

INFRARED INTRUSION DETECTION SYSTEM

Anti-Terrorist
Protection

Secure Valuable Assets

Secure Perimeter
Temporary or
Permanent Installations

Rugged and Sturdy

High Reliability

Low Nuisance Alarm
Rate

Detect Intrusions up to
300 meter at optimum
weather conditions

Detect Intrusions up to
150 meter in average
fog, rain or snow
conditions

Alarm / Tamper Signals
Transmitted on Hard
Wiring or Optional
Wireless Signal

Operates on 12VDC

Tamper Proof

5-Year Warranty

Extended Warranty
Available

Permanent Installation



ACM 4/2
Anti-Climb Mast Installation
(2meter tall)

Permanent Installation



OMA 4/2
Open Mast Installation
(1.5 meter tall)

Temporary Installation



TASS IIDS 4/2
Lightweight, Fly-Away
Portable Deployable
Tripod

HISTORY:

EAG of Americas, Inc., is proud to be the Manufacturer of the world's foremost Pulsed Infrared 2-beam and 4-beam Sensors. It is the original Patented EAG German technology known for its superior quality, performance and reliability.

The IIDS technology has been successfully manufactured and distributed globally for over twenty-five years to leading Government Agencies, Military branches, nuclear operations and Public Utilities. Originally developed by EAG-Germany, the IIDS technology was patented in Europe for over twenty-years and has been installed at NATO headquarters in Brussels Belgium, the Mercedes Development Center in Stuttgart Germany, Siemens in Hanau Germany and at Andrews AFB Maryland at Air Force One hanger and ramp space.

Developed as a "restricted sensor line" point-to-point technology, IIDS has become the world's foremost electronic, early warning and infrared anti-terrorist system worldwide. IIDS technology has been successfully evaluated by the Electronic Systems Center (ESC), Eglin AFB and is approved for use by the U.S. Air Force Command and Joint Forces for use in the TASS (Tactical Automated Security Systems) and IBDSS (Integrated Base Defense Security Systems) programs. In addition, IIDS sensors are used by the Department of Energy and are installed at a number of nuclear sites. The Department of State and the Department of Homeland Security/Federal Aviation Authority are also regular users of the IIDS technology.

In terms of performance-based technology, none other have better performance credentials than the IIDS system. With a ninety-seven percent (97%) Probability of Detection at a ninety-five percent (95%) Level of Confidence, the IIDS system is a "Will Detect" against any crawl intrusions, running and/or rolling intrusions, and jumping through and/or slow walking intrusions.

The IIDS has absolutely no deployment limitations and can be tripod mounted, mast mounted, and wall and/or roof mounted. IIDS does not show any signs of degradation from solar radiation, salt fog operations and/or from the influence of sand and/or dust. In fact, all IIDS sensors are resistant to RFI, EMI, IR and ESD. Furthermore, IIDS sensors, in typical physical perimeter installations perform without any adverse effect in sustained winds up to one hundred and fifty kilometers (150) per hour and are weatherproof, waterproof, and impervious to normal field operation vibration and shock. There is no prescribed scheduled or progressive maintenance required for an IIDS system.

INFRARED INTRUSION DETECTION SYSTEM

FEATURES:

IIDS2/4 Active Infrared (AIR) Sensor Systems

Active IR Beams: Signals are invisible, "pulsed" infrared beams that are transmitted on the 1200 Hz frequency. "Pulsed" IR technology is extremely reliable and dependable.

Break-beam Technology: Each IR beam is 90mm in diameter and must be covered 98.5% or more for no less than 20 milli-seconds to generate an alarm. **IIDS** is impervious to environmental and nuisance alarms and seldom false alarms!

Construction: IR sensors are constructed of anodized die cast aluminum and all hardware is stainless steel.

Hermetically Sealed IR Sensors: **IIDS** sensors are hermetically sealed and backfilled with a dry nitrogen gas and are guaranteed not to cloud under extreme temperature conditions (-40F to +150F). Sensors are weatherproof and waterproof and resistant to most vibration and shock.

Gated Sequencing: **IIDS** IR signals are electro-optically sequenced from the top sensor beam to the bottom sensor beam. Receiver sequence timing is pre-set at the factory.

