

Smart Warehouse Asset Tracking System (SWAsT)

Track & Manage inventory in real-time

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SWAsT: Advantages

Real-time inventory tracking, backtracking, analytics, & tech benefits

Real-time inventory tracking

- Physical = recorded stock.
- No auditing downtimes.
- No internal audits
- Avoid unwanted stocking
- Space optimization
- Reduces manpower costs
- Processing time
- Reduces carrying cost of inventory

Backtrack Operations

- Backtrack operations, people, stock.
- End-to-end material flow
- Order fulfillment & accuracy
- Order pickup rate
- Order packing accuracy
- Return rate to operations mapping.
- Technology investment payback

Warehouse analytics

- Processing time against SKU.
- Order fulfillment rate
- Cost efficiency
- Order packing accuracy
- Carrying cost of inventory against SKU.
- Inventory turn-over ratio.
- Customer profiles, Storage space utilization, inventory analytics.

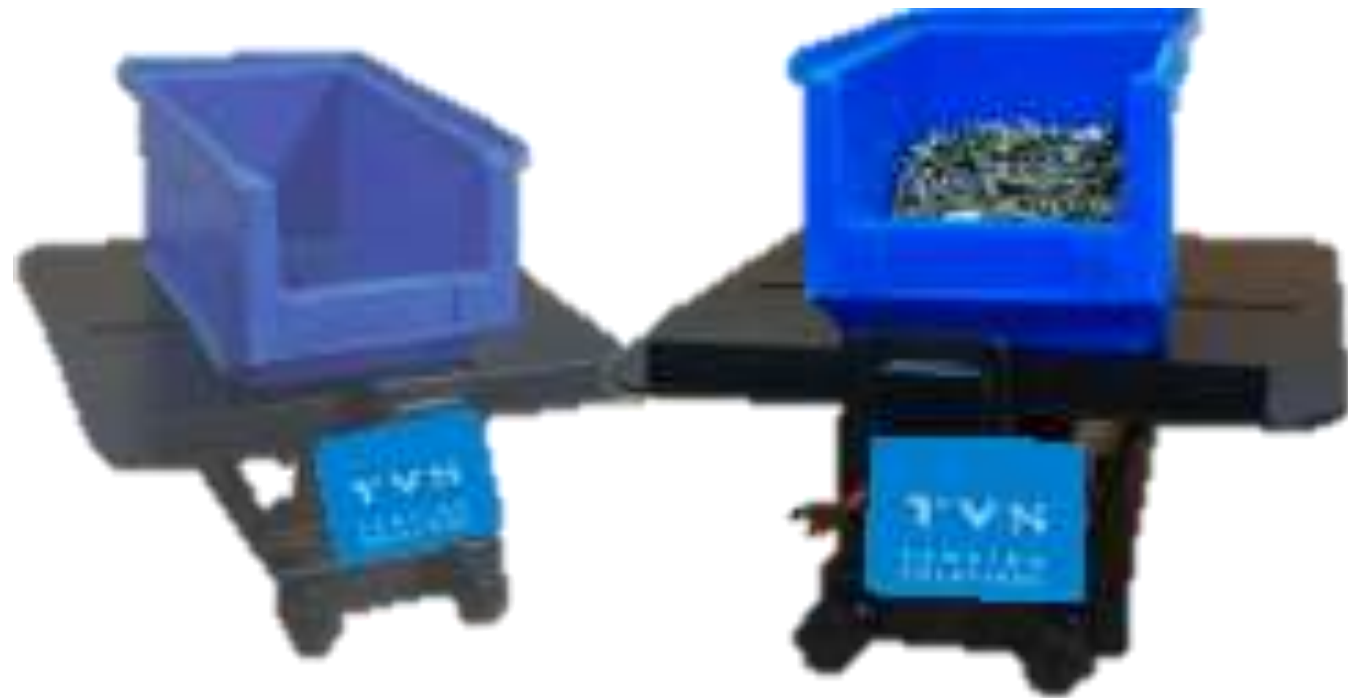
Technology benefits

- Real-time inventory tracking & management.
- Faster response & customer user experience.
- Complete KPI tracking
- Business leadership & flexible operations;
- Manpower productivity, reduced downtimes, audit requirements, & cost benefits.
- Integration with other systems-ERP

