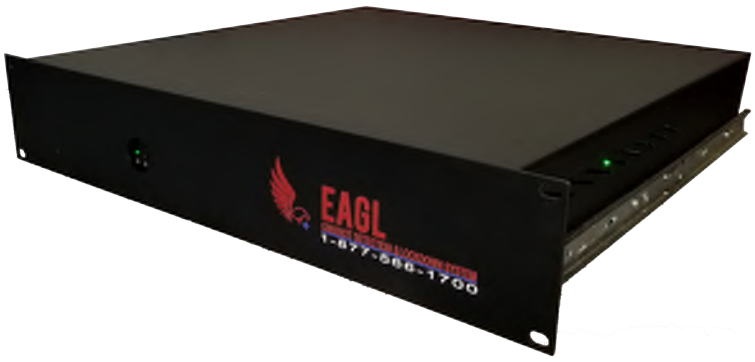
EAGL SERVER



Application

The Emergency Automatic Gunshot Detection and Lockdown (EAGL) System is a Gunshot Detection System (GDS) capable of providing both automatic and autonomous responses upon threat detection and validation.

Description

Configuration uses standard HTTPS protocol over TCP/IP while operating on a Linux platform allowing integration flexibility and interoperability with third-party equipment using an open API structure. These include: access control, video and mass notification messaging systems. EAGL Server presents system status by allowing credentialled operator interface via its web-based Graphical User Interface (GUI). Server also offers notification features to include: Email, Text (Text-to-Speech), VoIP phone dial functions. Server can also provide analog outputs to initiate third-party equipment functionality.

The EAGL Server connects via Power-Over-Ethernet (POE) to EAGL Gateways allowing encrypted, two-way, wireless RF communication to FireFly® and DragonFly™ Sensors.

Typical Characteristics

Power: External, 120VAC, Single Phase Input (NEMA 5-15P)

Server: Embedded Host Firmware, Web Server

Dialer: Analog / Digital (POTS / VoIP)

Relay Board: IP Controlled Relay Board (8 IP Relays, 8 Operational Modes)

Dimensions: (2U) 19"L x 17.5"W x 3.5"H
482.6 mm x 444.5 mm x 88.9 mm

Operating Environment: Typical IT Room, Controlled Environment, 68°-71°F

Operating System: Linux

Integration: Access Control, Video Surveillance, Wide Area Notification, Aural/Emergency Light & Strobe, PA systems and VoIP

Architecture: Allows interoperability with third party APIs

Certifications, Compliance and Conformance

Internal Server components and/or chassis have the following credentials are listed or meet the following rules:

WEEE & AEO (C-TPAT)