Alarm Trigger Delays: Variable trigger delays can be factory adjusted from 20 to 120 ms, thus controlling sensor/alarm sensitivity.

Variable Transmission: **IIDS** zones can be hardwired or use supervised UHF wireless or cellular telephone transmission.

Multiple Alarm Functions: Different alarms will be transmitted in the event of an intrusion, tamper or fault condition.

Alarm Memory: An intrusion alarm activates an LED indicator at central control until manually reset. A reset can only be accomplished after an intrusion is removed and the sensor resets to standby condition.

Power Sources: The **IIDS** sensors operate with conventional power through a 12VDC or 24VDC Power Supply. Optional RBM (Rechargeable Battery Module, lead-acid) units can be provided as a back-up power source, including solar panels.

Wiring: **IIDS** sensors have multi-pin connectors for power and signal and two BNC bayonet socket connectors for beam synchronization. Wiring and connectors are waterproof.

Maintainability: Virtually maintenance free.

Warranty: Full five (5) years on all IR sensors! Extended warranty available.



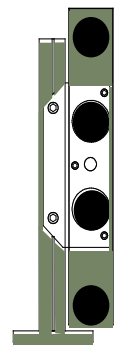
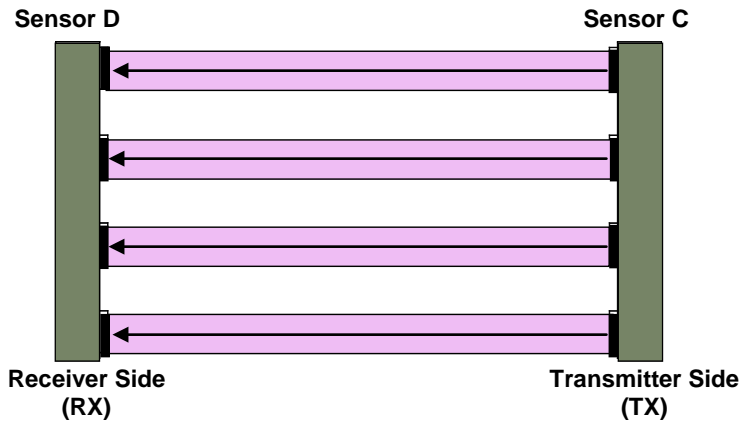
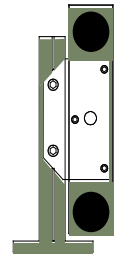
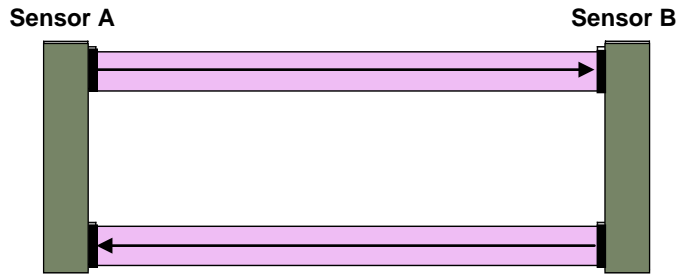
IIDS2 Sensor
(2-Beam Active Infrared Sensor)

Weather Condition:	Detection Range:
Clear and dry	up to 1200 ft / 365 m
Average	up to 495 ft / 150 m
Heavy fog, snow, rain	up to 230 ft / 70 m

- Active Infrared Detection
- Physical Perimeter Defenses
- Electronic Anti-Terrorist Systems
- Security Data Management
- Project Coordination
 - Integration Services
 - Video Surveillance
 - Web enabled monitoring
 - Access Controls
 - Biometrics
- Security Consulting
- Technical Support