Optimize cost, space, material, people, orders, processing time, & systems across warehouse

SWAsT: Technology

Edge connected bins with analytics, cloud services, & customer connect



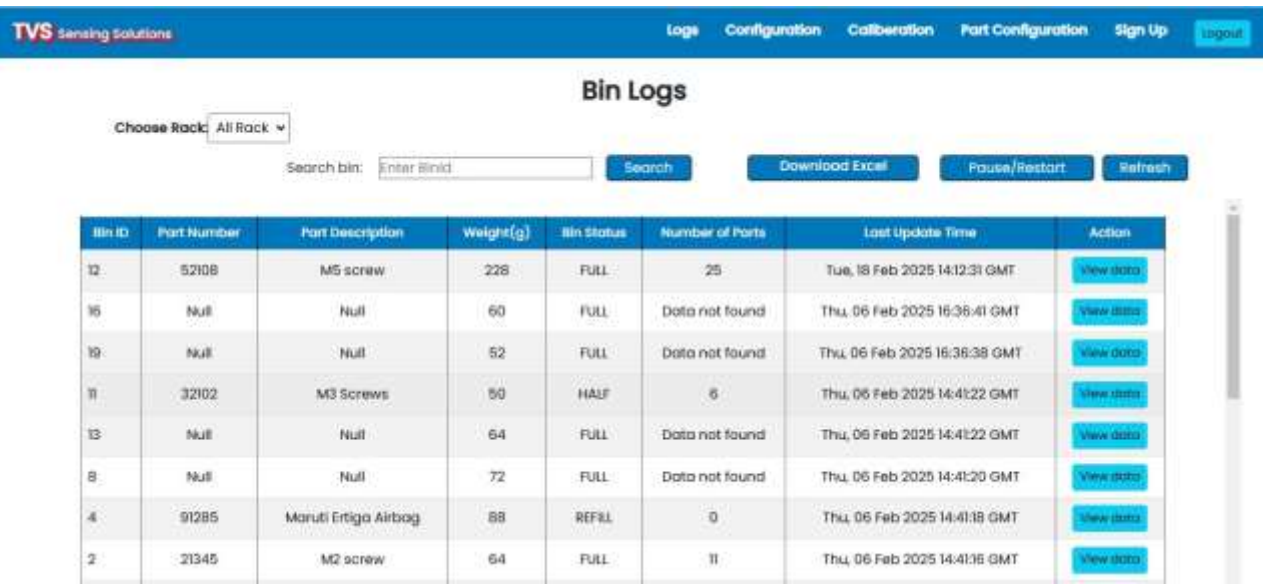
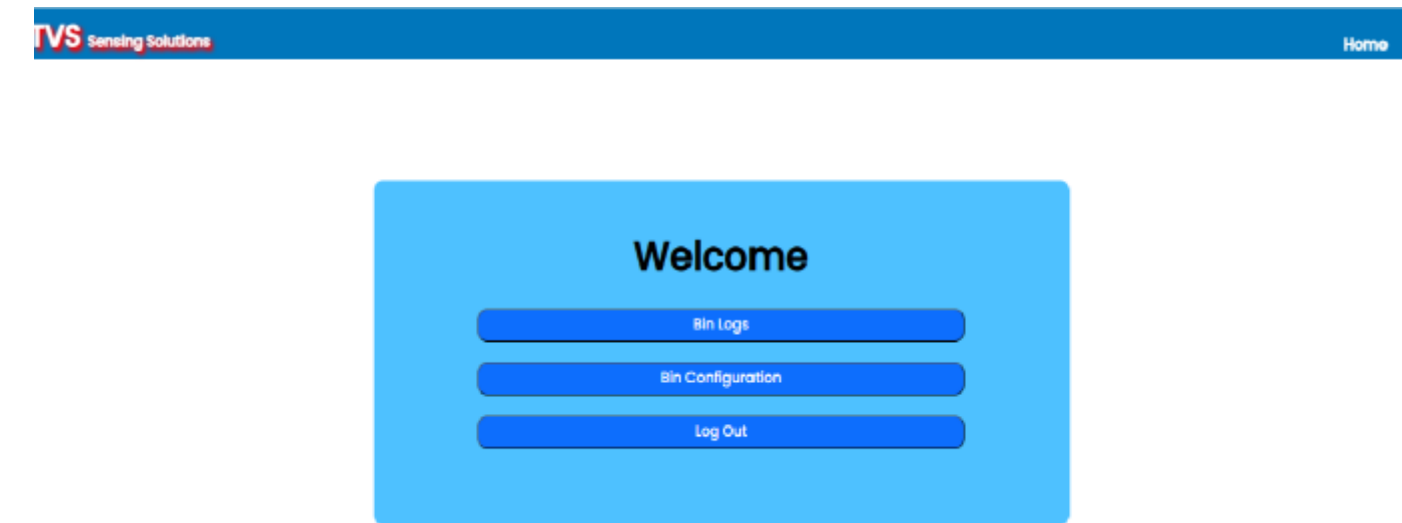
Edge nodes with WiFi connectivity providing real-time inventory. Optional human detection & camera recordings.

