

IV-ISA-01

Intelligent Sensor Array

Rev. Date: V10 10/08/2020

Overview

The Ivani Intelligent Sensor Array provides a digital data collection platform for the modern intelligent building. This multi-purpose device is designed to provide software configurable data collection for advanced building analytics. Coupled with Ivani NPST™ and Ivani RTLST™ analytics capabilities, the Intelligent Sensor Array provides advanced occupancy data, locations of tagged assets/people, daylight levels, temperature and humidity readings throughout the building. These data improve a range of building functions including efficiency, safety, and comfort while enhancing overall productivity.

Top Product Features

Digital data connectivity via USB

Compact footprint

Advanced BLE wireless communications analytics

Digital Passive Infrared (PIR) detector

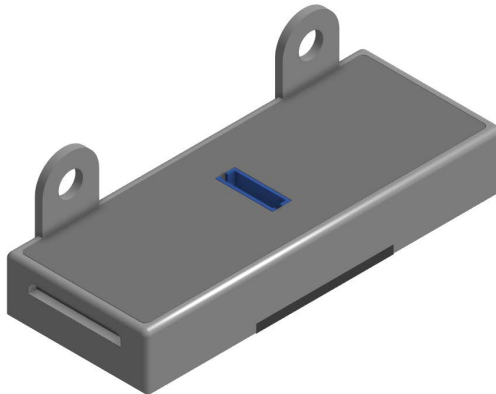
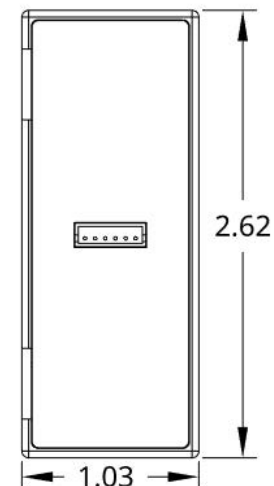
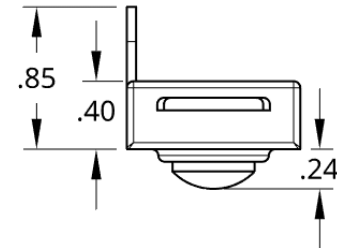
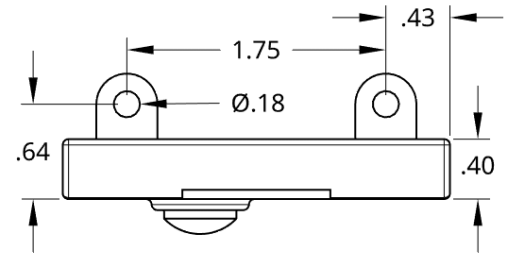
Temperature/Humidity monitoring

Ambient light sensing

Sensors

Sensors Included	
PIR Motion: 6~8m (19.5 ft to 26ft) 120° angle	Temperature: -40~80 °C (+/- 0.3 °C)
Ambient Light: 0~4000 lux	Humidity: 0~100% (+/- 2 %)

Dimensions	
Length	2.62" (66.55 mm)
Width	1.03" (26.16 mm)
Height (excluding PIR & mounting brackets)	.40" (10.16mm)



Product Certification



Product Specifications

Mechanical

Size: 2.62" x 1.03" x 0.40" (66.55 mm x 26.16 mm x 10.16 mm)

Weight: 16 gm

Environment: For indoor use only

Mounting: 2.537" x 0.953" cutout for 18-22 gauge panel

Color: White

Housing: Nylon

Electrical

Power Supply Type: 5V DC

Power Activation: 20mA

Sensing Array/Hardware Specifications

Digital PIR	
Range	6~8m (19.5 ft to 26ft) 120° angle

Temperature & Humidity	
Temperature	-40~80°C (+/- 0.3 °C)
Humidity	0~100% (+/- 2 %)