ICES-003: Issue 6:2016, Class B IT Equipment

Low Voltage: Directive 2014/35/EU

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

EMC: Directive 2014/30/EU

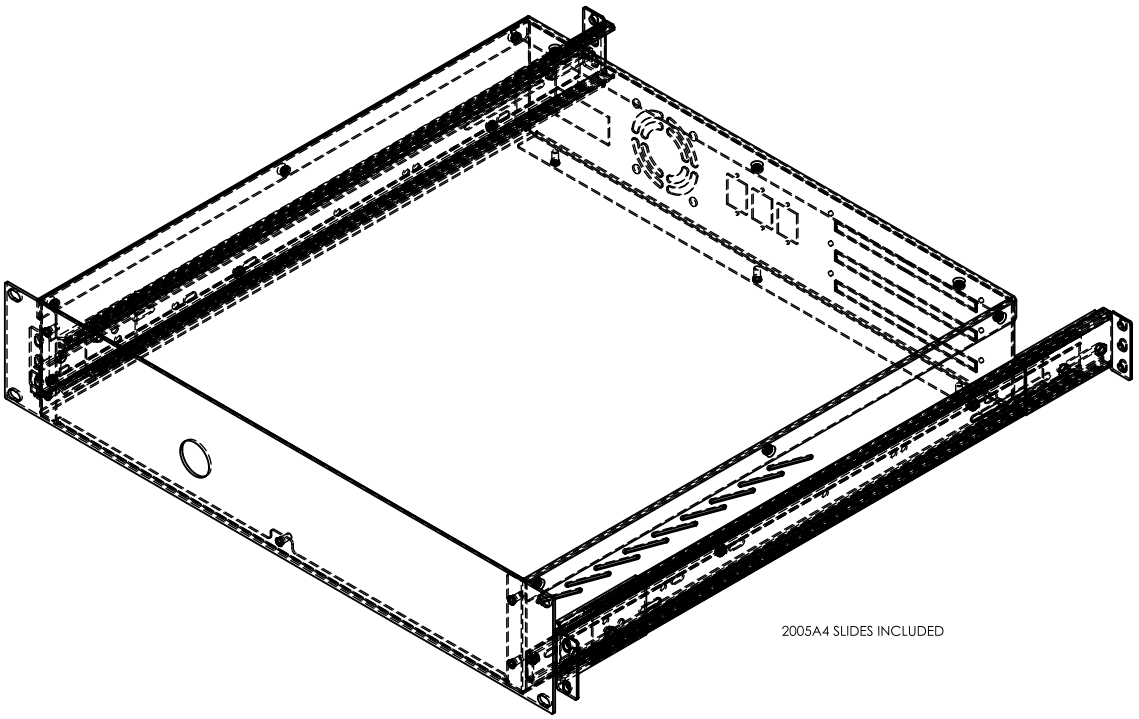
CE: RED 2014/53/EU

FCC: Parts 15 & 68

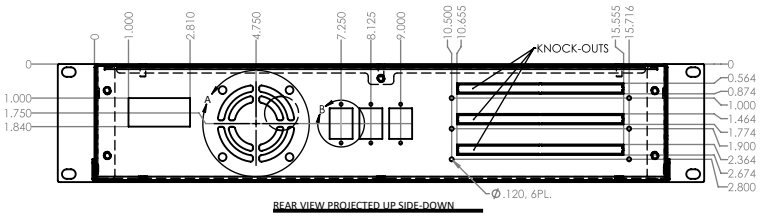
UL508A

Certifications dependent upon internal component use and configuration which are subject to change. PCNs list certifications relevant at time of publication.