- 24 x 7 real-time inventory tracking module
- Rugged & flexible bins to accommodate different SKU size.
- Flexible WiFi units to transmit real-time information using indigenous WiFi
- Labels: optional e-ink or OLED displays.
- Increased security for high value SKUs through movement sensing & camera recordings plus person identification.
- Limited edge memory to retain data as backup.
- Battery powered & plugged options available.
- Consumes less power, State-of-charge, battery condition monitor, & indicators.
- Auto-sleep options for WiFi, display. & event-based triggering for power savings.
- Cost & performance optimized.

Rugged & flexible bin edge nodes with WiFi connectivity for real-time inventory tracking

SWAsT: Manager & Tracker

Flexible & simple software for Warehouse



Bin ID	Part Number	Part Description	Weight(g)	Bin Status	Number of Parts	Last Update Time	Action
12	52108	M5 screw	228	FULL	25	Tue, 18 Feb 2025 14:12:31 GMT	View data
16	Null	Null	60	FULL	Data not found	Thu, 06 Feb 2025 16:36:41 GMT	View data
19	Null	Null	52	FULL	Data not found	Thu, 06 Feb 2025 16:36:38 GMT	View data
11	32102	M3 Screws	90	HALF	6	Thu, 06 Feb 2025 14:41:22 GMT	View data
13	Null	Null	64	FULL	Data not found	Thu, 06 Feb 2025 14:41:22 GMT	View data
8	Null	Null	72	FULL	Data not found	Thu, 06 Feb 2025 14:41:20 GMT	View data
4	91285	Maruti Ertiga Airbag	88	REFILL	0	Thu, 06 Feb 2025 14:41:18 GMT	View data
2	21345	M2 screw	64	FULL	11	Thu, 06 Feb 2025 14:41:16 GMT	View data

