



FLOWLINC V1.0

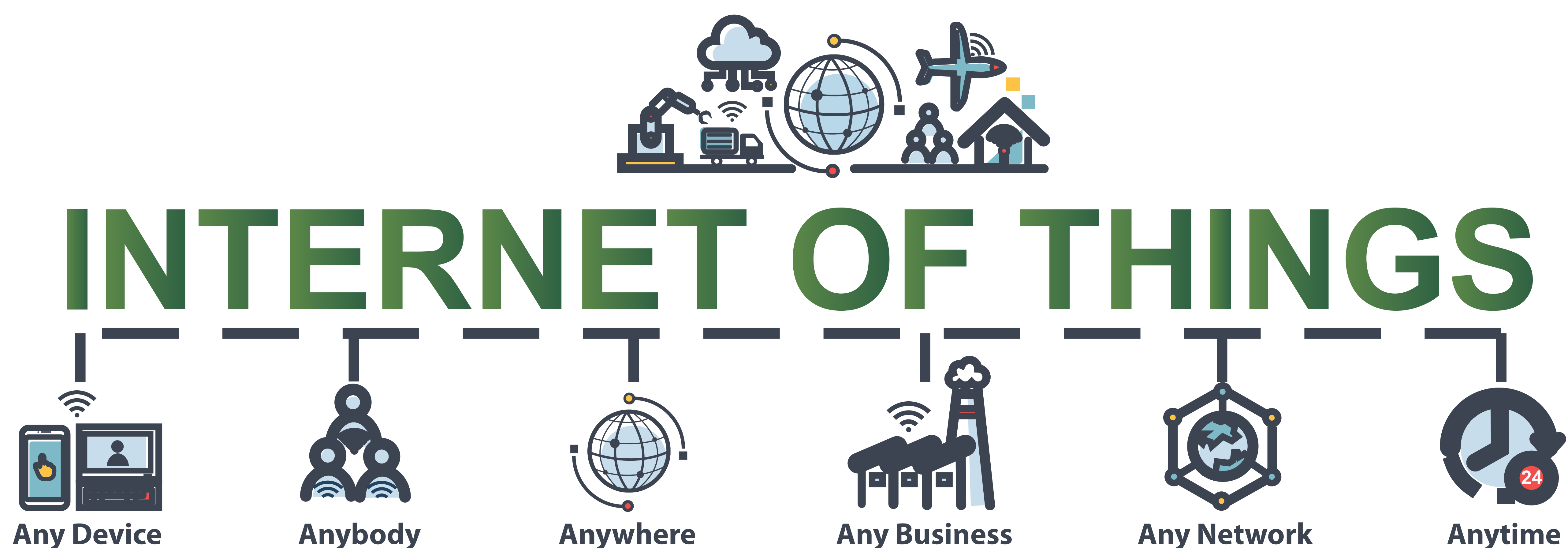
Bringing Industry & Intelligence Together



PRODUCT OVERVIEW

Flowlinc V1.0 is a next generation Industry 4.0 IoT edge device / node used for remote data control equipped with device management and analytics.

- Real-time monitoring and control of application parameters from anywhere through our iOS, Android, and web apps.
- Easily integrates with third party applications/servers as per user requirement.
- Data Security management.
- Dashboard – Insights on usage pattern for be informed, efficient and timely decision making.
- Saves resources, time and money by providing insight into your device usage and activity.
- Avoid Disaster: Set custom notifications for your devices.
- Over-the-air and remote upgrade capability for all network components



PRODUCT HIGHLIGHTS

- **BUILT IN ALL CONNECTIVITY**

Gain visibility and control into hard to wire locations with built in GSM (2G ,4G & LTE), WiFi, Bluetooth, LoRa & NBIoT

- **OPEN PLATFORM**

Easy to integrate with existing Device via any common industrial protocol: Modbus RTU, Serials, MQTT

- **BUILT-IN I/O**

Analog and digital I/Os for direct monitoring and control

- **COMPACT IN SIZE**

Dimensions of the device allows its use in limited space and difficult environmental conditions

- **CLOUD**

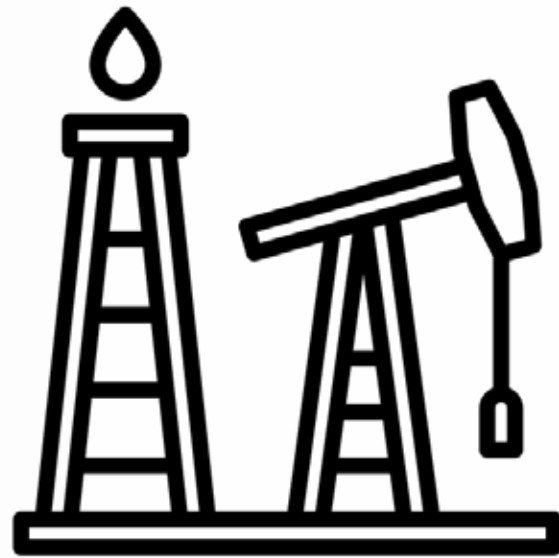
It is a cloud/IoT platform agnostic device capable of communicating with all available cloud services

