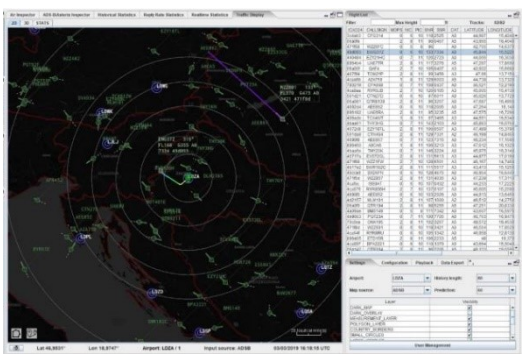
openAir hotspot is a compact and versatile ADS-B receiver for mobile use or spontaneous setups.

It runs for 24h on embedded battery while serving surveillance data via Wi-Fi connection to multiple clients. The device provides raw or decoded ADS-B data on TCP/IP sockets and serves a web page showing a map with the current traffic situation.

openAir1090 hotspot offers:

- Situational awareness on surrounding air traffic at low cost and with minimal installation effort
- ADS-B receiver with high dynamic range for monitoring of traffic in all altitudes and distances from own location
- Acts as Wi-Fi hotspot or connects into an existing wireless network
- Web application shows received traffic on a map with switchable colour settings (day/night) and detail levels
- World-wide map background data stored on internal flash memory, no connection to Internet required during operation
- Embedded GNSS receiver to indicate own location on map and to calculate distances
- Compact and high reliability, no cables, no moving parts, IP66/NEMA4 enclosure
- Advanced decoding techniques, CRC correction
- Embedded band-pass filters for optimum reception performance in difficult RF environments
- Embedded MPPT charge controller allows direct connection of solar panel for 24/7 autonomous operation



Technical Parameters

Power supply		
USB	5 VDC	
Power connector	5-22 VDC	Allows connection of solar panel
Battery capacity	5300 mAh	Up to 24h runtime
Power consumption	<1W when battery is fully charged <10W when battery is charging	
Dimensions		
Type of enclosure	IP66 outdoor enclosure	NEMA 4
Enclosure dimensions	60mm diameter, 260mm total length	
Weight	500g	
1090MHz Receiver Input		
Frequency	1090	[MHz]
Dynamic range	-90 to +10	[dBm]
Antenna gain	2.1	[dBi]
Reception range	100-150	[NM]
GNSS receiver		
Constellations	GPS+GLONASS L1 Band	
Sensitivity	-165dBm tracking	
Channels	33	
Network connection		
USB port	Serial interface	
Wifi	2.4GHz 802.11 BGN	
Wifi mode	Access point or client mode	
Data protocols	HTTP, TCP/IP	
Environmental specification		
Ambient temperature	-20 to 60	[°C]
Relative humidity	<99	[%]
Cooling	passive	