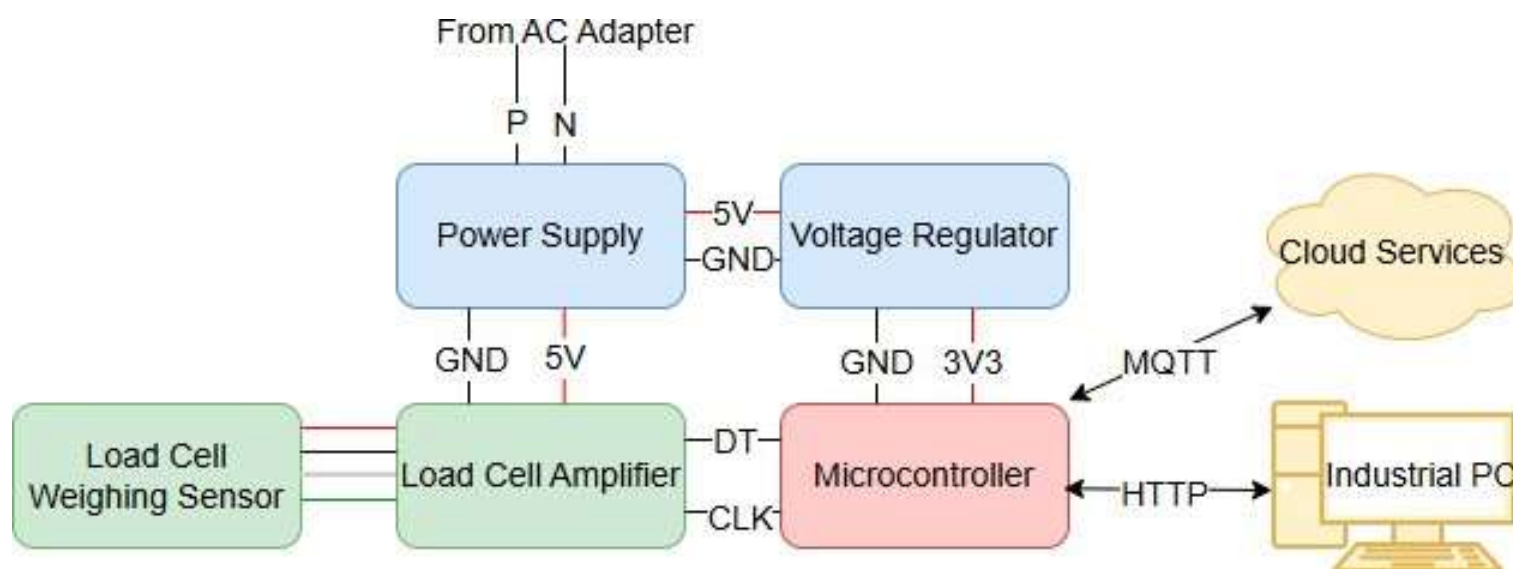
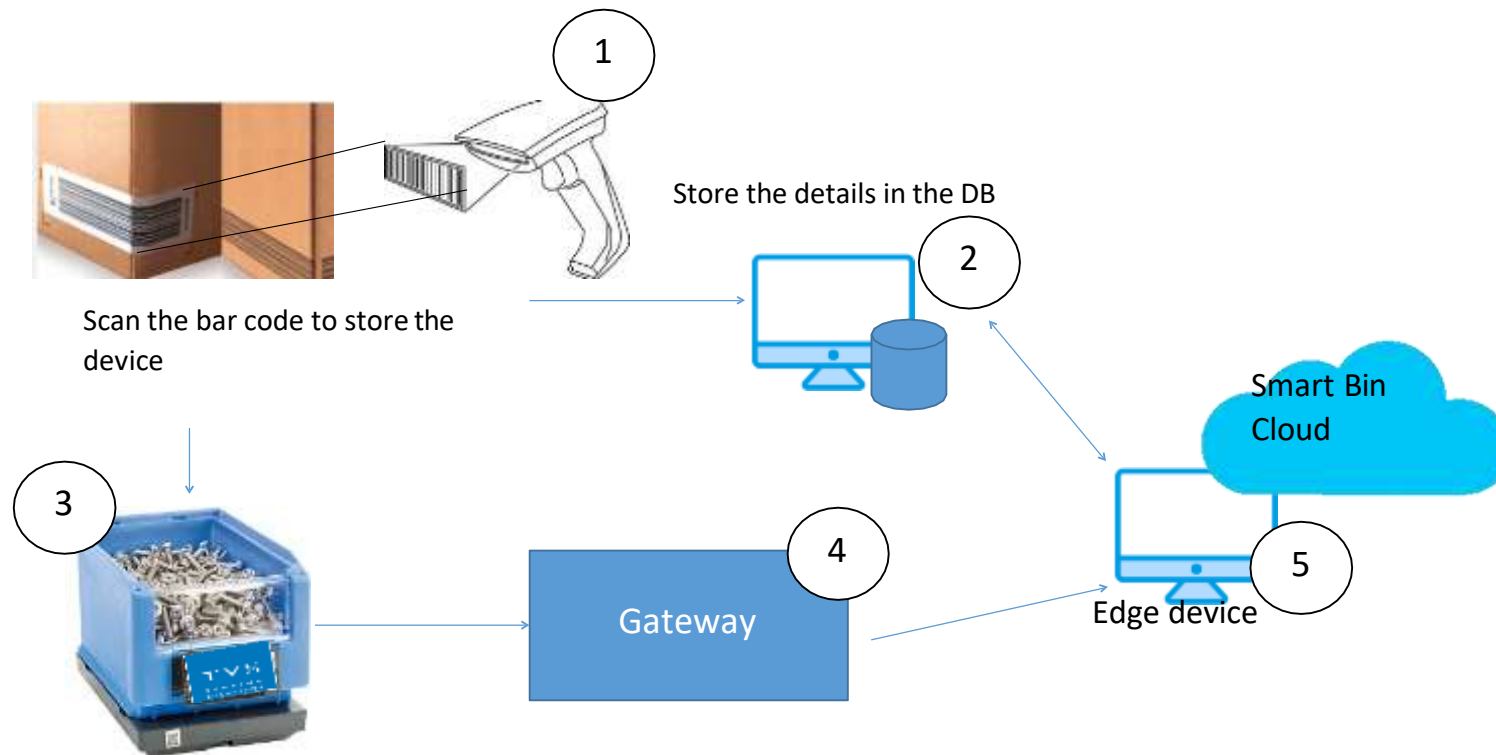
Flexibly configure bins, calibrate, parts catalogue, real-time analytics, & complete tracking.