- **STORAGE**

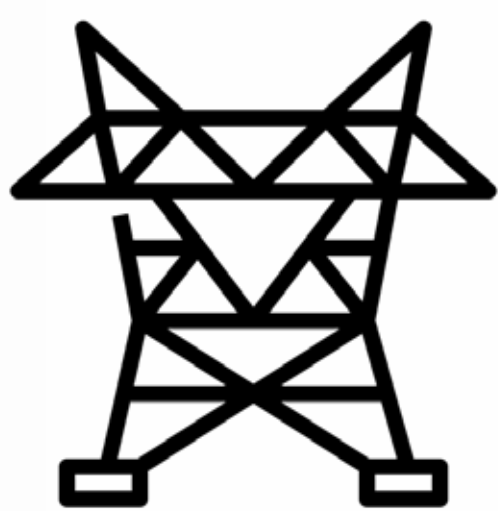
On-device storage for mission critical data to ensure data continuity and integrity in the case of network outages

APPLICATION AREAS

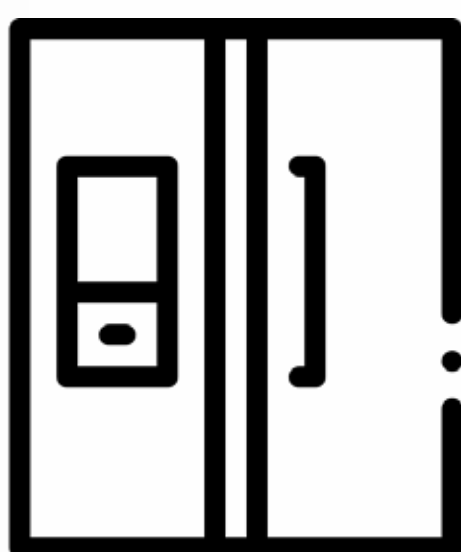
MINING



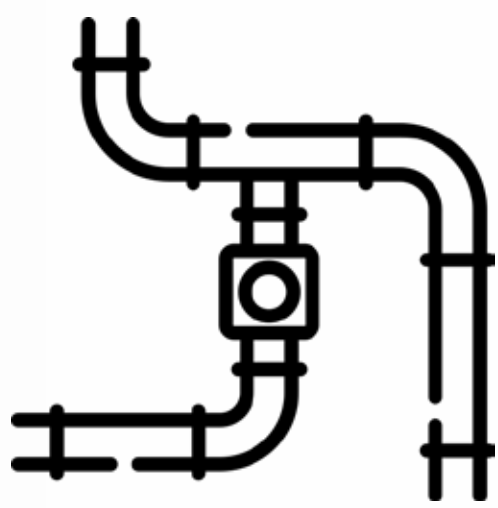
POWER
TRANSMISSION &
DISTRIBUTION
MANAGEMENT



SMART
APPLIANCES



OIL & GAS



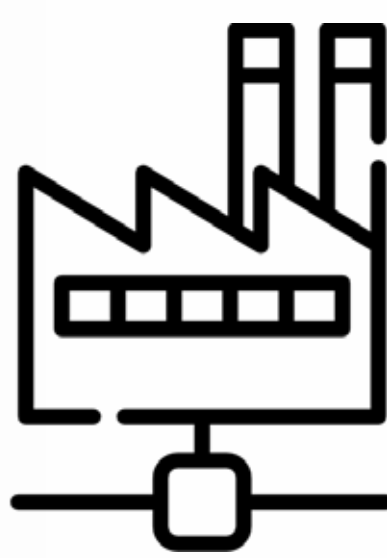
ASSET
