



Set no limits ...

Perimeter Intrusion Detection System using Sensors, PTZ Cameras & AI.

Our Entire Hardware and Software is designed and manufactured in India

Mission/Vision and Global Footprint



About Us:

SenseGiz makes enterprise and industrial IoT solutions for sensor based condition monitoring, security and real time asset/people tracking applications using a combination of proprietary mesh connected hardware, cloud, analytics and apps.

Mission:

To help our customers increase their efficiency and reduce costs by monitoring the health of machines and track assets/people real-time.

Vision:

To make the world a more productive, safer and secure place to live in, with access to affordable technology.



Awards







Deployment for BSF













Through our COIN, we have created a Proprietary Mesh Network on top of 2.4 GHz based Wireless Communication Network

FC (E 🛣



Click here to watch the video of our multi-function product COIN:

Gateway for COIN: Wi-Fi, Ethernet, LTE





WiFi / Ethernet Gateway



LTE Gateway

WiFi Gateway (Water Proof)

- The Gateway used is a WiFi gateway built by SenseGiz.
- On the wireless mesh side, the gateway is a part of the low power, point to point mesh network.

Ethernet Gateway (Water Proof)

- Mostly used if the facility does not have Wi-Fi, does not permit or restrict the use of Wi-Fi.
- Our Ethernet Gateway can also store data on your cloud server using our platform.

LTE Gateway for SIM based connectivity (*customer to use their own SIM/data cards)

- Our LTE Gateway comes in handy in case there is no access to WiFi or Ethernet or if you have a WiFi blind spot.
- · Data from SIM card can be used to connect and push the data to the cloud

Cost Effective Solution

- One Gateway can support a mesh network of up to 100 COIN units.
- Multiple Gateways could be used to create a large network and all such Gateways can be linked to a central cloud.

Smart

 Monitor, manage, and analyze the Gateway and COINs from our user-friendly web panel.

How it works







1. COIN Our COINs form point to point mesh network of tiny sensor nodes.

2. GATEWAY (Wi-Fi / Ethernet / LTE) Gateway assigned to these coins collects data and relays it to the cloud over internet. Cloud Server

3. CLOUD SERVER Our powerful cloud is API enabled for custom deployment.



5. ANALYTICS Achieve desired business outcomes by using the right tools and techniques, at the right time.

Sector Not Not<

4. WEB PANEL Our software crunches the numbers, displays information and lets user control the device parameters.

Integration with existing CCTV cameras





System Architecture Overview



Sensor layer					
PTZ Cameras	Sen	Sensors		Fixed Cameras	
Intelligence layer					
Predictive alerts	Rule-engine	Pattern matching		Reporting and knowledge capture	
Command and control					
Situational awareness Messaging -		multi-protocol	Trigger	of response mechanisms	

System Deployment Overview





Siren Alerts







Intrusions trigger an instant loud Siren Alert- which can be installed closer or far away from the fence.

Smart AI Video Analytics





Person Detected by AI in Control Room **Trigger System** IP 192 168 1 200 H/08/0024 12:29:13

PTZ Camera Photos











PTZ Cameras in Action in diverse environments

COIN sensor installation







COIN sensor installation





Al based people Detection on Desktop





Security solutions for fencing / perimeters



Benefits

- COIN can be installed throughout the fence at a distance of 30 feet apart.
- COINs can detect vibration and angular movements on the fence
- Get real time alerts on unauthorized entry and events.
- Al based people detection at longer distances from the cameras with sirens.
- Our Machine Learning model can recognize & distinguish human activities.
- Real time data analysis can distinguish between humans (walking, running, and other objects like vehicles, animals etc.
- Integrated with pre-existing CCTVs used to cover the entire perimeter length.



We can provide the following types of software deployments:

Access to our Cloud Server, Platform, and Dashboard: In this option, the customer gets access to our Cloud Server where the data will be stored and processed, and access to Dashboard from where the sensors can be controlled and all activities can be tracked. This Option is ideal for Small and Medium Enterprise Customers.

Our Software platform installed on your cloud: In this option, the customer's existing cloud server is used and no data is stored elsewhere. Our basic platform is installed on the customer's server and either our dashboard or any other dashboard can be used by customers. This Option is ideal for Large enterprise customers who already have their own cloud server in place..

Military application : For military applications, we have an option to host everything on local server.



- COIN is small in size, economical and with a long battery life. Also comes with the ability to control/change parameters of each sensor through the server.
- Multiple sensors built into the product for angular movements, vibration, humidity and temperature sensing.
- Advanced AI & Machine learning algorithms for use in diverse scenarios.
- Complete Indian ownership of entire Intellectual Property with skilled local support.
- · Workflow & interface can be customized as per requirements.
- Easy to integrate additional external systems.

Case Study : Security against multiple Intrusion



CHALLENGE

A government organization wanted real time data on trespassing and intrusion activity in an area where no person was allowed. The entire perimeter was to be covered against such activities and hence the solution was required to be very cost effective and efficient.

The organization also demanded no false alarms due to rains, winds etc.

SOLUTION

The perimeter was covered with our Coins. Sensors in the coin would detect intrusion activity and send real time notification to its users, which helped them take appropriate action.

BENEFITS

Wireless connectivity and wireless streaming. Hence a perfect fit in such cases. Due to its small size, the coin is not visible to the intruders.



Achievements





Most promising IoT start up award by IESA



NASSCOM – Iconic Startup of the year

NASSCOM

NASSCOM's select delegation to CEATEC, Japan



National Entrepreneurship Award by MoS Development and Entrepreneurship

CISCO. May 2018

Top Start up Award at Cisco Launchpad Cohort 3.



June 2018

Best MSME Award by MoS Defense MARUTI SUZUKI MARUKA MARUKA Makamata Sukatana Maruka Sukatanan

2019

Top Startup award by Maruti Suzuki Cohort 1



MHRD Ministry of Human Resource Development Government of India

2020

Winners of Samadhan COVID Challenge by MHRD



Winners of BCIC Emerging Stars Award. Bangalore Chamber of Industry and Commerce



Winner of 'Enterprise of the year, Technology' Award



Winner of 'Spirit of Manufacturing' award.

Leading Customers across the globe









1. Can the product be installed on barbed wire or chain link type of fence with concrete footing?

Ans: Yes, our product can be installed on your existing barbed wire or chain link type of fence or even a wall.

2. On options for cloud, we prefer to use our own cloud to process all the data. Can this be done with your product?

Ans: Yes, our base software can be installed on your cloud. Basically, it will be our platform on your cloud server. We will be sharing the API's for the same and our team can guide you on the entire process.

3. Are the hardware manufactured in your own factory and all software developed by your own resources?

Ans: Yes. All the hardware and software is designed and developed internally by our own team in India. We do have patents for some of our products as well.



4. Are the sensors installed on the fencing safe from any theft or vandalism? If one sensor is missing, can the system detect the missing sensor?

Ans: If someone is trying to destroy or damage the sensor, our system has the capability to pick up the signals and alert immediately to the admin or user so that appropriate action can be taken.

5. How does the system differentiate between strong wind and public intruders when the sensor captures the movement/vibration?

Ans: We have developed machine learning models that can further efficiently differentiate between strong wind and intruders.