IoT DRAGONFLY™
Outdoor Ballistic Sensor

*Encapsulated Sensor within Resonance Chamber and Wall Mount Shown

Solar panel enhances internal battery life

Application

An **outdoor** wireless gunshot sensor performing energy capture, waveform analysis and transmitting resultant data to the Emergency Automatic Gunshot Detection & Lockdown (EAGL) System, a Gunshot Detection System (GDS) via IoT.

Description

Compact, wireless, self-contained, battery operated gunshot sensor executing threat versus non-threat validation determinations using energy waveform analysis algorithms.

Sensor is encapsulated within resonance chamber allowing flat wall, corner or pole mounting capability while providing an optimum spherical detection coverage area up to **~70,685 FT²**.

Threat validation data is wirelessly transmitted by sensor to the EAGL System Server via internal Quectel. Data received by the EAGL System Server is processed further while initiating the appropriate preprogrammed automatic and autonomous Adaptive Response feature and process.

Sensor also receives calibration data from the EAGL Server using similar communication process and methods.
All transmitted data is encrypted.

Typical Characteristics

POWER: Internal - Direct Input, Inorganic Lithium Battery, 3.6VDC

BATTERY LIFE: ~7 YEARS

FUNCTION: On-board Firmware, Energy Waveform Analysis

COMMUNICATION: IoT, secure internet connection and data exchange (Quectel, Cat M)

DETECTION RANGE: Outdoor, ~150 FT Radius < ~70,685 FT² Spherical Area

DETECTION RESPONSE TIME: <4-8 Seconds

SENSOR DIMENSIONS: 4"OD x 2.25"T (101.6 mm OD x 57.15 mm T)

RESONANCE CHAMBER: 7.623"OD x 5.69"H (CHAMBER ONLY)

OPERATING TEMPERATURE: −40°F to 185°F

SENSOR WEIGHT: 7.7 oz. or 0.481 lbs., (0.218 kg.)
RESONANCE CHAMBER WEIGHT: 4.9 oz. or 0.303 lbs., (0.139 kg.)
MOUNTING: Mounting Application Specific, see Associated Components* on reverse side

Certifications, Compliance and Conformance

Device and/or components have the following credentials are listed or meet the following rules / regulations:

FCC: CFR 47, Part 15, Subpart B:2017, Class B

EMC: ICES-003, Issue 6:2016, Class B IT Equipment; 2014/30/EU

RoHS: Directives 2015/863/EU; 2011/65/EU

UL: UL Yellow Card[2]: E67171-248322; BBCV2.MH12193 (Listing); UL94-HB (Flammability Rating)

CAN/CSA-CISPR 22-10

CE: RED 2014/53/EU

UN / DOT 38.3

Certifications are current at the time of this publication but are subject to change. PCNs will list certifications relevant at time of publication.
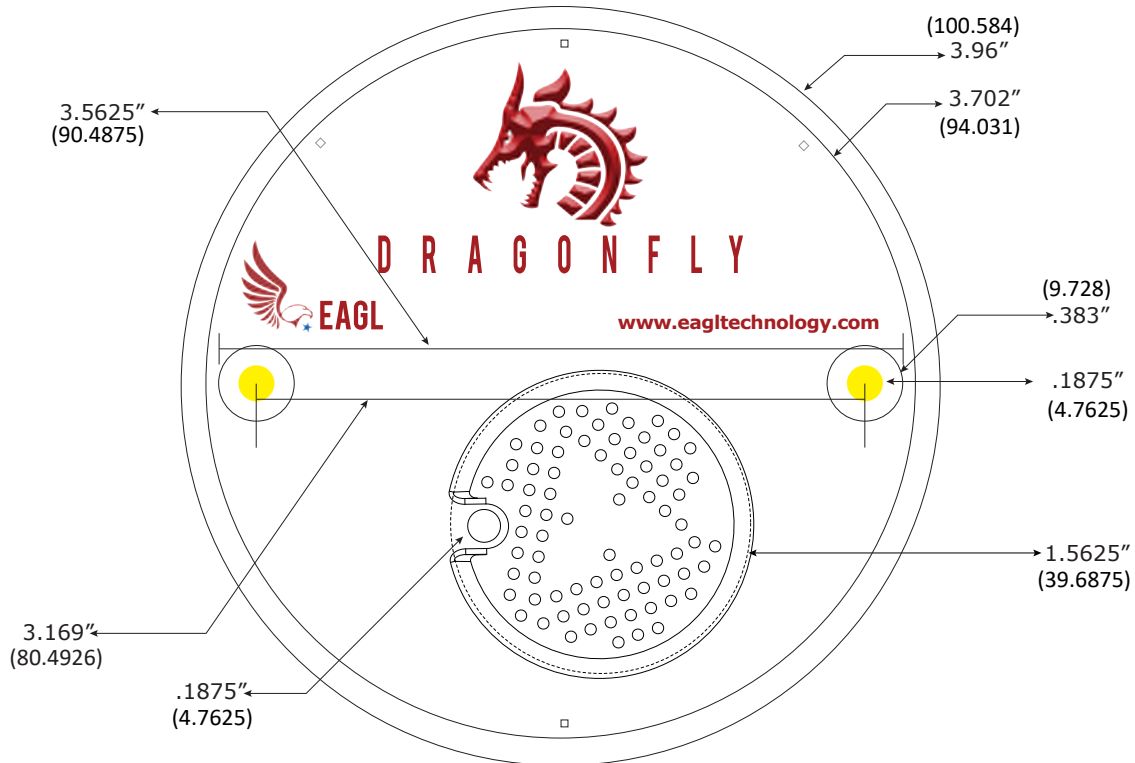

ASTORS AMERICAN SECURITY TODAY 2020 PLATINUM AWARD WINNER HOMELAND SECURITY AWARDS

ASTORS AMERICAN SECURITY TODAY 2019 PLATINUM AWARD WINNER HOMELAND SECURITY AWARDS

ASTORS AMERICAN SECURITY TODAY 2018 PLATINUM AWARD WINNER HOMELAND SECURITY AWARDS

ASTORS AMERICAN SECURITY TODAY 2017 PLATINUM AWARD WINNER HOMELAND SECURITY AWARDS ED

Dimensions

Sensor

(Numbers) = Millimeters, all else are SAE

🟡 Device Through-Hole Locations and Dimension = 0.1875"D (4.7625)

Device Thickness = 2.25"   (57.15)

Associated Components*

* The DragonFly™ Ballistic Sensor is designed for encapsulation within a Resonance Chamber with an attached screen baffle. The Resonance Chamber, Screen Baffle, Mounting Bar and Bracket components together offer flexible device deployment options. This information is detailed on the Outdoor Sensor Mounting System specification.