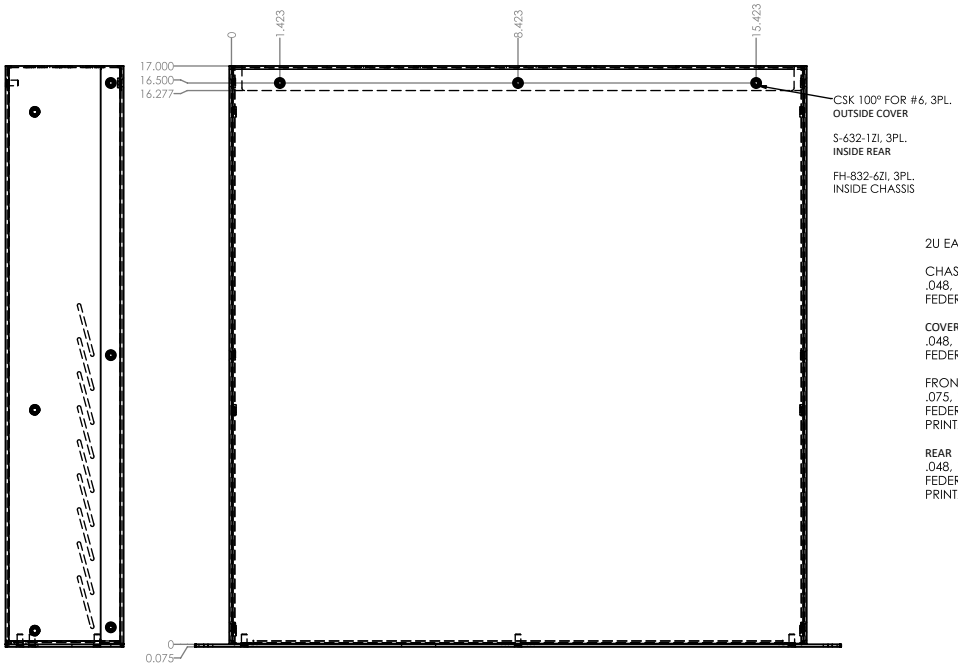
Dimensions

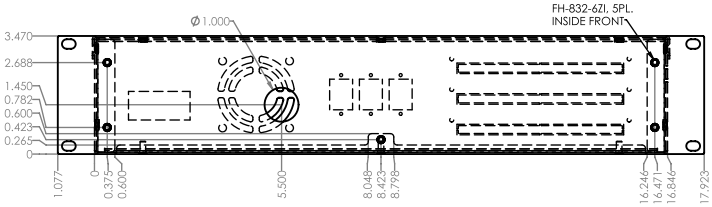


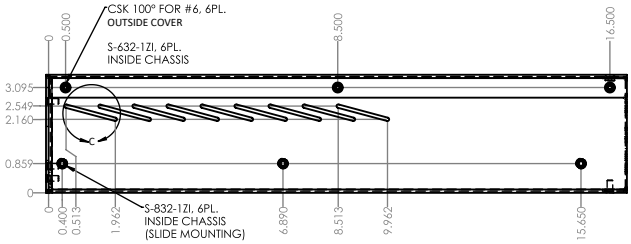
2005A4 SLIDES INCLUDED



REAR VIEW PROJECTED UP SIDE-DOWN







2U EAGL CHASSIS REV(-) WITH SIDE RAIL

CHASSIS
.048, 18GAGE, COLD ROLLED STEEL
FEDERAL STANDARD 595 COLOR FS 37038 FLAT BLACK, E300-BK11, FLAT, SMOOTH, POLYESTER POWDER

COVER
.048, 18GAGE, COLD ROLLED STEEL
FEDERAL STANDARD 595 COLOR FS 37038 FLAT BLACK, E300-BK11, FLAT, SMOOTH, POLYESTER POWDER

FRONT
.075, 14GAGE, COLD ROLLED STEEL
FEDERAL STANDARD 595 COLOR FS 37038 FLAT BLACK, E300-BK11, FLAT, SMOOTH, POLYESTER POWDER
PRINTABLE FACES:1

REAR
.048, 18GAGE, COLD ROLLED STEEL
FEDERAL STANDARD 595 COLOR FS 37038 FLAT BLACK, E300-BK11, FLAT, SMOOTH, POLYESTER POWDER
PRINTABLE FACES:1

FIREFLY® Indoor Ballistic Sensor

Application

An **indoor** 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).

Description

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

Sensor typically is mounted to horizontal ceiling substrates providing a spherical detection coverage area of **~31,415 FT²**. Sensor can be attached to vertical surfaces, such as walls and columns, presenting a decreased coverage area.

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

Sensors also receive 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 optimally

FUNCTION: On-board Firmware, Energy Level and Waveform Analysis

COMMUNICATION: Encrypted, Wireless RF, 10 Channel

DETECTION RANGE: Indoor, ~100 FT Radius
< ~31,415 FT² Spherical Area

DETECTION RESPONSE TIME: <4-8 Seconds

DIMENSIONS: 4”OD x 2.25”T
101.6 mm OD x 57.15 mm T

OPERATING TEMPERATURE: –40°F to 185°F

WEIGHT: 7.6 oz (0.475 lbs)
0.215 kg

MOUNTING: Horizontal and Vertical surfaces

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;
ID: 2ALPH-E19

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

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

UL: UL Yellow Card²: 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.

