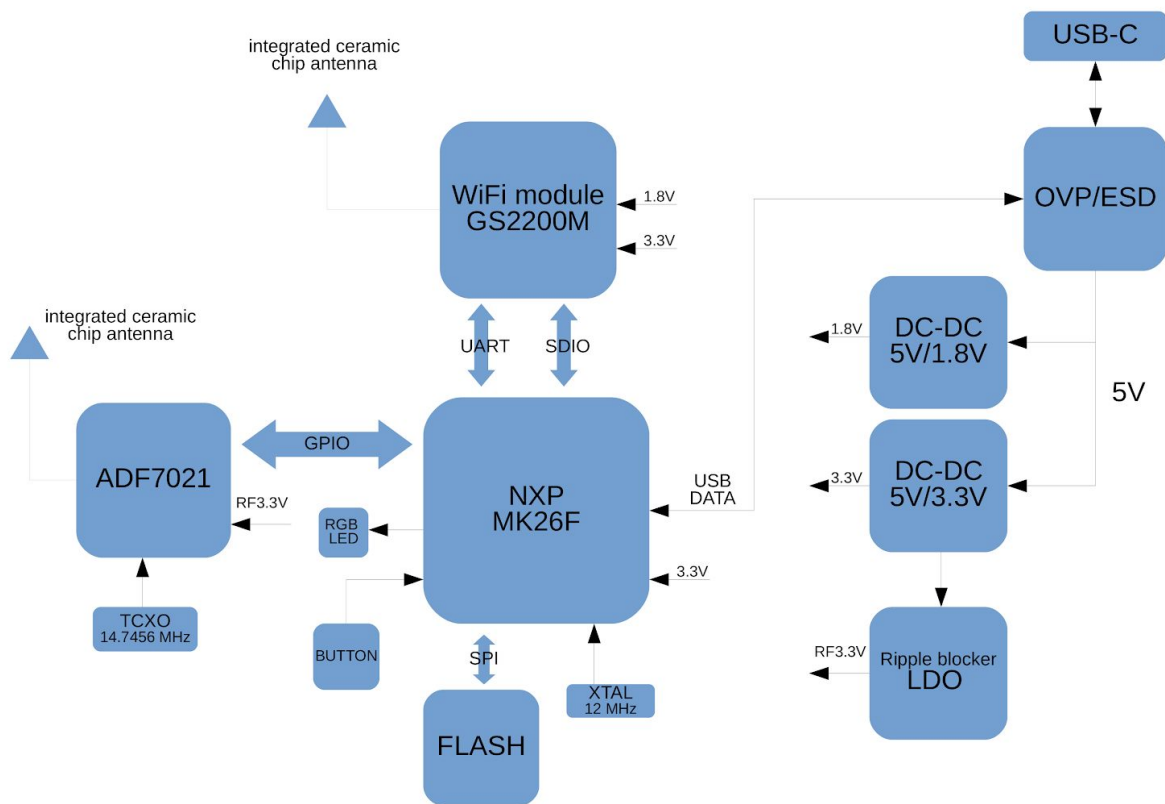
- Web-based easy and fast Quick Setup
- No additional hardware required, works out of the box without a computer
- All accessories included you need to have the openSPOT2 up and running (USB-C cable, 120V/230V USB power supply)
- Built-in Wi-Fi and radio antenna
- Designed for 24/7 continuous use even 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](#)

Specifications

- Dimensions: 85 x 48 x 15 mm
- Weight: 32 grams (without antenna)
- Operating temperature range: for indoor use, -10 - +60 °C
- Power supply: 5 V DC through the USB port
- Power consumption:
 - Max. 150 mA @ 5 V (0.75 W)
 - Avg. 115 mA @ 5 V (0.575 W)
 - Avg. 65mA @ 5 V (0.325 W) with enabled powersaving
- UHF modem:
 - RF power output: max. 13 dBm (20 mW)
 - Receive/transmit frequency range: 421-458 MHz (JP: 430-440MHz, TW: 430-432MHz)
 - Receiver sensitivity:
 - Gaussian 2FSK: -114 dBm @ 9.6 kbps
 - Raised Cosine 4FSK: -109 dBm @ 9.6 kbps
 - Oscillator frequency stability: 0.5ppm
 - 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: +15 dBm (802.11b 1Mbps), +14 dBm (802.11g 6Mbps), +14 dBm (802.11n MCS0)
 - Receive/transmit frequency range: 2.4 - 2.495 GHz
 - Receiver sensitivity: -91 dBm (802.11b 1Mbps), -88 dBm (802.11g 6Mbps), -88 dBm (802.11n MCS0)

Block diagrams

openSPOT2 block diagram



System block diagram