TRACKING



CONSUMER
DURABLES



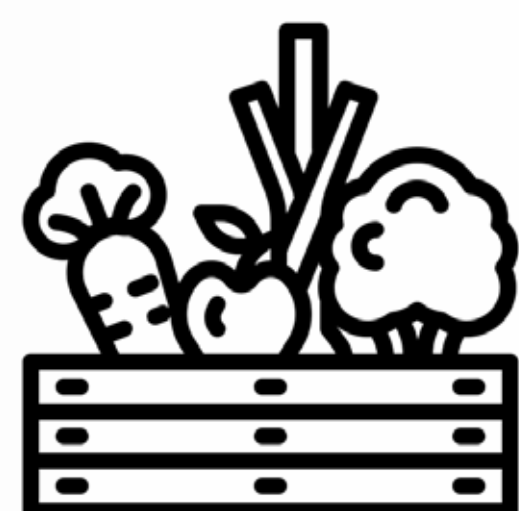
SMART
FACTORY



AUTOMOTIVE



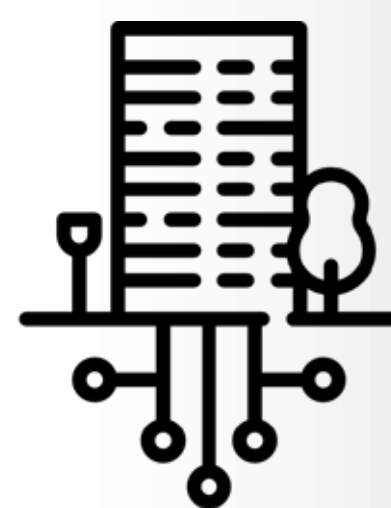
AGRICULTURE



ENERGY
AUDITING



SMART CITY



SUPPLY CHAIN
& LOGISTICS



SOLAR PV
PLANT
MANAGEMENT



SMART
METERING



WATER
MANAGEMENT



SMART
INFRASTRUCTURE



SHIPPING AND
MARINE

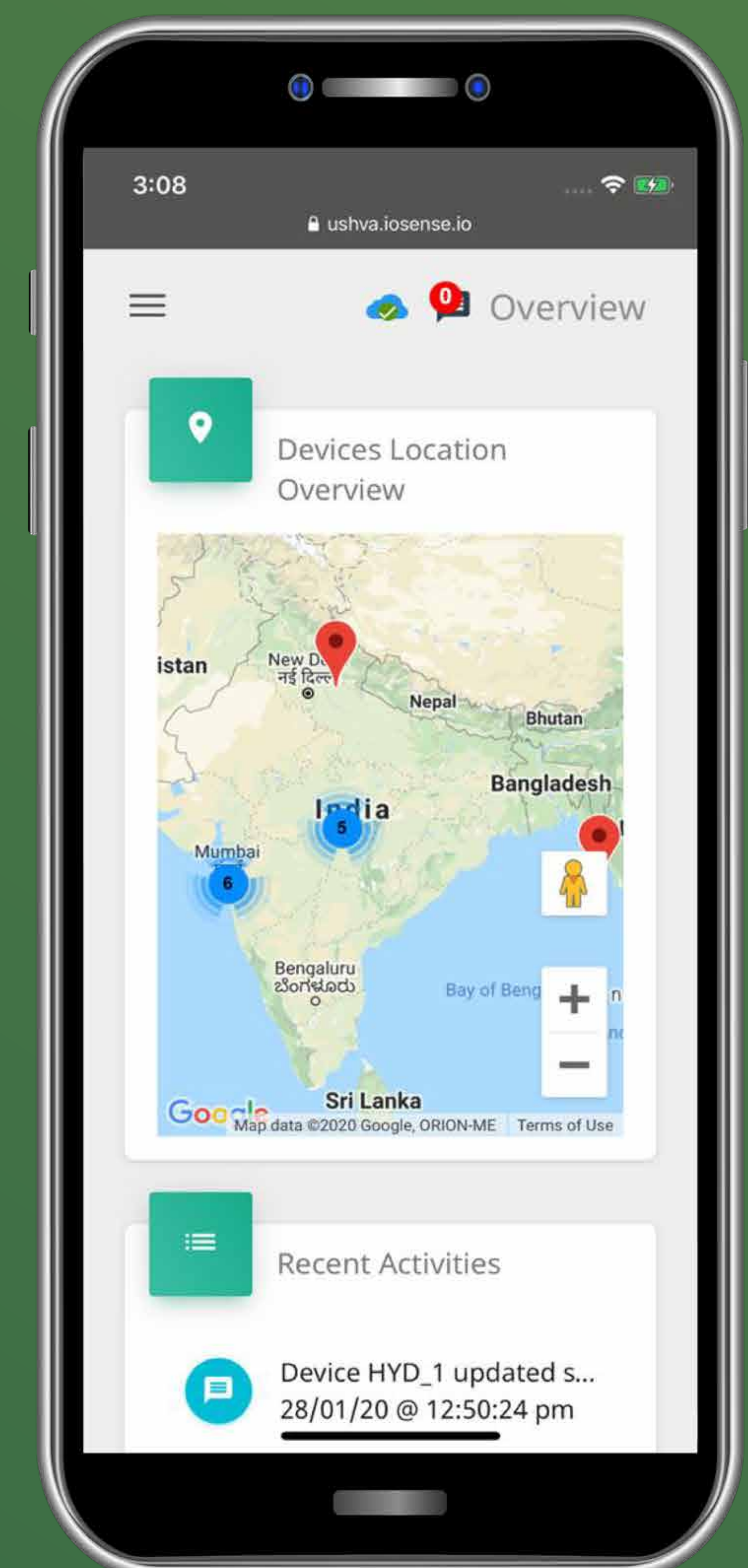
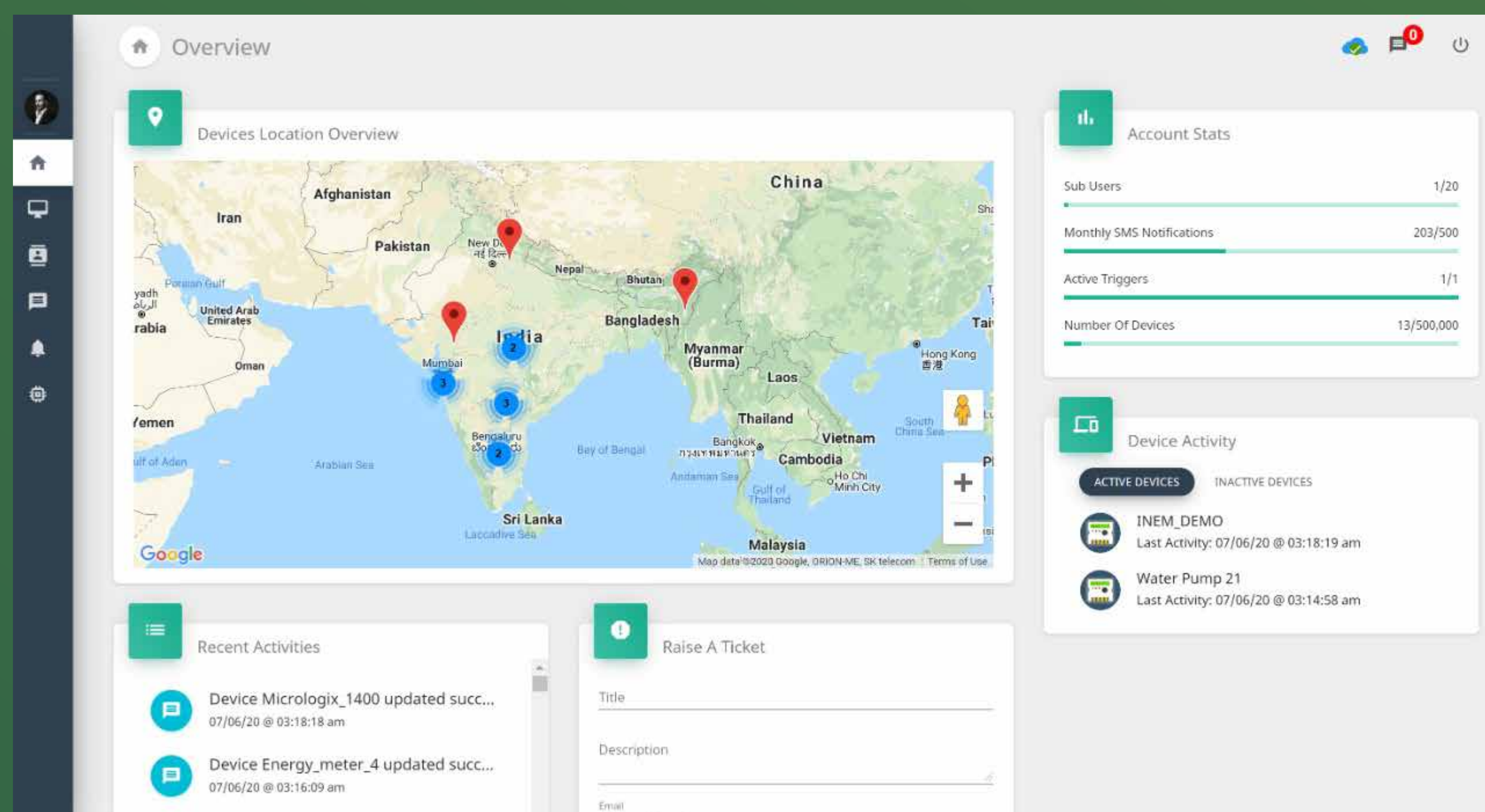