EAGL GUNSHOT DETECTION & LOCKDOWN SYSTEM

V2.0 - V2.1

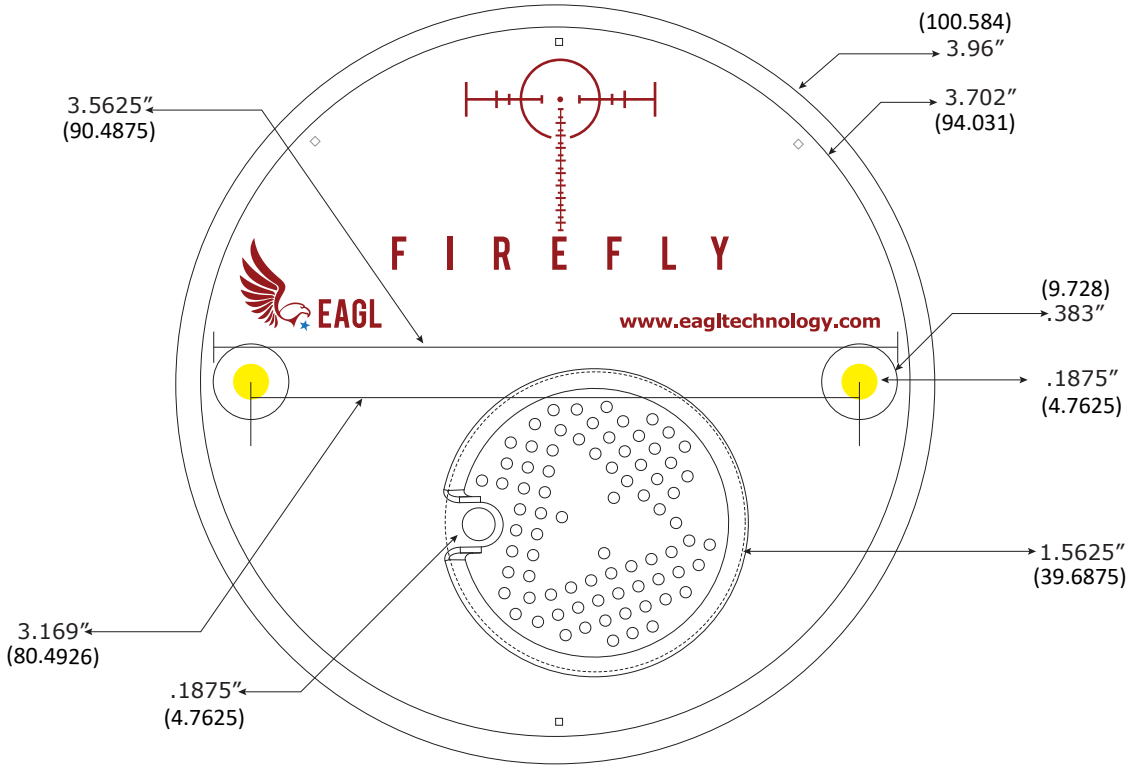
ED

Dimensions

(Numbers) = Millimeters, all else are SAE

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

Device Thickness = 2.25” (57.15)



EAGL TECHNOLOGY

www.eagltechnology.com

DRAGONFLY™

Outdoor Ballistic Sensor

*Encapsulated Sensor within Resonance Chamber and Pole Mount Shown

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).

Description

Compact, wireless, self-contained, battery operated gunshot outdoor 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 a spherical detection coverage area up to **~70,685 FT²**.

Threat validation data is wirelessly transmitted by sensor to the EAGL System Server via the EAGL Gateway. 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 optimally

FUNCTION: On-board Firmware, Energy Waveform Analysis

COMMUNICATION: Encrypted, Wireless RF, 10 Channel

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

DETECTION RESPONSE TIME: <4-8 Seconds

DETECTOR 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

DETECTOR WEIGHT: 7.6 oz. or 0.475 lbs., (0.215 kg.)
RESONANCE CHAMBER WEIGHT: 4.9 oz. or 0.303 lbs., (0.139 kg.)

MOUNTING: Mounting Application Specific, see detail 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;
ID: 2ALPH-E19

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

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

UL: UL Yellow Card²: 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.

