openAir multitrack is a high-performance all-in-one ADS-B/ FLARM/OGN/DRONEID receiver with integrated GNSS module.

The device offers a combined high-performance RF frontend for the 868 and 1090 MHz frequencies and supports all major surveillance protocols. It embeds a powerful multi-core processor that allows running multiple feeding applications, a web-based traffic display and configuration tool and custom applications on request.

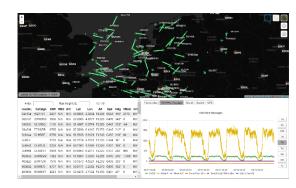
Messages are timestamped in nanosecond resolution by a GNSS synchronized timestamp to filter duplicate messages and provide high quality multilateration results.

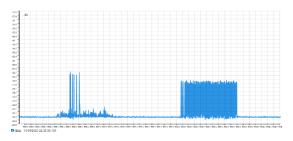
openAir multitrack offers:

- Pre-installed feeding software to the Open Glider Network and the AVIONIX AERO network
- Works with combined antenna for 868 and 1090 MHz, simple plug-and-play setup, no special technical or software know-how required
- High dynamic receiver for monitoring of en-route, terminal area and surface movement at the same time
- Compact and high reliability, no moving parts, low power consumption (<5W)
- Best-in-class sensitivity and decoding performance
- Embedded band-pass filters to enable good performance in difficult RF environments
- Web-based signal analysis functions to optimize antenna and system setup
- Data transmission via Ethernet LAN, WiFi, Bluetooth or optional 4G LTE modem
- Variety of output protocols in unrestricted data quality
- ADS-B/MODE-S/FLARM/OGN/PilotAware/FANET/ADS-L
- Receives Drone Remote ID (DRI) over WiFi/Bluetooth
- Most complete aviation receiver solution giving a full picture of the surrounding airspace
- OLED status display supporting installation and maintenance
- Option for outdoor enclosure













Technical Parameters

Power supply		
Input voltage	5 VDC/2A	PoE optionally
Power consumption (average)	< 5	[W]
Dimensions		
Type of enclosure	Desktop enclosure	
Enclosure dimensions (w * h * l)	70 * 30 * 100	[mm]
Weight	240	[g]
Dual band Receiver Input		
Frequencies	1090 and 868/915 or 978	[MHz]
Antenna Input	50	[Ω] SMA female
Sensitivity and dynamic range	-93 to 0	dBm (1090 MHz)
Processing	>2000	Msg/sec
Air Protocols	ADS-B/MODE-ACS, UAT978,	UAT978 alternative
	FLARM, OGN, PilotAware,	to 868MHz
	FANET, ADS-L	protocols
BIAS-T for active antenna	5V/200mA	Configurable
GNSS receiver		
Receiver type	72-channel u-blox M10 engine	
GNSS	GPS/QZSS, GLONASS, BeiDou,	
	Galileo	
MLAT Timing accuracy	<50 ns	GNSS locked
Network connection		
Ethernet type	Cat. 5e, 10/100/1000BaseTX	RJ45 connector
Data protocols	TCP/IP, UDP/IP, HTTP	
Output formats	AVR, AVX, Beast, SBS1, JSON,	ASTERIX CAT021 on
	MAVLink-v2, GDL90	request
Wi-Fi	2.4G, 802.11 a/b/g	
Bluetooth	BT 5.0	
IP address	Fixed or DHCP	
Environmental specification		
Ambient temperature	0 to 40	[°C]
Relative humidity	<80	[%]
Protection	Gas Discharge Tube Surge	
	Protectors and ESD Suppressor	
	on all antenna inputs	

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