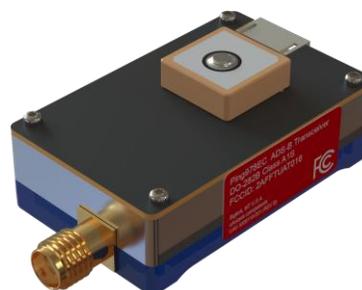


Overview

ping978EC is the world's smallest, lightest and most affordable full range, dual link Automatic Dependent Surveillance - Broadcast (ADS-B) transceiver with integrated Satellite Based Augmentation System (SBAS) Global Navigation Satellite System (GNSS) and precision barometric sensor. At just 22 grams, it assists with Detect and Avoid (DAA) functionality for Unmanned Aircraft Systems (UAS) developed exclusively for the UK market. ADS-B IN on 1090MHz and 978MHz. ADS-B OUT on 978MHz.



ping978EC

Features

Transceiver

- 978MHz with time-based self-assigned temporary non-ICAO 24-bit aircraft address.
- Detects ADS-B equipped aircraft on 1090MHz and 978MHz within a 100-statute mile radius in real time.
- GDL 90 combined UAT / 1090ES traffic reports
- SMA 978/1090MHz Antenna Connector. Antenna included.

GNSS

- Integrated high integrity SBAS GNSS sensor (derived from uAvionix's TSO C-199 FYX technology)
- Integrated GNSS antenna
- Integrated precision, temperature controlled static pressure sensor
- Battery backed GNSS for fast Time-to-First-Fix (TTFF)
- GNSS/SBAS augmentation system

Performance

- GDL 90/Mavlink control serial input compatible with popular autopilots
- GDL 90 Ownship and altitude packets
- Meets MOPS RTCA DO-282B Class A1S
- Meets UK CAA CAP 1391 specification, including CAP 1391 Appendix E.

Regulatory

- Meets FCC 47CFR part 87.

Technical Specifications

Specification	Value
Input Power	11-28V
	500mW Ave.
	30W Peak (400us)
Size	25x50x18mm
Weight	22 grams
SIL/SDA	1/1
Operating Temp	-45 to 70°C
Transceiver	
<i>Transmit</i>	
978MHz	20W Nominal (43dBm)
1090MHz	S/W Disabled
<i>Receive</i>	
MTL 1090MHz	-88dBm
Dynamic Range	-79 to 0dBm
MTL 978MHz	-93dBm
Dynamic Range	-90 to -3dBm
SBAS GNSS	
Augmentation	SBAS
Sensitivity	-166dBm
Altimeter	
Range	-1,000ft - 50,000ft
Interfaces	
<i>COM1 - 4 pin</i>	
Control	57600bps GDL 90/Mavlink
Ownship	57600bps GDL 90/Mavlink
<i>COM2 - 5 pin</i>	
Programming	115200bps GDL 90
Options	
978MHz Transceiver Antenna Included	