FEATURES AND CAPABILITIES



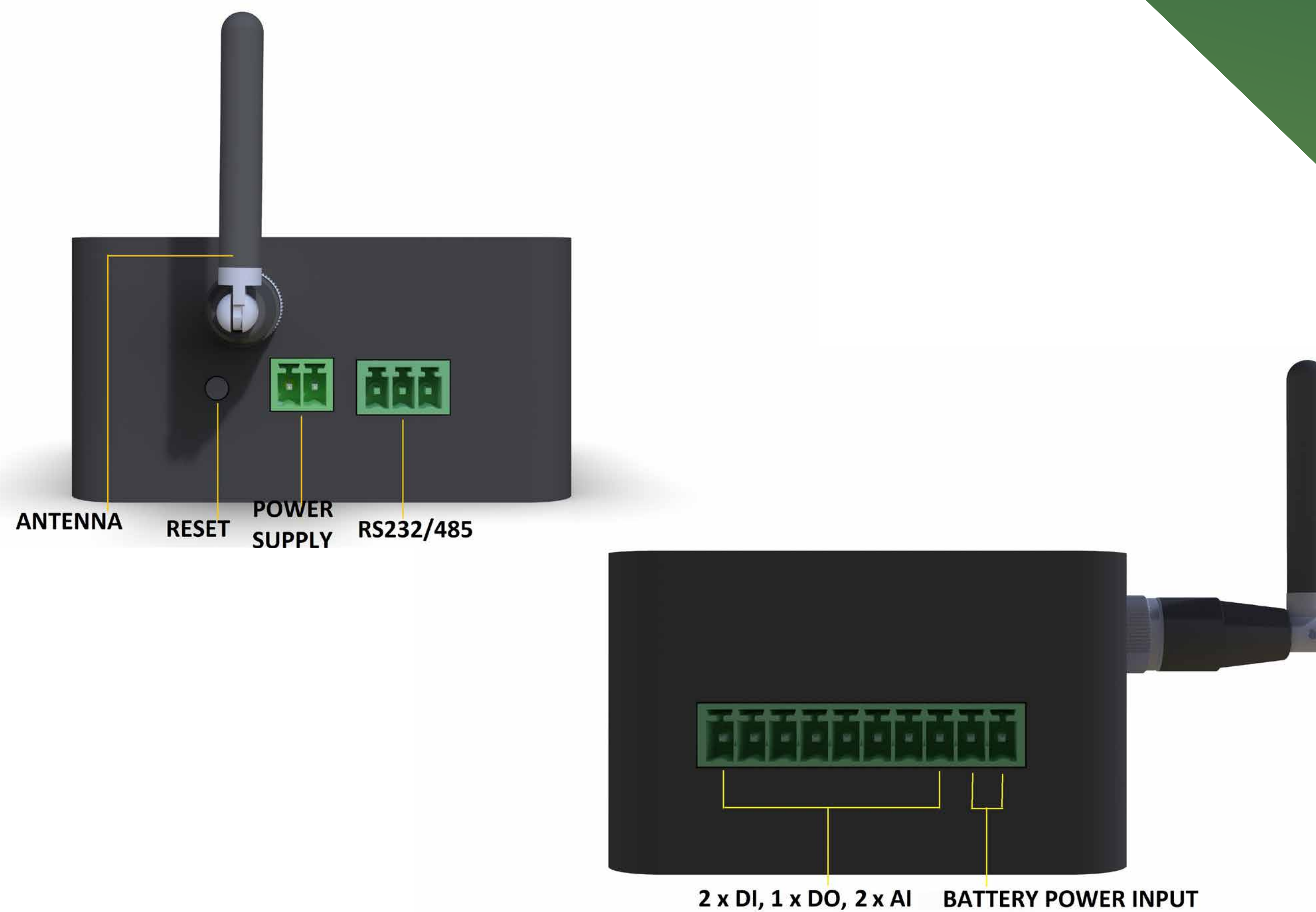
- **FASTER AND EASIER TO DEPLOY**

An integrated platform that can monitor critical equipment on the shop floor or hundreds of remote sites. Can simply connect the IOs/sensors — no servers to set up, no software to manage, and no complexity. This can either be deployed as a separate device along with the machine or integrated inside the machine making it compact and a single smart device.