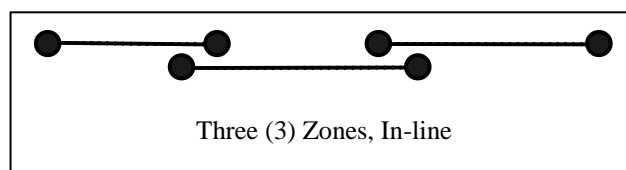
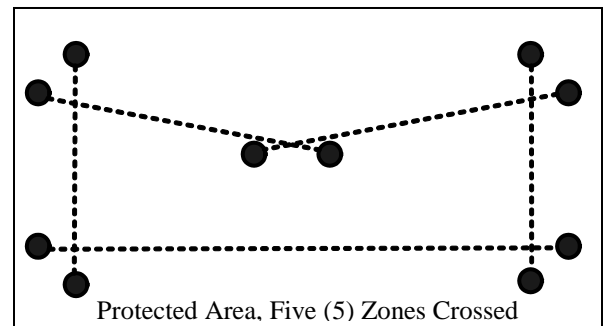
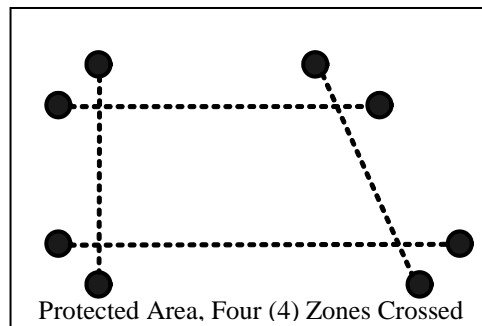
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IIDS4/2 Zone Configuration:



Open Mast 4/2

IR Zone Layout Examples:



INFRARED INTRUSION DETECTION SYSTEM

Zone / Sensor Configuration Examples:

							4500
							4300
							4100
12.8 ft	153.55 in						3900
							3700
							3500
							3300
							3100
							2900
							2700
							2500
7.6 ft	90.55 in						2300
							2100
							1900
							1700
4.9 ft	59.05 in						1500
4.3 ft	51.20 in						1300
							1100
							900
							700
							500
							300
	3.95 in						100 mm
Ground Level		IIDS 4/2	IIDS 4/2	IIDS 4/4	IIDS 4/2/2	IIDS 4/4/2/2/2	

INFRARED INTRUSION DETECTION SYSTEM

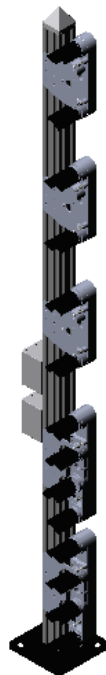
Assembly/ Mounting Examples:



Anti-Climb Mast
4/4/2/2/2 w/ PSTC



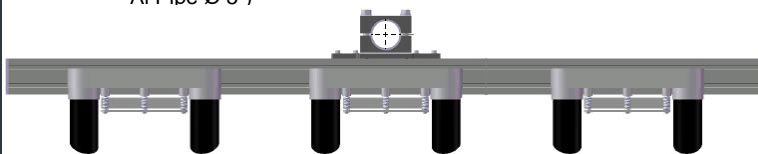
OMA-44222
(Open Mast
Al Pipe Ø 5")



OME-44222
(Open Mast
Extruded Al 120x120mm)



ACM-44222
(Anti-Climb Mast
Al 6061-T6)



BEAM-222
(Horizontal Beam Extruded AL 120x120mm)

Open Mast constructed from

- Aluminum Pipe OD 4.0" for height up to 7.6 ft
 - Aluminum Pipe OD 5.5" for height up to 12.8 ft
 - Extruded Aluminum Profile 120x60mm for height up to 4.9 ft
 - Extruded Aluminum Profile 120x120mm for height up to 12.8 ft
- Pipe is welded to base plate; extrusion is secured to base with 4-8 screws located on the bottom side of the base

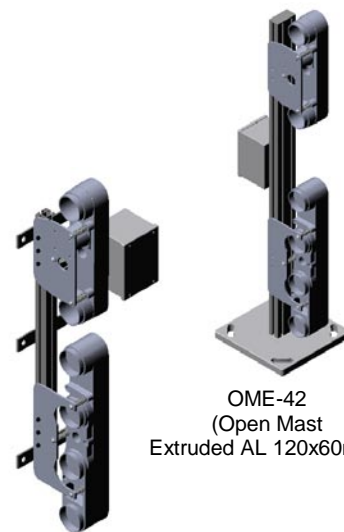
Anti-Climb Mast constructed from

- Aluminum 6061 for height from 7.6 ft to 12.8 ft
- welded to base plate, removable back cover and optional Pressure Sensitive Top Cap (PSTC)

Special Mounting examples:

- Horizontal Beam Extruded Aluminum Profile 120x120mm
- Wall Mount Extruded Aluminum Profile 50x50mm

All hardware is stainless steel and the masts are clear anodized.