EAGL

V2.0 - V2.1

ED

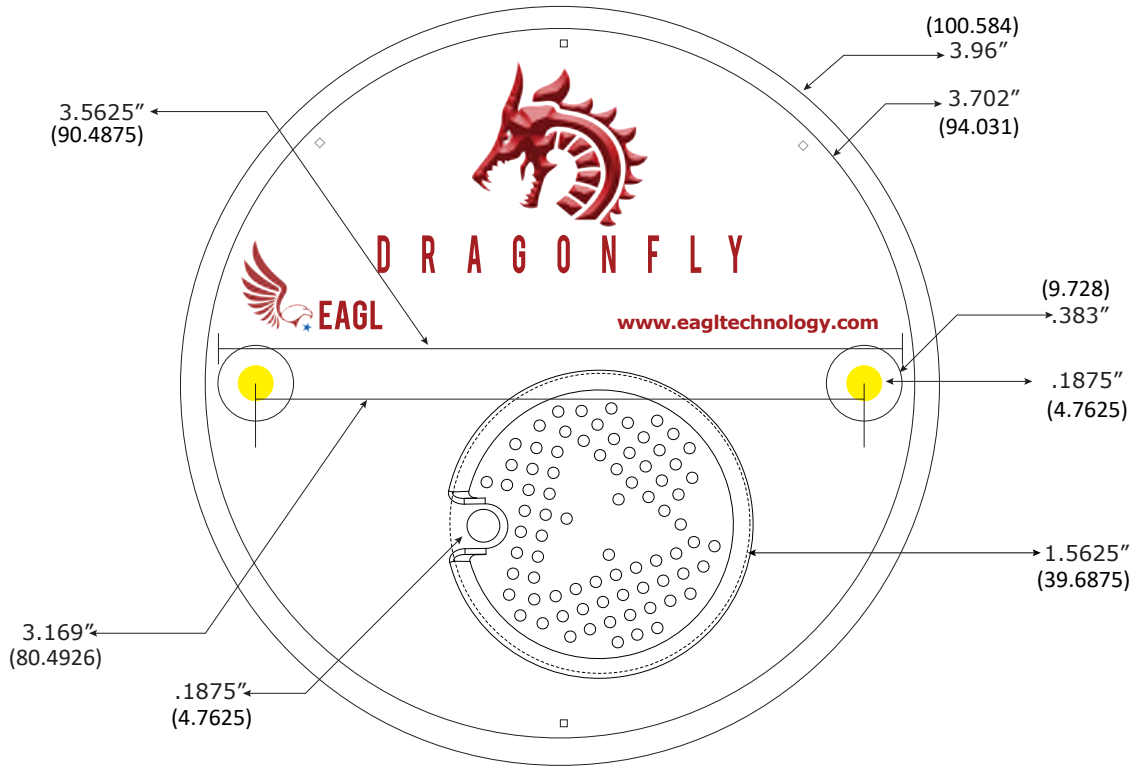
Dimensions

Detector

(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™ Outdoor 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 Detector Mounting System specification.

EAGL TECHNOLOGY

EAGL GATEWAY

Application

An integral Emergency Automatic Gunshot Detection and Lockdown (EAGL) System device providing for two-way data communication between EAGL Server and deployed Sensors.

Description

The EAGL Gateway is used to provide both wired & wireless communication and is comprised of components within an enclosure having an IP66 rating. The gasketed lid offers two-piece "tongue & groove" construction providing protection against oil, dust and water intrusion while housing internal components requiring direct connection to the EAGL Server via Power-Over-Ethernet (POE) CAT 5 - 6e cabling.

The EAGL Gateway also includes internal LoRa radio circuitry to provide encrypted wireless, two-way RF communication with the associated FireFly® and DragonFly™ Sensors.

Typical Characteristics

POWER: External, POE, Single Phase Input (RJ-45)

COMMUNICATION: POE to / from EAGL Server,
Wireless RF to / from FireFly® &
DragonFly™ Sensors

LORA RANGE: Indoor Environment ≤ 500'
Outdoor Urban Environment ≤ 500'
Outdoor Unobstructed
Line-Of-Sight ≤ 2.2 miles

DIMENSIONS: 7.87"L x 4.72"W x 3.05"T
200.00 mm x 120.00 mm x 77.47 mm

WEIGHT: 1lb, 4.2oz
0.572kg

OPERATING ENVIRONMENT: Indoor / Outdoor
Environments

ANTENNA: Internal

Certifications, Compliance and Conformance

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

FCC: CFR 47, Part 15, Subpart B:2017, Class B;
ID: 2ALPH-E19

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

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

Kitemark®: No. KM 500004

UL: UL94-HB (Flammability Rating)

IP66 & **NEMA** 4, 4X, 6, 6P, 12 & 13

CEMARS™: ISO 14064-1:2006

JOSCAR: Registered

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

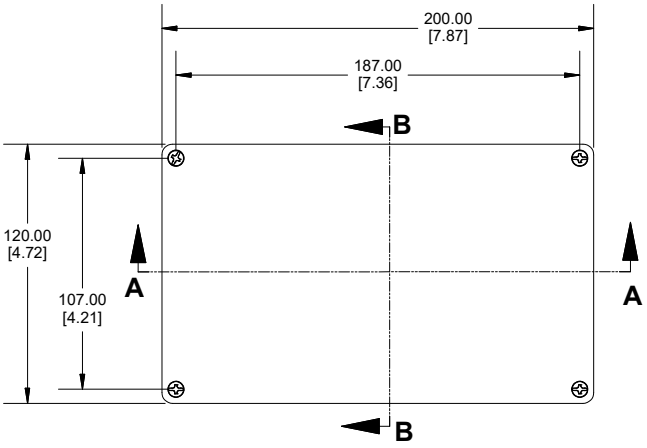
EAGL GUNSHOT DETECTION & LOCKDOWN SYSTEM