- Flexible & simple software to configure bins on-the-fly.
- SKU reading from barcode readers, QR code, NFCs, RF tags, & other forms.
- Complete inventory list upload/download, & real-time inventory tracking through excel sheets.
- Palette tracking capabilities, GUI for analytics, KPI tracking, material tracking, etc.
- Software outputs in .csv, .json, .excel, & other formats for easy reading in other systems.
- Web end-points for connecting to other systems or software- ERP, existing warehouse management systems, etc.
- Flexible smart bin configuration, calibration, self-diagnostics, optimization suite for space, storage, real-time GUI, Whitelisting, complete product catalogue information,
- Flexible catalogue depending on the user log-in: technical specifications, financial, warehouse KPIs, vendors, customers, etc., generated based on whitelisting.

Access point connecting edge nodes for scaling & flexibility.

SWAsT: Cloud

SaaS model for inventory tracking



SaaS model for inventory tracking

- Cloud provisioning for data accessibility, sharing, real-time inventory management, configuration, ordering, re-ordering, customer connect, & records.
- Provide customers with real-time data on inventory levels, key KPIs, historical information, generate alerts, & process operations.
- Complete financial, operational, & performance tracking.
- Whitelisted data availability, connection across different facilities, customer engagement, real-time inventory tracking as a service to customers, service availability.
- Data redundancy, cloud agnostic integration, cloud-based analytics, ordering & reordering level analysis.
- Server-based services are also offered without cloud provisioning, explainable AI based analysis, if-then analysis, & other options.
- Prescriptive & predictive analytics.

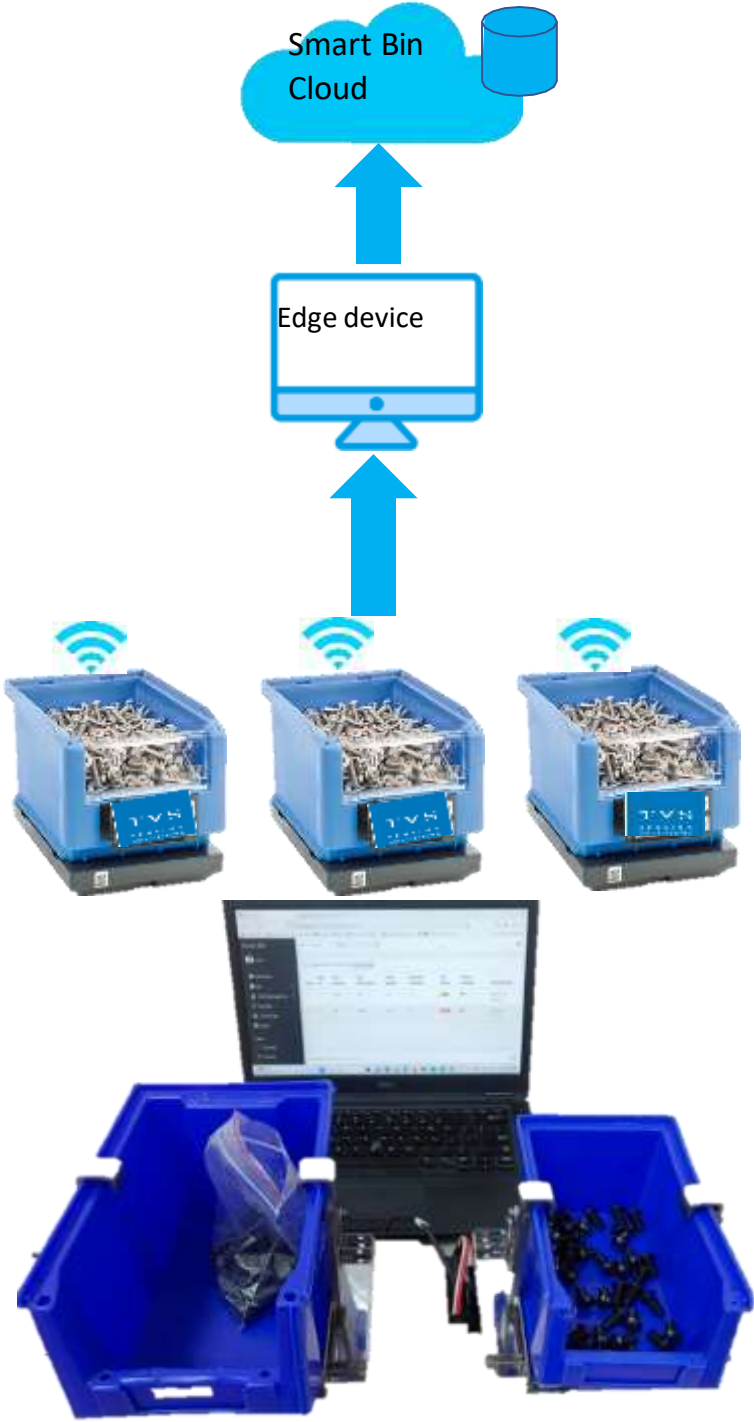
Cloud provisioning with SaaS model for inventory tracking, prescriptive analytics, & KPI tracking.

