

Infrared Navigation Defense Integration And Network Augmentation  
I.N.D.I.N.A.

Loot Protection System

Summary Datasheet

By the **C**onnected **O**ptical **L**ogistics and **I**nfrared **N**etworks Company.  
January 22, 2025.

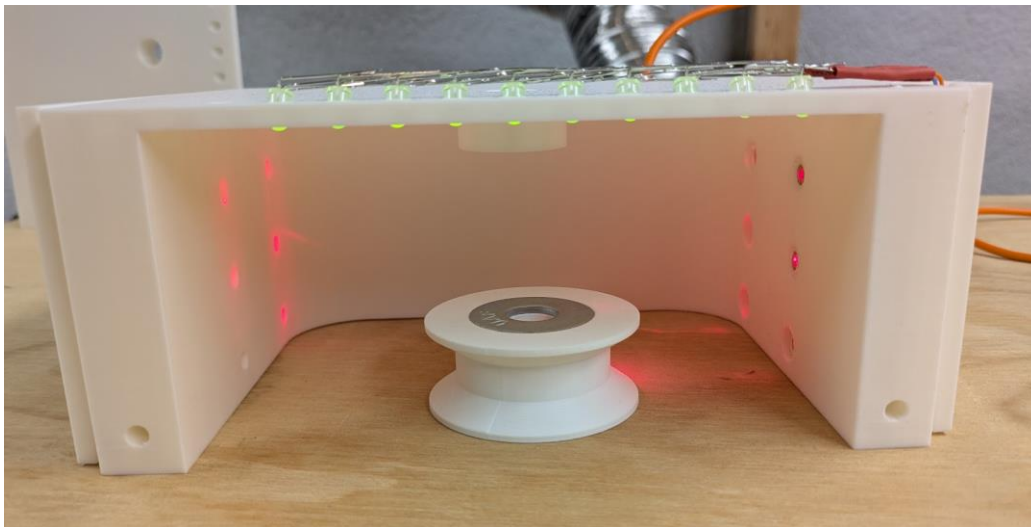
## OVERVIEW

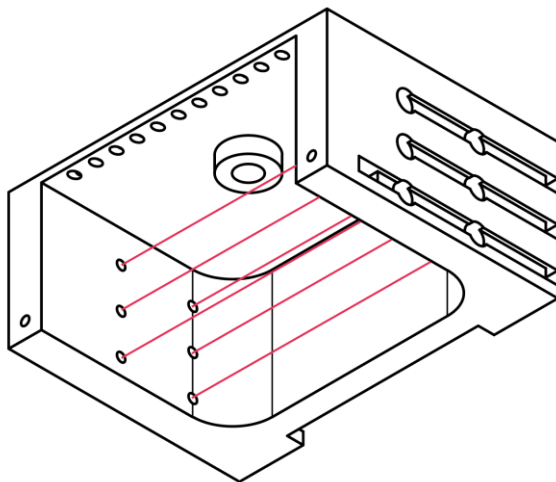
The Infrared Navigation Defense Integration And Network Augmentation (I.N.D.I.A.N.A.) is an advanced loot protection system (L.P.S.) designed by the Connected Optical Logistics and Infrared Networks (C.O.L.I.N.) Company.

This LPS has the following features:

- Six individual channels / lasers
- Programmable setting of each channel (set at factory) for indicating alarm
- Microcontroller controlled
- USB powered
- < 800 mS response time
- COSYS protocol IR navigation LEDs
- Can be interfaced with CONET wireless for both status checking and control of the alarm.

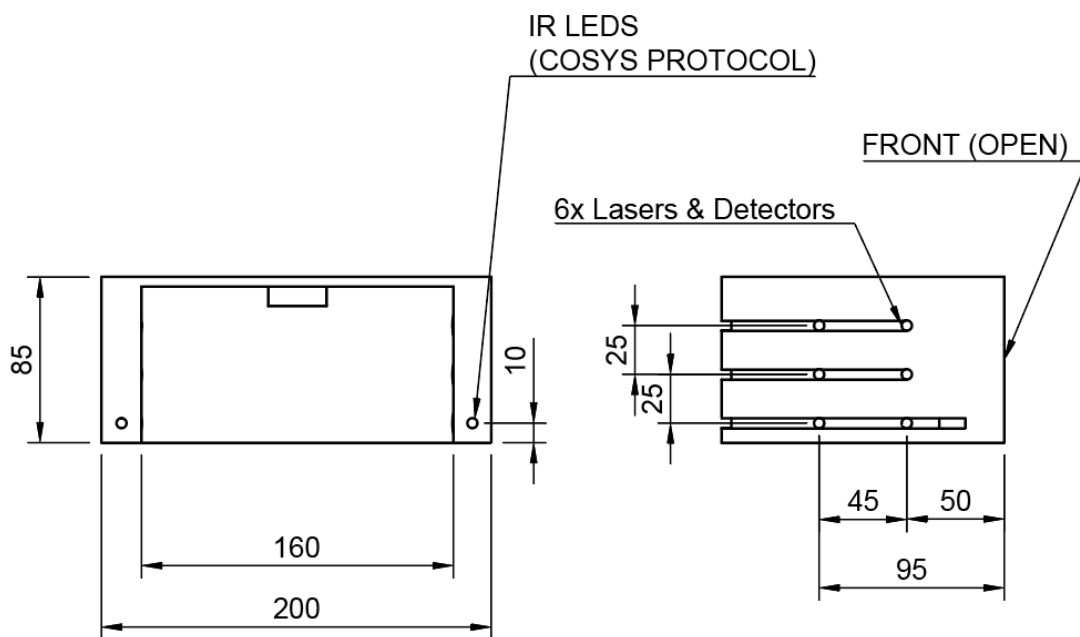
In operation, a visible red laser is used on each channel. The receivers are recessed making it difficult to "blind" them with external light, and an overhang blocks access from above.





View from Underneath showing laser path

### Mechanical Dimensions



## COSYS Protocol

See the mechanical dimensions for location of the COSYS protocol IR emitters. The INDIANA LPS contains two COSYS emitters, both transmitting the same information.

These emitters can be used to check the status of the LPS by one of our unattended robo-guards.

See the COSYS Protocol Documentation for more details of COSYS, this section includes only the device-specific settings.

The message transmitted by the device is as follows:

```
IND XXXXXX YY CC\n
```

The message is ALWAYS 17 characters long, including the \n (0x0A hex) character as required by the COSYS protocol. In the above, the variable parts of the message are:

XXXXXX = Status of each channel, 1 or 0

YY = OK (no alarm) or AL (Alarm active in last cycle)

CC = COSYS required checksum (can be ignored)

Some example message is as follows in ASCII:

```
IND 011111 OK 46\n
```

```
IND 111111 AL 4E\n
```

```
IND 000001 AL 4F\n
```

### Revision History

January 22, 2025: Initial Release

January 22, 2025: Added photo for clarity, fix newline