SAFETY ACT

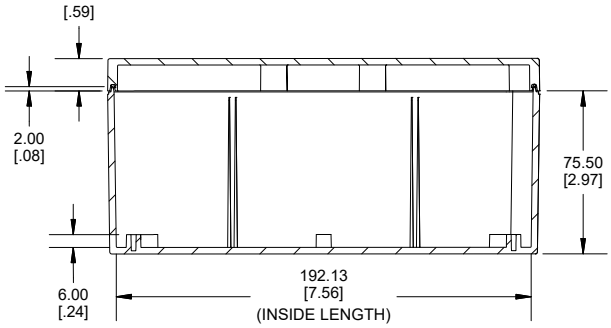
ASTORS 2018 PLATINUM AWARD WINNER

ASTORS 2019 PLATINUM AWARD WINNER

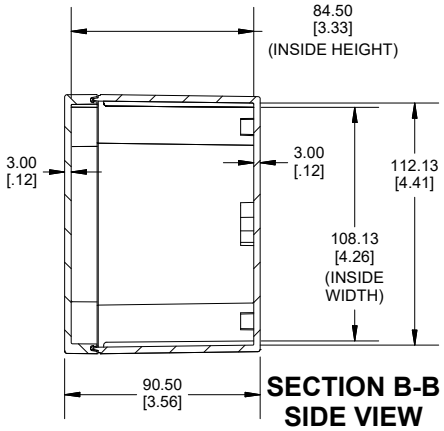
Dimensions



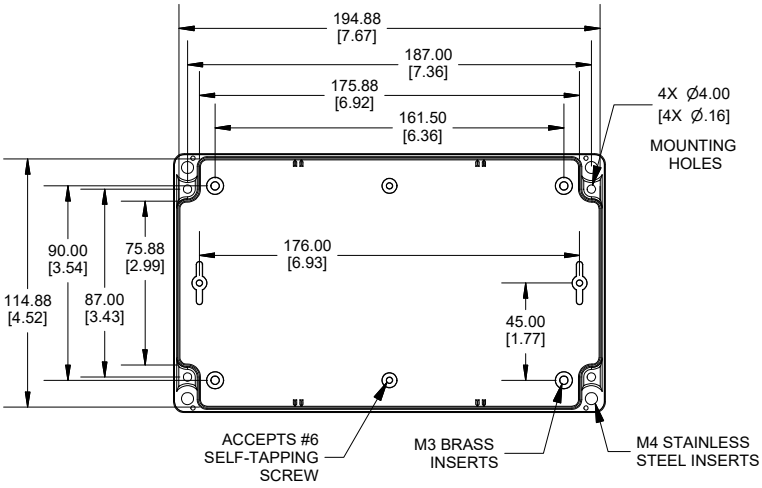
TOP VIEW



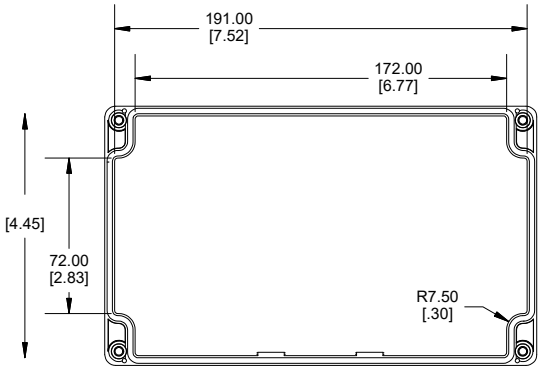
SECTION A-A
SIDE VIEW



SECTION B-B
SIDE VIEW



INSIDE BOX



INSIDE LID

Dimensions:
mm
[inches]

V2.0 - V2.1

DURESS BUTTON

Application

A wireless, manually operated, panic device allowing direct input of a signal representing and processed as a threat to the Emergency Automatic Gunshot Detection & Lockdown (EAGL) System, a Gunshot Detection System (GDS).

Description

A compact, wireless, self-contained & battery operated device having a momentary switch when pressed, transmits a signal representing a threat condition to the EAGL System.

The Duress Button switch / operator is encapsulated within a clear, hinged protective enclosure to prevent inadvertant switch operation.

Button operation requires user opening the hinged protective top cover to access and press the switch / operator to activate the device transmission process.

All device transmissions are encrypted.

Typical Characteristics

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

Battery Life: ~7 Years optimally

Function: Allows operator to manually input a threat condition signal by depressing button which initiates a wireless transmission to the EAGL System.

Communication: Encrypted, Wireless RF, 10 Channel

Communication Range: ~200 FT, Spherical

Dimensions: 4”OD x 3.5”H
101.6 mm OD x 88.90 mm H

Device Weight: 9.8 oz.

Operating Temperature: –40°F to 185°F

Mounting: Mounting Application Specific, see detail on reverse side

Certifications, Compliance and Conformance

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

FCC: CFR 47, Part 15, Subpart B:2017, Class B;
ID: 2ALPH-E19

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

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

Dimensions

Numbers = (Millimeters), all else are SAE

Device Mounting Through-Hole Locations and Dimension = 0.1875”D (4.7625)

Assembly Base Thickness = 2.25” (57.15)

Assembly Base and Hinged Button Cover = 3.0655”H (77.8637)