Technology Offering

Business Models

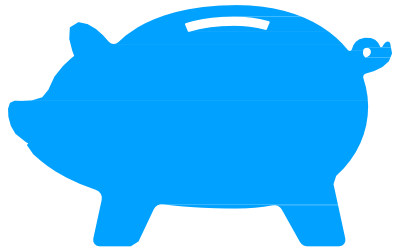


Saket Automation
Industrial Automation & SPM Manufacturer



Edge connecting to access points, to SWAsT manager & Tracker, & SWAsT cloud services.

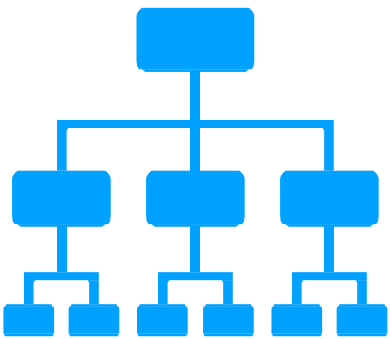
- Complete Sale of Goods
- Freemium
- Razor Blade option
- Reverse Razor model
- Subscription
- Rentals
- Reordering levels
- Own & Operate
- Hybrid



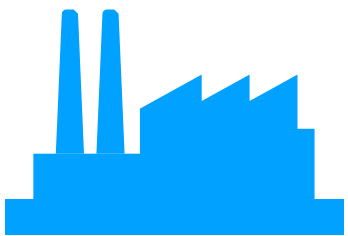
Reduced
Inventory
costs



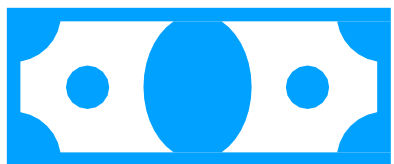
Reduced
Labour Costs



Order
fulfillment &
accuracy



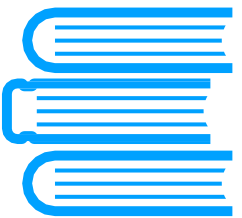
Space
Optimization



Carrying Cost
of Inventory



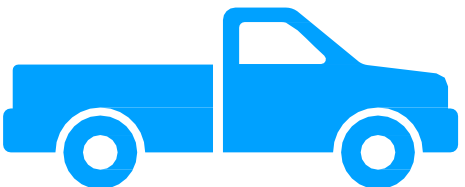
Reduced
Return Rate



Reduced
Auditing &
Downtime



Inventory
turnover ratio



Order Picking
Accuracy

Hybrid business models: CSoG, Freemium, Subscription, rentals, reordering levels, & hybrid.

