

Overview

pingStation 3 is a dual-band (978MHz and 1090MHz), networkable Automatic Dependent Surveillance-Broadcast (ADS-B) receiver with a Power-Over-Ethernet (POE) interface enclosed in an IP67 rated protective enclosure. PingStation 3 provides ground, surface, or low-altitude ADS-B surveillance. pingStation 3 is robust enough to be permanently mounted outdoors in harsh environmental conditions and small enough to be used as a mobile asset for roaming operations. Installation is simple with the included pole-mount bracket, and a single POE cable that provides both power and data communications. An integrated GPS provides precision timestamping for messaging.

Multiple pingStation 3 may be networked together to provide a wide area low-altitude surveillance volume. Data messages options are available, including ASTERIX CAT021, JSON, and Compressed VRS format as described within the pingStation3 ICD.



Features

- Detects ADS-B equipped aircraft on 1090MHz and 978MHz in real time.
- Internal GPS provides high resolution timestamp messaging.
- Based on exclusive Ping™ Silicon Radio
- IP67 rated environmentally protected enclosure
- Simple power and connectivity options using Power over Ethernet (POE)
- Multiple data format options
- Network multiple receivers to enable a wide area low-altitude surveillance network

Technical Specifications

Specification	Value
Input Voltage / Power	44-57V / 500mW Power over Ethernet
Size	7.0"x1.4"x26.5"
Weight	545 grams
Operating Temperature	-40°C to 65°C
Ingress Protection	IP67
Receive	
MTL 1090MHz Dynamic Range	-88dBm -79 to 0dBm
MTL 978MHz Dynamic Range	-93dBm -90 to -3dBm
Interfaces	
• ASTERIX CAT021 • Ethernet (JSON UDP) • Compressed VRS (Virtual Radar Server)	
Loading	
Wind Rating	150 mph (Cat5) / 21.5 lbs

Data / Power Connector: RJ-45 POE 802.3af

Parameter	Value
Standard	802.3af (802.3at Type1)
Maximum power	15.4W
Voltage Range	37 – 57V
Maximum Current	350mA
Maximum Cable Resistance	20Ω
Supported Cabling	Shielded Cat 3 and Shielded Cat 5
Supported Modes	Mode A (endspan), Mode B (midspan)
Power Management	Power Class 0
Maximum Cable Length	100 meters

Mechanical Specification

