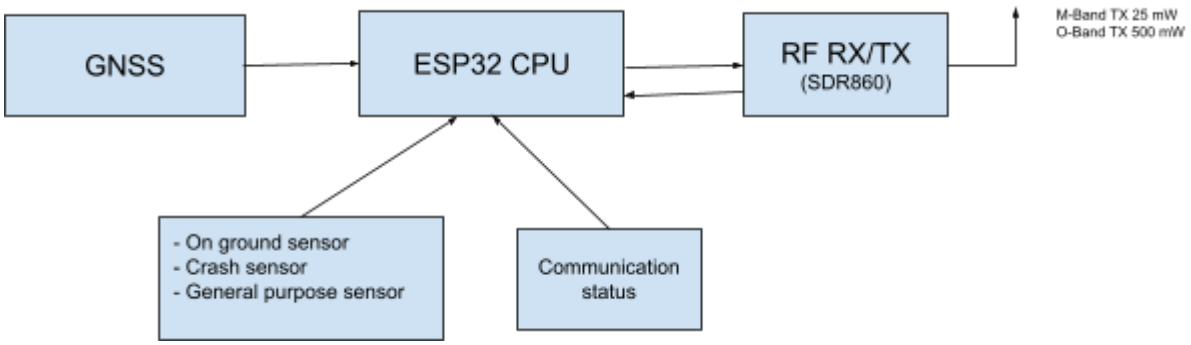
ADS-L Beacon

ADS-L Beacon block diagram



ADS-L Beacon features

- *iConspicuity* compatible (comply with AMC1 SERA.6005(c) as proposed in EASA NPA 2021-14)
- Operation Frequency SDR860
- Experimental device for Lab testing / operation
- *In flight* Test mode enables to play back a pre-recorded flight
- Local WiFi Debug mode enables UAV integration audit
- Autonomous operation (operation is not UAV electronics dependant)
- Flexible UAV integration
- Multi sensor integration
- Communication status integration
- Multiple GNSS systems (GPS, Galileo, GLONASS)
- High resolution GPS (WAAS / EGNOS)
- Auto managed *Flight State*
- Comm port for debug / testing
- Local WiFi for debug / testing
- Radio link encryption ready
- Lightweight device (< 100 gr)
- Ultra low power consumption

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Radio specifications

Operation Frequency (SDR860)	868.2 MHz, 868.4 MHz (M-Band) 869.525 MHz (O-Band)
Channel Bandwidth	200 KHz (M-Band) 250 KHz (O-Band)
Modulation	2-GFSK
Max. Power (ERP)	14dBm / 25mW (M-Band) 27dBm / 500mW (O-Band)
Bitrate	100 kbps (M-Band) 38.4 kbps (O-Band)
Gauss Filter BT	0.5

Electrical specifications

Power supply options	USB-C (5 V) XT30 port (20 - 27 V) Li-Po autonomous battery
Test / Debug comm port	UART port / WiFi
Crash sensor interface	Digital input
On ground sensor interface	Digital input
General purpose sensor interface	Digital input
Communications status interface	Digital input

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iConspicuity payload parameters

(comply with AMC1 SERA.6005(c) as proposed in EASA NPA 2021-14)

Parameter	**Source / Management**
Timestamp	GNSS
Flight state	UAV Flight Control / sensors / Auto Managed
Aircraft category	Config
Emergency status	Config / Digital input
Latitude	GNSS
Longitude	GNSS
Ground speed	GNSS
Altitude above WGS- 84 ellipsoid	GNSS
Vertical rate	GNSS
Ground track	GNSS
Source integrity level	Config
Design assurance	Config
Navigation integrity	GNSS
Horizontal position accuracy	GNSS
Vertical position accuracy	GNSS
Velocity accuracy	GNSS