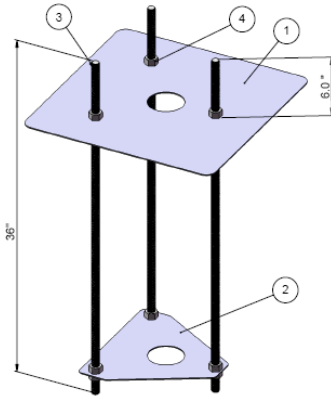


OME-42
(Open Mast
Extruded AL 120x60mm)

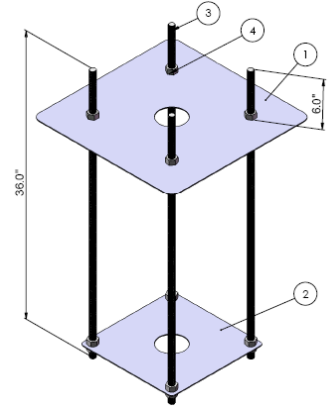
Wall-Mount-42
(Extruded AL
50x50mm)

INFRARED INTRUSION DETECTION SYSTEM

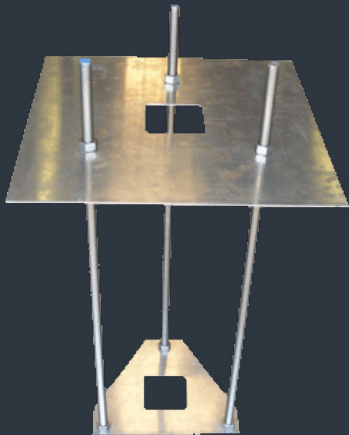
Anchor Kits:



Anchor Kit 3 Bolt Pattern
P/N 060-10036
(Concrete base)



Anchor Kit 4 Bolt Pattern
P/N 060-20036
(Concrete base)



Anchor Kit 3 Bolt Pattern
P/N 060-10036

Item No.	Description
1	Top Plate
2	Anchor Plate
3	3/4"-10 UNC x 36" Anchor Bolt
4	3/4"-10UNC Hex Nut

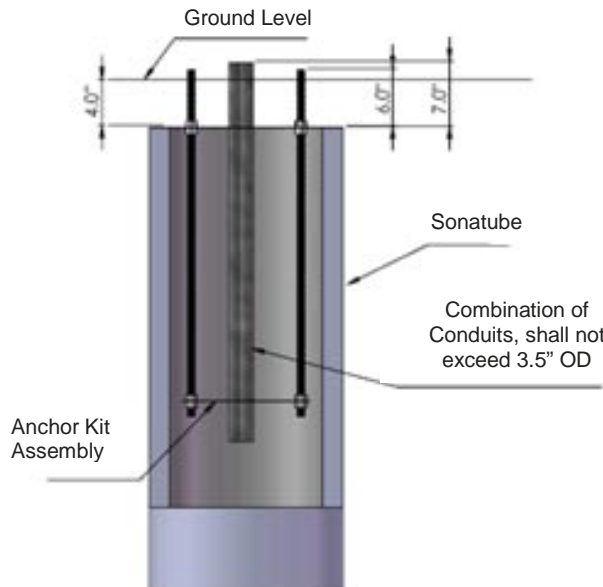


Top View

IR Direction
Alignment between TX
and RX mast must be
within $\pm 5^\circ$

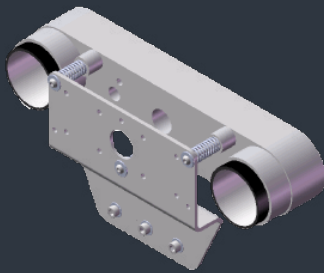


Dent Breakaway
Anchor Kit
(optional)