Key Specifications

Technology Specs



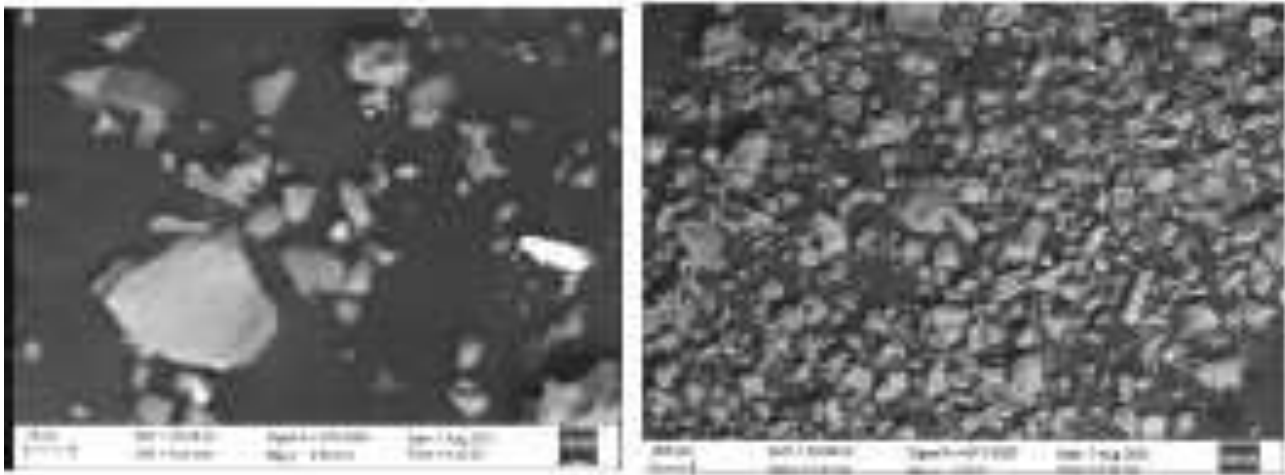
Edge connecting to access points, to SWAsT manager & Tracker, & SWAsT cloud services.

- WiFi Compliant
- PLC interface as required
- MQTT, AMQP, CoAP protocol
- Complete IoT Solution
- Integrated with ERP systems
- Ware-house management Software
- Light-weight software
- API compatibility
- Wide range of measurements
- Flexible units
- Completely modular implementation
- Standardized communication protocols
- IIoT based solution
- Integrated with other TVSSS systems
- Customized bins
- Industrial Software Compliant

