

RF-300 Datasheet



Highlights

- Detects communication between drone and remote controller (Wi-Fi and RF)
- Classifies drones by manufacturer and model
- Direction-finding locates drone and pilot
- Approximate coverage range 1.3 miles (depends on terrain)
- Ruggedized form-factor for extreme environments (IP65)
- Single connection Ethernet and power (PoE+)
- Scans all drone frequency bands

Detection and Classification of Drone-Based Threats

The RF-300 is a passive, network-attached radio sensor for the detection, classification, and direction finding (geolocation) of drones and their remote controls. The RF sensor detects consumer, commercial, and hobbyist drones.

Direction Finding and Geolocation of Drones and Pilots

Through internal digital signal processing of radio signals, the RF-300 identifies the direction and in combination with one or more RF-300 determines the position of signals from drones and pilots.

Part of the DroneTracker and DroneDNA

The RF-300 connects to Dedrone’s DroneTracker, a software platform that aggregates and analyzes data from multiple sensors, displays critical information about drones and their flights, sends alerts and generates reports, and optionally triggers passive or active countermeasures. DroneTracker includes Dedrone’s DroneDNA, a library of drone signatures that is frequently updated to detect the latest drones.

Specifications

Range (line of sight)	Up to 0.65 mi (1.0 km) Up to 1.0 mi (1.5 km) in ideal conditions
Accuracy of Direction Finding*	±5° (mean error)
Geolocation	With two or more RF-300, also through Wi-Fi signals
Device Type	Sensor
Radio Frequency	Omnidirectional passive detection, classification, and direction finding
Dimensions (L x W x H)	7.7" x 3.7" x 14.4" (195 mm x 95 mm x 365 mm)
Weight	6.8 lb (3.1 kg)
Ingress Protection Rating	IP65
Operating Temperature	-4 °F to +131 °F (-20 °C to +55 °C)
Power Supply	PoE+ (IEEE 802.3at)
Power Consumption	18 W (typical)
Connectivity	Via LAN to existing IT infrastructure
Configuration, Operation, and Alarms	Via DroneTracker software (requires software version >= 3.1 and valid license)
Software Updates	Firmware and DroneDNA updates via cloud-based connection

*in the 2.4 GHz band