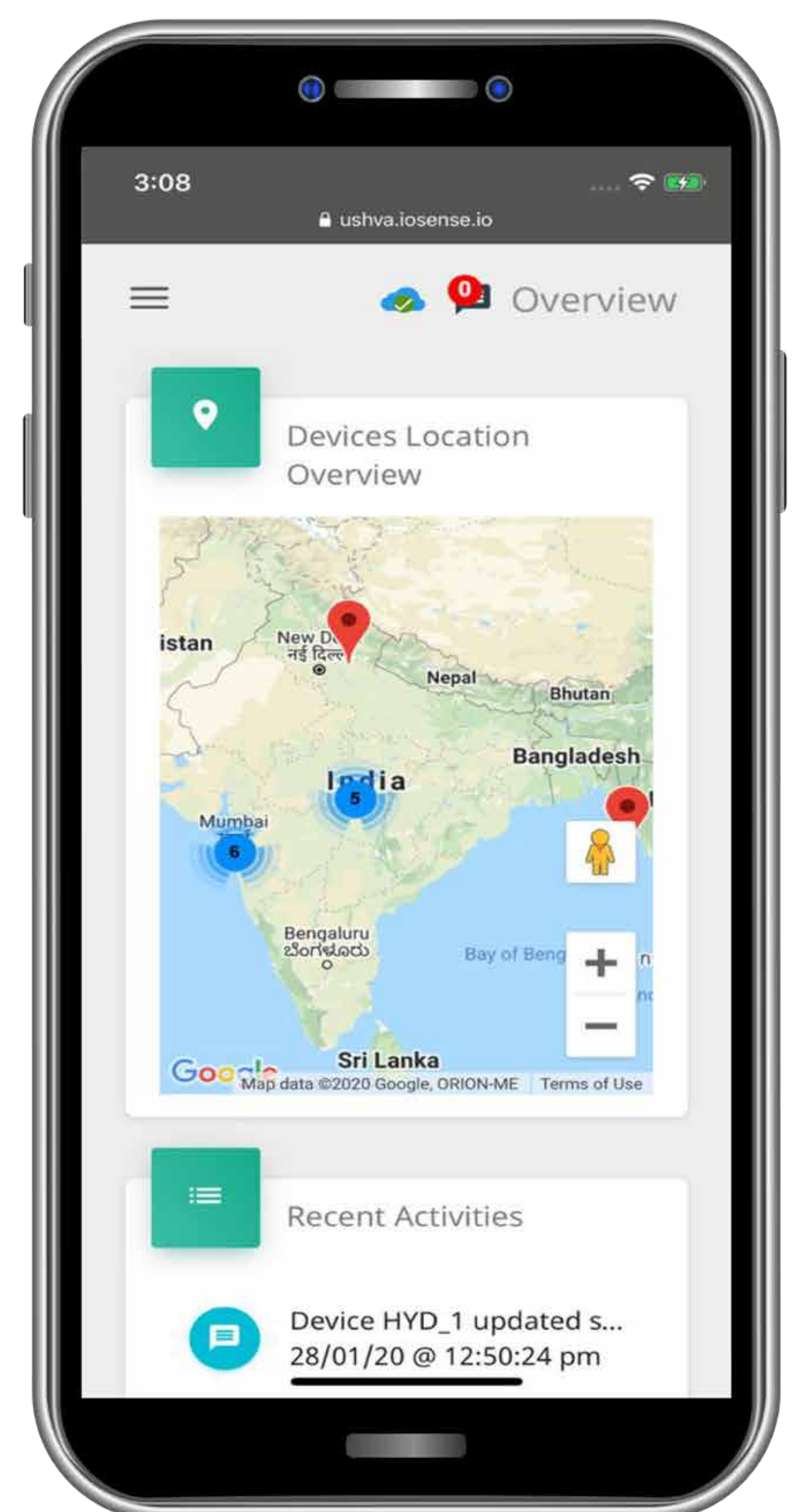
- **OPERATIONAL DATA AT YOUR FINGERTIPS**

Flowline makes getting your data easy and real time which further makes you draw insights into your own set of data to get most out of it. With cloud dashboards that automatically resizes to fit any device, you can view critical data anywhere, anytime. It's also easy to export data to the analytics tool of your choice or to directly integrate with your existing historian through modern API functionality.



