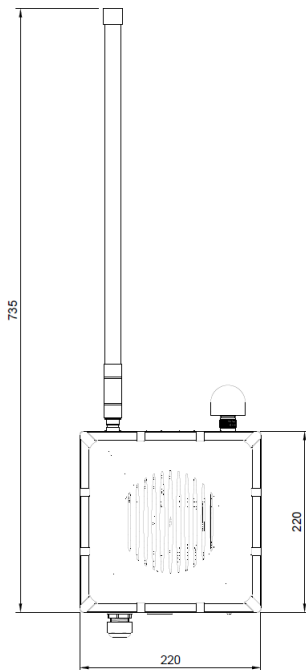


Technical Specifications for the G-1090 Product Line

Common Features

Functions	ADS-B, Mode-S, Mode A/C receiver
ADS-B, Mode-S, A/C receiver	1090 MHz
ADS-B, Mode-S, A/C range	Up to 290 Mi. (400 km) depending on aircraft avionics emitting power
Geographic area	Worldwide
Data availability	Data stream or web platform
Aircraft position precision	ADS-B: GPS precision for horizontal positioning, ± 50 ft (15 m) for vertical, Mode-S, A/C: depending on receivers' layout (MLAT)
Messages latency	ADS-B: 1.2 s MLAT (Mode S - Mode A/C): 2.2 s



Common Interfaces

Antenna connectors	N-type, Female
GNSS	Dedicated, GPS.
1090 MHz Antenna	Omnidirectional, 5 dBi, 51cm long, fiberglass
Ethernet	RJ45, DHCP or Static IP address
Mobile connectivity	In option

Electrical data

Power supply	48/56 V (PoE)
Power consumption	Max 8 W

Environmental data

Operating temperature	-4 to 194 °F (-20 to 50°C)
Protection from dust/water	IP66
Pressure compensation	

Dimensions

8.6 x 8.6 x 4.3 inch (220 x 220 x 110 mm), without antenna(s).
Max 6.6 lb (3 kg)

Installation

To maximize coverage, the G-1090 should be installed in an area where obstacles are not covering the sky. The G-1090 is equipped with a mounting system for installation on horizontal/vertical poles.

Server connection

All G-1090 should be connected to the internet to Multilateration processing (note that Mode S or Mode A/C messages are available only when triggered by 1030 MHz interrogations). It is not possible to get the data by connecting directly to the receiver. All data detected by a network of G-1090 is available by connecting to INVOLI API or by connecting to the INVOLI.live visualization platform.

G-1090 FLARM specific features

Region	Europe
Antenna	868 MHz, omnidirectional, 9dBi, 63cm, fiberglass
Range	Up to 30 Mi (60 km) depending on FLARM installation on the aircraft
Precision	± 100 ft (30 m) for horizontal and vertical positioning

G-1090 UAT specific features

Region	United States
Antenna	978 MHz, omnidirectional, 5.5dBi, 66cm, fiberglass
Range	Depending on UAT installation on the aircraft
Precision	Depends on GNSS precision of the aircraft transmitter

G-1090 Interrogator specific features

Region	Worldwide
Antenna	1030 MHz
Range	Adjustable
Power consumption	Up to 25 W

G-1090 RemotID specific features

Region	Worldwide
Antenna	2.4 GHz, omnidirectional, 0dBi, 10cm, plastic
Range	Up to 2 Mi (4km) depending on drone emitting power
Precision	Depending on the GNSS precision of the drone emitter

Further information

For more information and quote, please contact info@involi.com

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