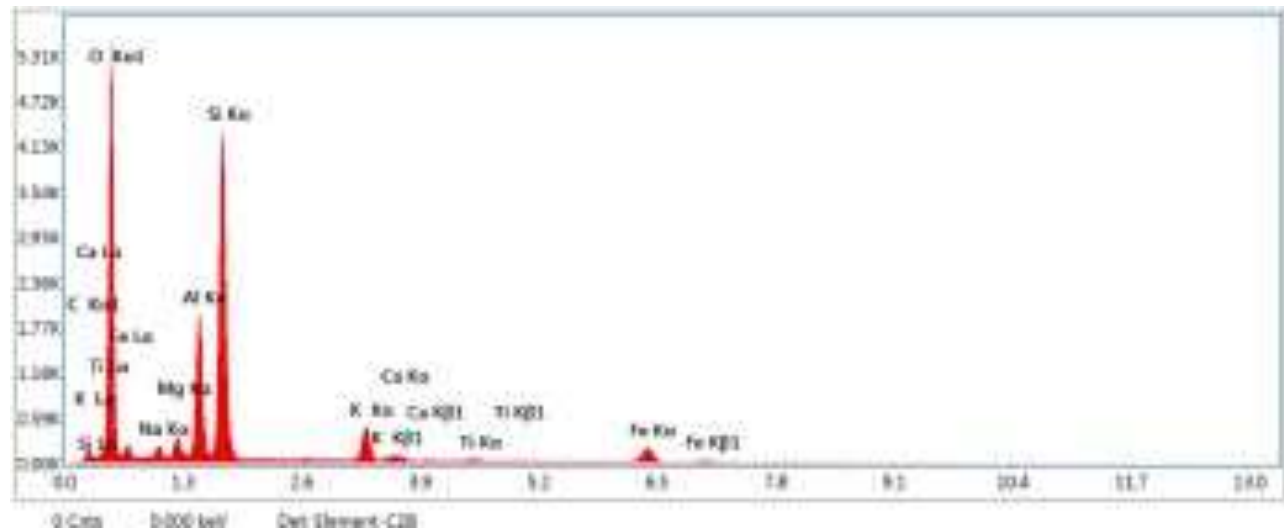
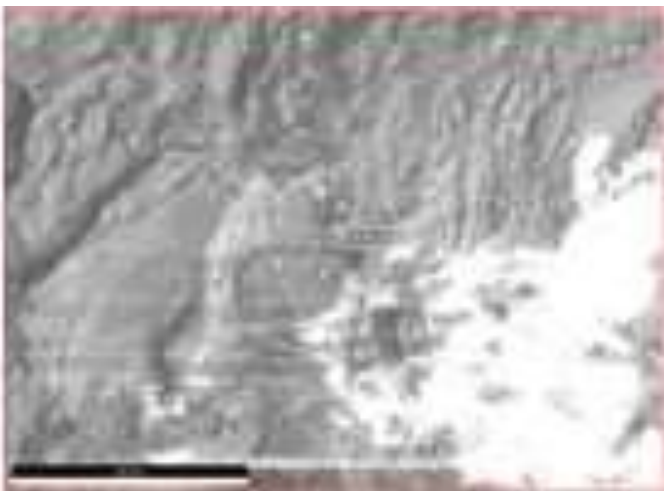
Hybrid business models: CSoG, Freemium, Subscription, rentals, reordering levels, & hybrid.

Other Products

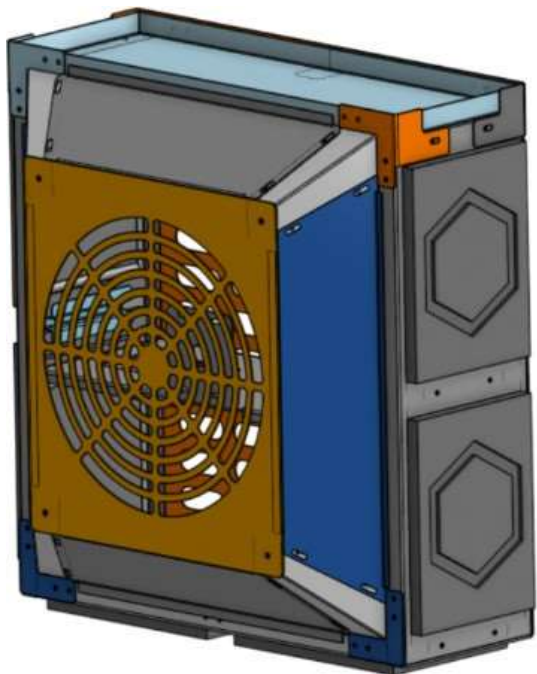
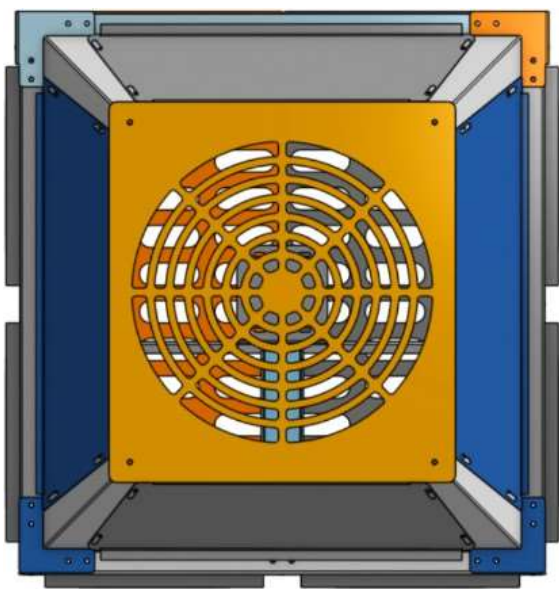
Automotive, Buildings, Healthcare, & Others



Patented micron structure for passive cooling



Humidity Control



Sturdy & Robust Design