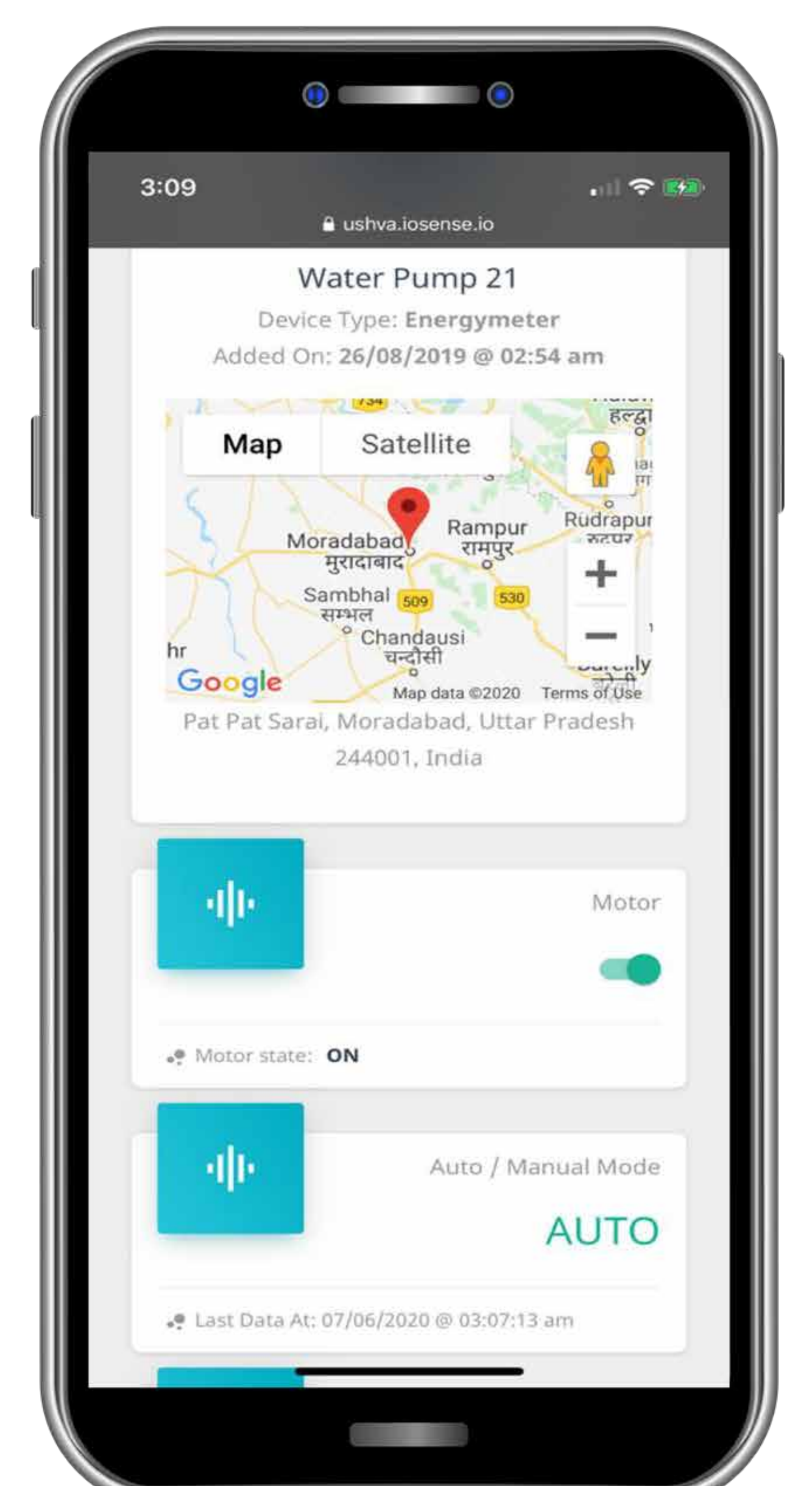
DESIGNED FOR MODERN DATA SECURITY

- Unlike legacy solutions that were designed in a different era and patched over time, Flowline V1.0 is purpose-built to aggregate and process sensor data securely. Cyber threats continuously evolve, and your industrial IoT architecture should as well. Flowline V1.0's architecture ensures always up-to-date cloud software and seamless over-the-air firmware patches for on-premise devices