Ambient Light	
Range	0-4000 lux

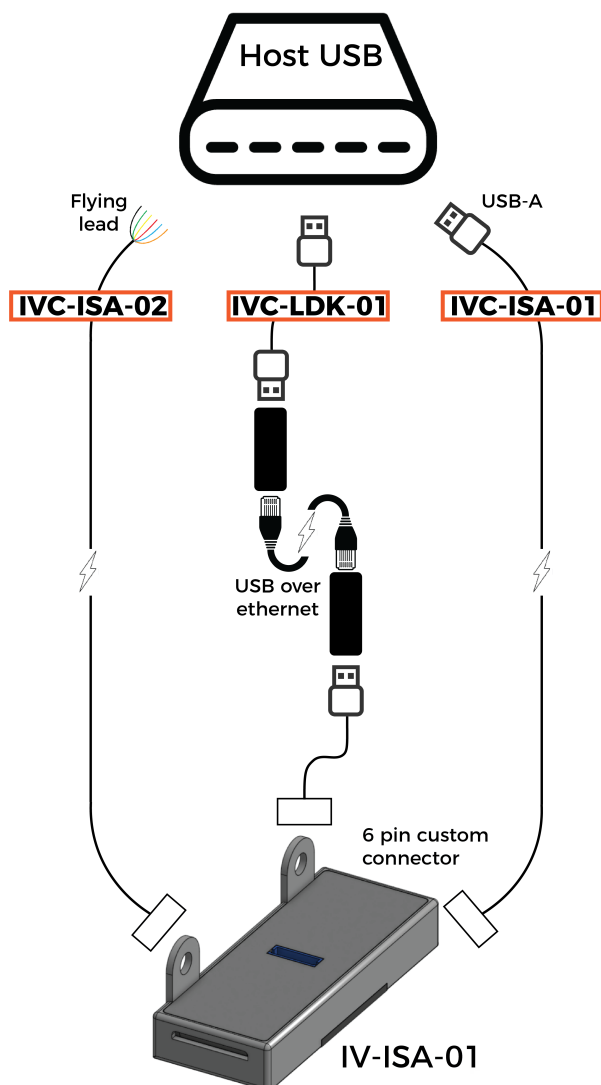
Wireless Specifications

On-board Wireless Radio	
Radio Frequency	2.4 GHz
Standard	BLE
Transmitter Power	+4dB(MAX)

PIR Motion Sensor Coverage

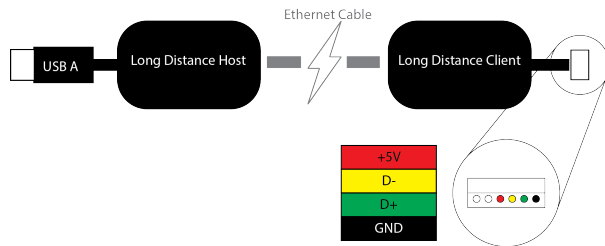
Mounting Height - (ft)	Motion Sensor Coverage		
	Estimated Sensor Range: Radius (ft)	Estimated Sensor Range: Diameter (ft)	Ivani Buffered Sensor Range: Radius (ft)
8	13.86	27.71	12
9	15.59	31.18	14
10	17.32	34.64	16

Install Diagram

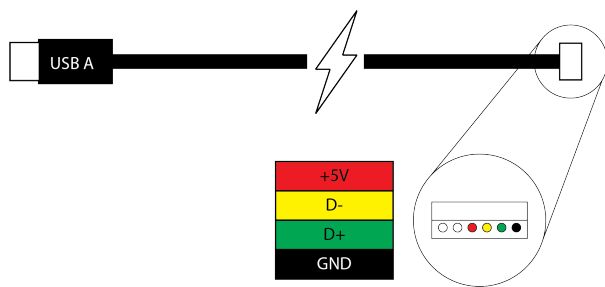


Electrical Install Options

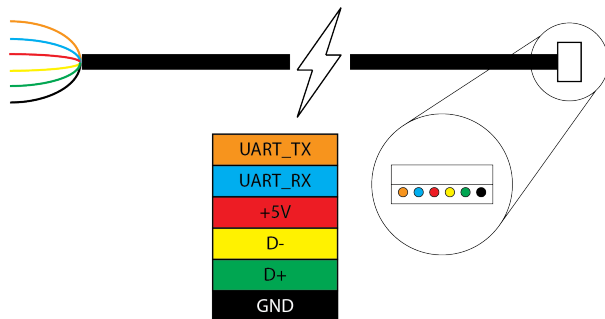
Long Distance Kit (IVC-LDK-01)



USB Terminated Flying Lead (IVC-ISA-01)



Non-Terminated Flying Lead (IVC-ISA-02)



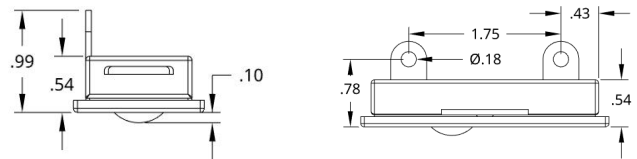
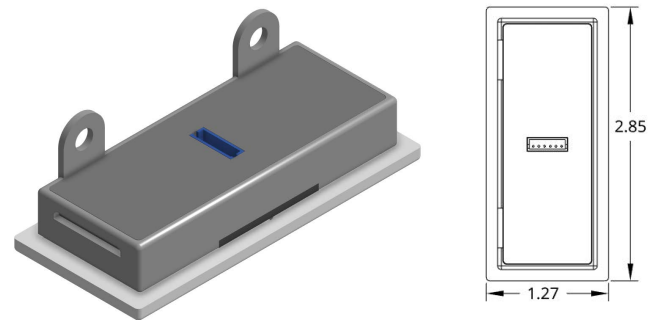
Catalog Information