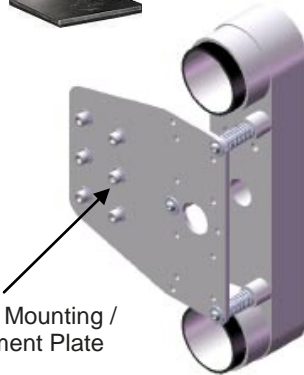


INFRARED INTRUSION DETECTION SYSTEM

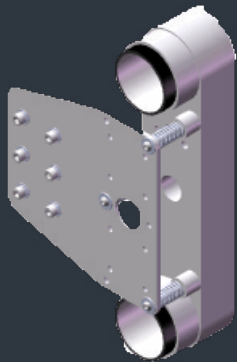
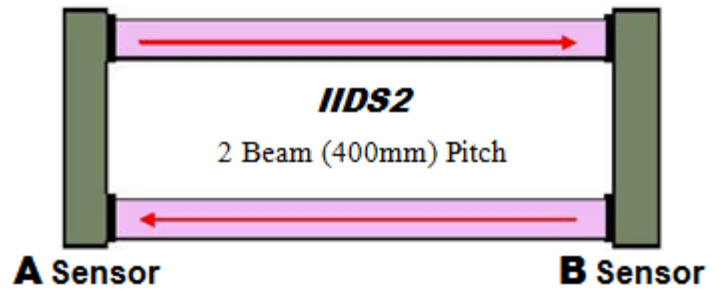
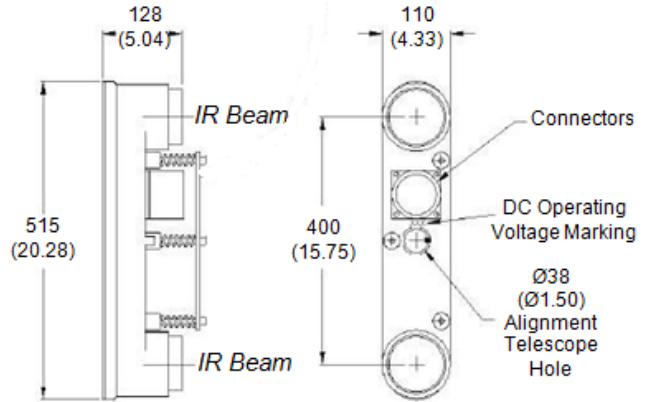
IIDS2 A & IIDS2B Sensors:



IIDS2 Sensor with Special 3 Point Mounting Plate for Horizontal Beam Installations



3 Point Mounting / Alignment Plate



IIDS2 Sensor with Standard 3 Point Mounting Plate for Open Mast (Extrusion Profile) Installations

Specifications:

- Input Voltage: 12 VDC*
- Current Consumption: **A** Sensor, 55 mA
B Sensor, 30 mA
- IR Beam Diameter: 90 mm (3.55 in)
- IR Pulse Frequency: 1200 Hz
- IR Pulse Duration: 6µs
- IR Wavelength: 890 nm
- Alarm Trigger Delay: 20 – 120ms (Factory adjusted)
- Minimum Alarm Time: 2 sec
- Alarm Outputs: Normally Closed (In Standby)
- Weight: 7.05 kg (15.5 lbs)
- Operating Temperature: -40°C to +70°C
-40°F to + 158°F
- Sensor Housing: Hermetically sealed cast aluminum housing, back-filled with dry air
- Length of Detection Zone:
 - 300 m at optimum conditions
 - 150 m in average weather conditions
 - 70m heavy fog, snow or rain

*Optional Input Voltage 24 VDC

INFRARED INTRUSION DETECTION SYSTEM

IIDS4C & IIDS4D Sensors:



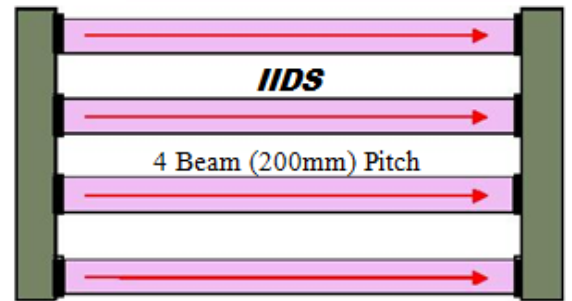
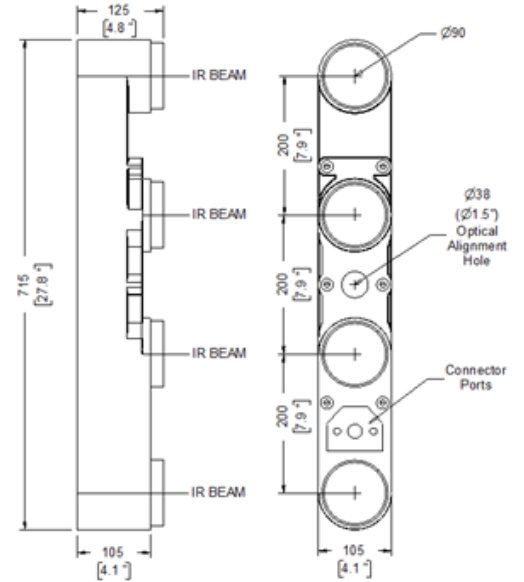
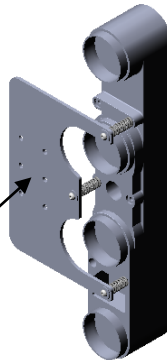
IIDS4
(new Housing)



IIDS4
(old Housing)



3 Point Mounting / Alignment Plate



C Sensor
(Transmitter)

D Sensor
(Receiver)

Specifications:

- Input Voltage: 12 VDC*
- Current Consumption: C Sensor, 55 mA
D Sensor, 70 mA
- IR Beam Diameter: 90 mm (3.55 in)
- IR Pulse Frequency: 1200 Hz
- IR Pulse Duration: 6µs
- IR Wavelength: 890 nm
- Alarm Trigger Delay: 20 – 120ms
(Factory adjusted)
- Minimum Alarm Time: 2 sec
- Alarm Outputs: Normally Closed
(In Standby)
- Weight: 7.05 kg (15.5 lbs) *Optional Input Voltage 24 VDC
9.8 kg (21.5 lbs) old housing
- Operating Temperature: -40°C to +70°C
-40°F to + 158°F
- Sensor Housing: Hermetically sealed cast aluminum housing, back-filled with dry air
- Length of Detection Zone:
 - 300 m at optimum conditions
 - 150 m in average weather conditions
 - 70m heavy fog, snow or rain

INFRARED INTRUSION DETECTION SYSTEM

Mounts directly to a multi-use tripod



Allows quick set-up



Weather-proof, portable, and ruggedized design



TASS detection zone is up to 495 ft (150m)



Alarm signals are transmitted via RF to alert security personnel



Operates on 12 VDC from a rechargeable battery module (RBM)



Tamper-proof to maintain integrity



High reliability

USAF TASS APPROVED IIDS 4/2:

TASS IIDS 4/2 AIR (Active Infrared Intrusion Detection System)

The EAG of Americas line of Tripod mounted IIDS sensors are of the **TASS** (Tactical Automated Security System) approved active infrared (AIR) type, self-contained sealed units. The sensors transmit and receive the active IR beams over a specific line-of-sight range.

These portable sensors facilitate rapid deployment and are highly resistant to nuisance alarms.

In the IR-Zone the top sensor IIDS2A on the RX tripod is the IR-Starter. The pulsed beam is received by the Tx tripod sensor IIDS2B, processed and transmitted back to the RX sensor. The IR beam cascades down from top to bottom of the zone in less than 1 second. This condition is continuous until the beam is broken and the alarm is triggered.

The sensors are electro-optically synchronized to eliminate IR interferences between zones in an in-line deployment.



Specifications:

- Input Voltage: 12 VDC
- Current Consumption: **RX tripod**, 155 mA
TX tripod, 110 mA
- Battery stand-by power: 72 hrs. per zone
- IR Beam Diameter: 90 mm (3.55 in)
- IR Pulse Frequency: 1200 Hz
- IR Pulse Duration: 6µs
- IR Wavelength: 890 nm
- Alarm Trigger Delay: 40 ms
- Minimum Alarm Time: 2 sec
- Alarm Outputs: Normally Closed
(In Standby)
- Weight: 29 kg (63.8 lbs) fully assembled tripod
- Operating Temperature: -30°C to +60°C
-22°F to + 140°F
- Sensor Housing: Hermetically sealed cast aluminum housing, back-filled with dry air
- Length of Detection Zone:
 - 300 m at optimum conditions
 - 150 m in average weather conditions
 - 70m heavy fog, snow or rain