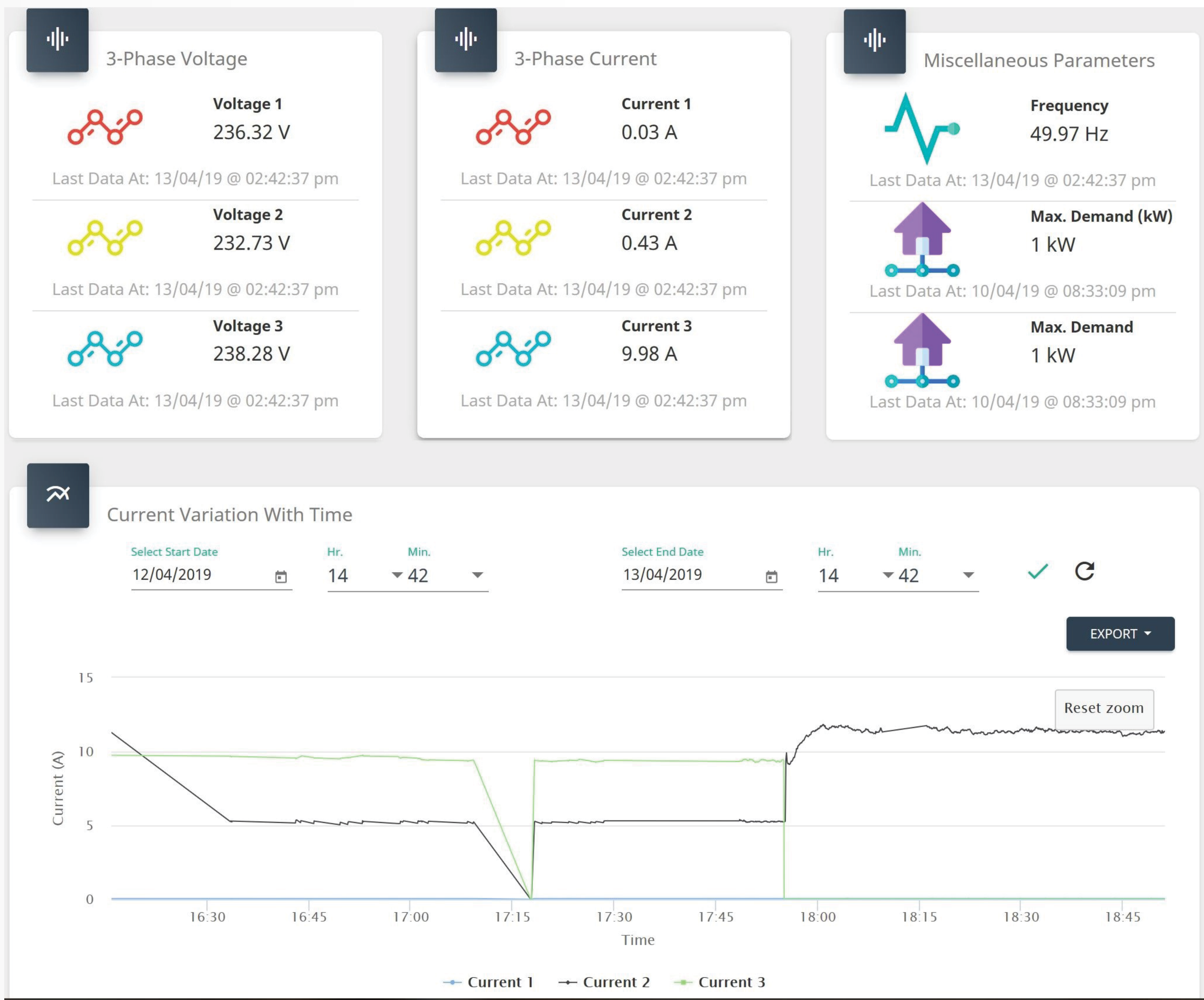
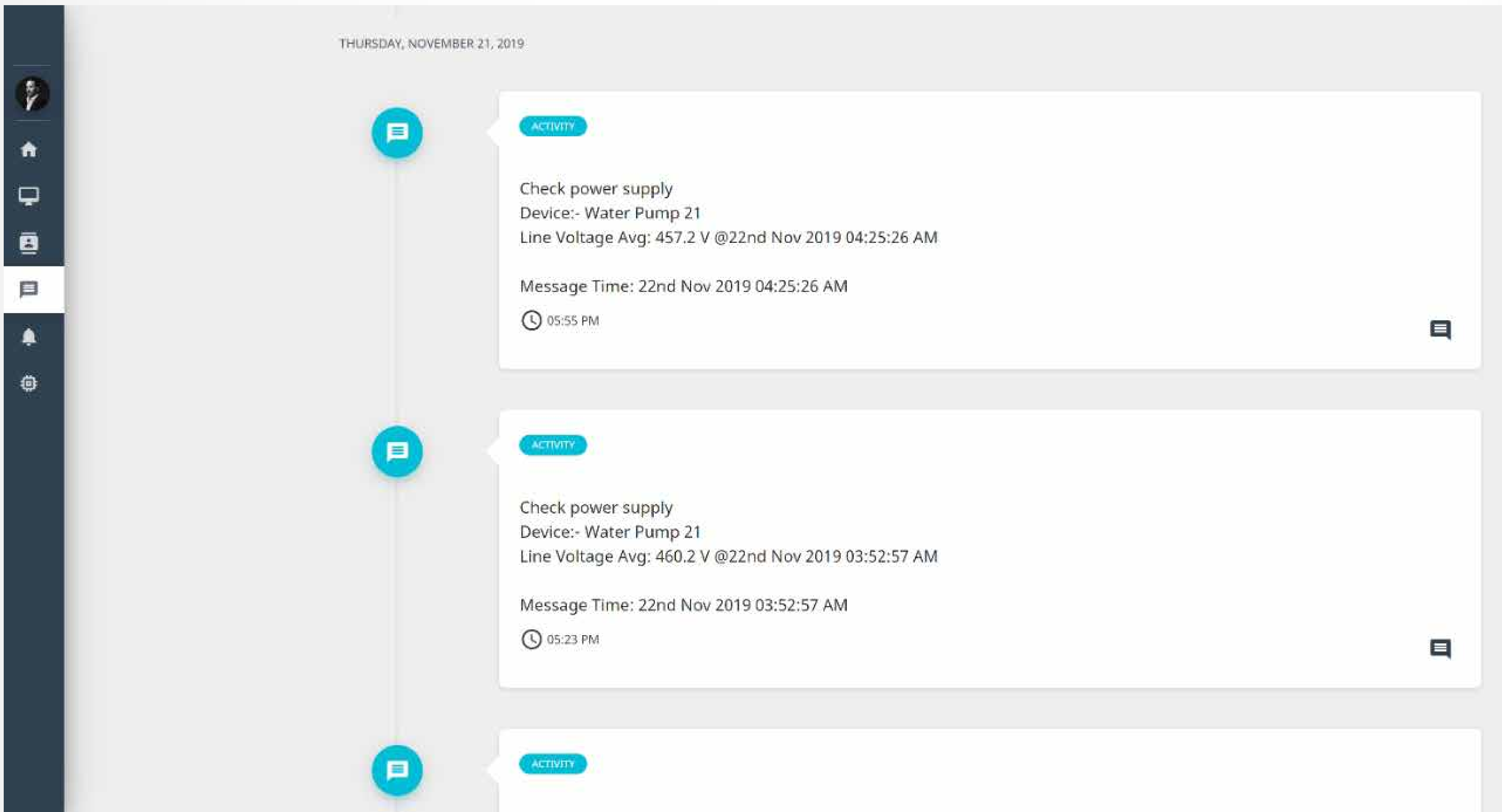
GET OPERATIONAL VIEW OF YOUR ASSETS