Name	Part Number
Intelligent Sensor Array	IV-ISA-01
Long Distance Kit	IVC-LDK-01
USB Terminated Flying Lead	IVC-ISA-01
Non-Terminated Flying Lead	IVC-ISA-02
In-Fixture Faceplate	IVF-ISA-01
Ceiling Mount Kit	IVF-ISA-02

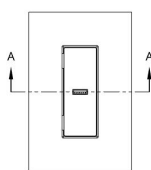
Accessory Dimensions

Dimensions: IV-ISA-01 w/In-Fixture Faceplate (IVF-ISA-01)

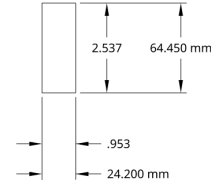
Length	2.85" (72.39 mm)
Width	1.27" (32.26 mm)
Height (excluding PIR & mounting brackets)	.54" (13.72mm)



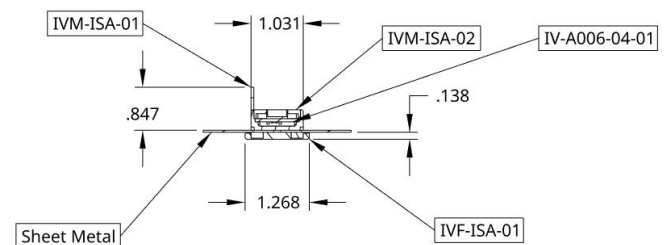
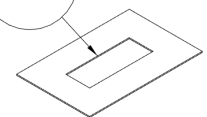
Sheet metal
nominally .04" thick



18-22 Ga Steel



Nominal Cutout



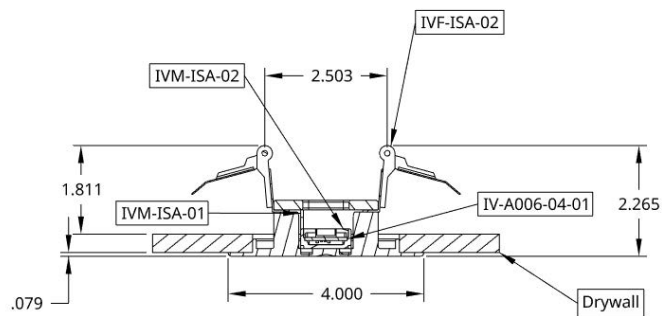
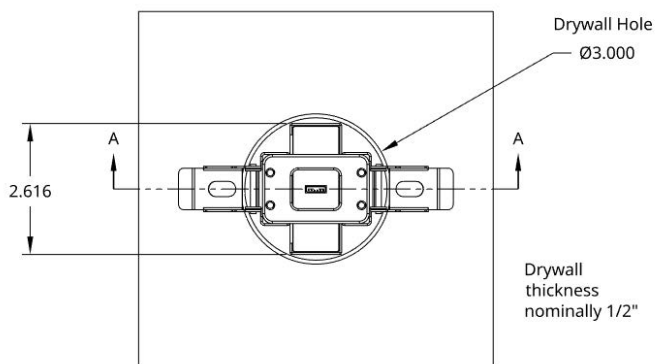
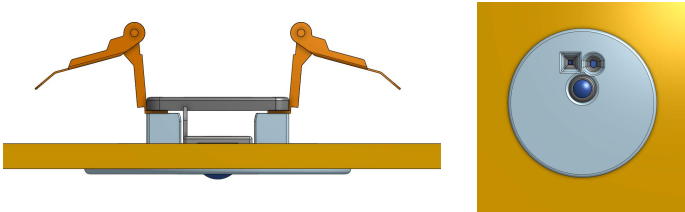
SECTION A - A

Warranty

Three year warranty on hardware

Accessory Dimensions Cont'd.

Dimensions: IV-ISA-01 w/Ceiling Mount Kit (IVF-ISA-02)	
Diameter (external)	4.00" (101.6 mm)
Diameter (drywall cutout)	3.00" (76.2 mm)
Height (above ceiling)	1.81" (45.97 mm)



SECTION A - A

Compatible Analytics Packages

- Ivani NPST™
- Ivani RTLS™

Warranty

Three year warranty on hardware

FCC WARNING

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum distance between 20cm the radiator your body: Use only the supplied antenna.