- Manage your plants assets using robust and customizable Flowline device. This shall help you increase your runtime and decrease customer grievances along with clear visibility of all your assets.



IMPLEMENT EDGE COMPUTING WITH ONLINE / OFFLINE DATA PROCESSING & STORAGE

- Flowlinc has a powerful onboard controller paired with on-board storage and compatibility with multiple communication protocols. This helps refine the data and send only the critical insights for faster automated actions based on real-time insights along with making it useful in data critical scenarios.



TECHNOLOGY SPECIFICATIONS

Variants	
U02200101	Wi-Fi, Bluetooth v4.2 BR/EDR, Bluetooth Low Energy (BLE) 1xRS-232/485, 2xAnalog Inputs, 2xDigital Input & 1xDigital Output
U02200102	LoRa + Wi-Fi, Bluetooth v4.2 BR/EDR, Bluetooth Low Energy (BLE) 1xRS-232/485, 2xAnalog Inputs, 2xDigital Input & 1xDigital Output
U02200103	Cellular Connectivity (2G, 4G & LTE) + Wi-Fi, Bluetooth v4.2 BR/EDR, Bluetooth Low Energy (BLE) 1xRS-232/485, 2xAnalog Inputs, 2xDigital Input & 1xDigital Output
U02200104	NBLoT + Wi-Fi, Bluetooth v4.2 BR/EDR, Bluetooth Low Energy (BLE) 1xRS-232/485, 2xAnalog Inputs, 2xDigital Input & 1xDigital Output

Communications	
Serial Port	RS-485: 2-wire, half -duplex RS-232: 2-wire, full or half-duplex (ESD protected)
Supported Protocols	Modbus RTU, Serial, UART, SPI, BACNet, M-Bus, LonMark

Digital and Analog Inputs/Outputs	
Digital Input	2x User configurable as inputs, ESD/EFT/Surge protected, 3.3-24 volt tolerant, over-voltage protection
Digital Output	1xAs Output: Sinking MOSFET output, rated 24V, 0.5A
Analog Input	2 channels with voltage range 0-10V or 4-20mA, Resolution: 12-bit, ESD/EFT/Surge protected,

Wired & Wireless Connectivity	
Cellular	2G/4G/LTE cellular connectivity, Frequency range 850/900/1800/1900, Protocol support: TCP/UDP/PPP/HTTP/FTP/SSL/PING/NTP/NITZ/SMS/MQTT
Wi-Fi	802.11b/g/n 16mbps
Bluetooth	Bluetooth v4.2 BR/EDR and Bluetooth Low Energy (BLE)
GNSS	GPS/GLONASS/Galileo/QZSS

Storage, Processing, Security & RTC	
Inbuilt Storage	16 GB (Expandable up to 256 GB)
Data Security	Data secured via SSL (256-bit, military-grade encryption)
Edge Processing	Powerful edge processor for low-latency local control
RTC	Precise Real time clock

Power	
Voltage	5Vdc -24Vdc
Power consumption	10 watts (Max)

Enclosure	
Dimensions	70mm (L) x 60mm (W) x 35mm (H)
Weight	0.22 lbs. (0.1 kg)
Mounting	Toolless DIN rail mounting / panel mounting / tabletop placement (optional)
Operating Conditions	-30°C ~ +80°C (-22°F ~ +176°F), Less than 90% RH, Startup should be done at above -30°C

Guarantee	
Warranty	Replacement warranty for 1 year

Protection	
Over Voltage Protection, Reverse Voltage Protection, Short Circuit Protection	
Electrostatic Discharge	+/-4kV - EN 6100-4-2
Electromagnetic RF fields	10 V/m 80 MHz - 1 GHz 3 V/m 1.4 GHz – 2.0 GHz 1 V/m 2,0 GHz - 2,7 GHz - EN 61000-4-3
Fast Transients	+/- 1 kV - EN 61000-4-4
Surge protection	+/- 1 kV - EN 61000-4-5

Disclaimer : The details presented in this document are based on our research so far, our experience and knowledge. In case of changes in operating conditions and methods of application, any information given in this document cannot be considered as guarantees and preliminary tests are recommended. For more information, connect with our technical team, they will provide support services.