Kaleidoscope

The **Internet of Things** Platform

2018 Platform Overview

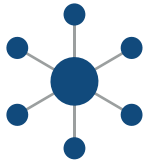kaleidoscopeiot.com

WHO WE ARE

What is Kaleidoscope?

Kaleidoscope is an industrial IT corporation providing enterprises with both the building blocks and an end-to-end IoT platform helping enable the direct integration of IoT into physical assets and devices in the field. Kaleidoscope simplifies the IoT network stack and management layer, lowering the barrier of entry for IoT and enabling complex integrations in the field.

Our platform provides enterprises with a Birds eye view of their organization's infrastructure and assets, delivering key data points, metrics and intelligence to the appropriate organizational units via the Cloud.

The Kaleidoscope Cloud is an "end-to-end" IoT management and data ingestion platform designed to provide enterprises with a single pane, unified view of their organizations infrastructure and data. Our platform works with both Kaleidoscope hardware, as well as many third party hardware and software solutions, providing a base framework for seamless and secure connectivity of IoT devices to the Cloud.

We are an award winning recognized leader in architecting, implementing and managing IoT & AI solutions, driving digital transformation across industries around the globe.

The fragmentation of the IoT market is currently at most points of the IoT value chain.

The market needs inter-operability for the rising demand of IoT in the next decade.

The worldwide IoT market is still in it's infant stages and we are yet to realise many innovations yet to come.

Industries we work with

Our IoT platform already spans several industries and is rapidly growing, we're fundamentally changing the way that many industries connect with their assets, driving digital transformation across enterprise.

WHO WE SERVICE

Our key industries:

Agriculture
The future of farming is "Smart". Offering high-precision crop control, intelligent data collection, and automated farming techniques.

Manufacturing
IoT devices are already improving the efficiency and productivity of manufacturing operations globally.

Building Automation
Smart buildings achieve energy reduction goals and improve resident safety and comfort monitoring.

Pharmaceutical & Health
Increase bed capacity, improve processes, security, and safety all the while continuously building loyal patient relationships

Construction & Mining
The IoT-led journey towards business transformation in Construction & Mining has just begun. By making industries safer, more efficient and more automated, IoT is bringing about positive change in these industries.

Transportation & Logistics
From fleet management, to warehouse & yard management, enterprises are leveraging IoT and Kaleidoscope to drive bottom-line growth and end-to-end visibility with Cloud, Big Data and AI.

Utilities & Alternative Energy
Power grids and generation plants can share information in real time to distribute and manage energy efficiently keeping you the decision makers informed in real time

Smart Cities
A more cohesive and operational city can be attained using IoT gathered data . Fast and responsive decisions can be made improving citizen's quality of life.

Our **Cloud Platform**

More than just data... "A single pane, unified view of your things."

Business Intelligence
Our core Cloud provides embedded Big Data & Analytics to drive business intelligence on the fly, in real-time.

Operations HQ
Monitor your infrastructure with our dashboards and provide alerting to your staff with our automated on-call system based on data driven decisions.

Scalability
You worry about your business, we'll worry about the heavy lifting - Our platform is capable of "auto-scaling" from hundreds of data-point's ingested per minute to hundreds of millions.

Security
Leave the security to the experts, our platform leverages the latest in end-to-end encryption and Blockchain distributed ledger technologies to provide a seamless IoT experience.
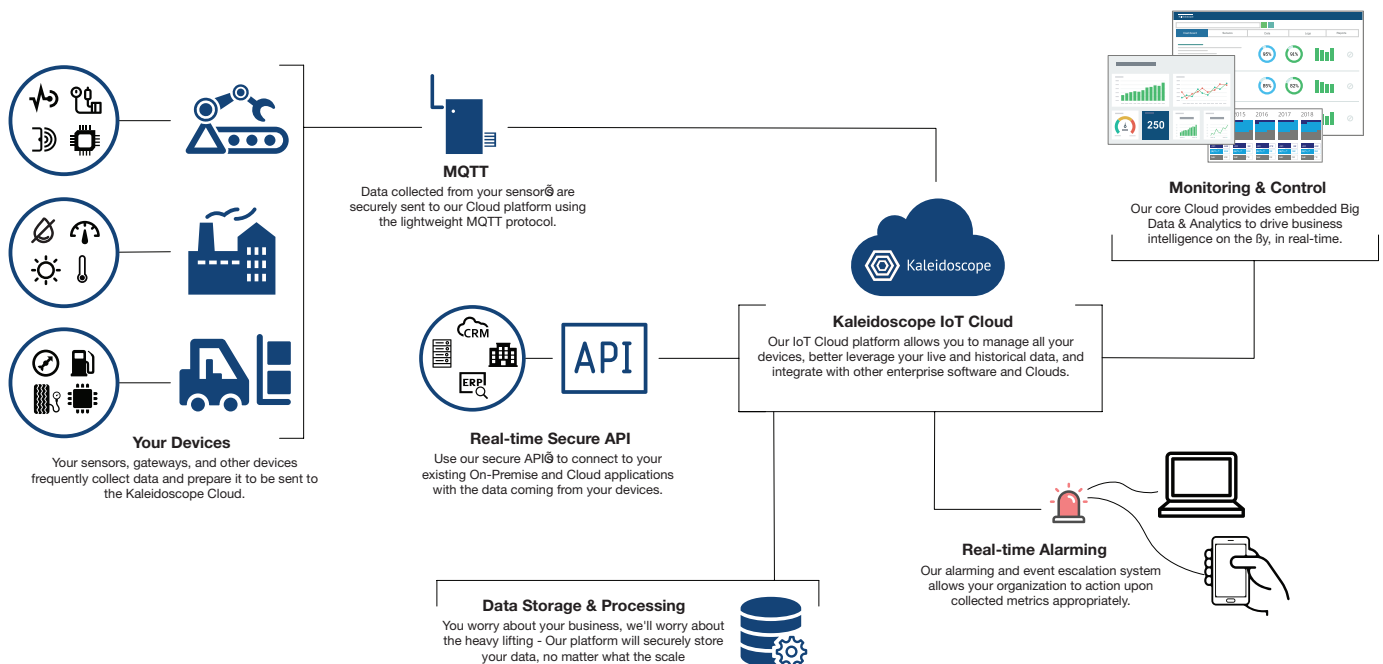
API
Integrate your data to your other Enterprise Application's and Cloud's - Our platform's API allows direct integration to your ERP, EAM, SCM, and more.

Artificial Intelligence
Make data driven decisions on autopilot. Our neural network allows for the training of data ingested by Kaleidoscope to make actionable decisions for your enterprise.

How it works

MQTT
Data collected from your sensors are securely sent to our Cloud platform using the lightweight MQTT protocol.

Monitoring & Control
Our core Cloud provides embedded Big Data & Analytics to drive business intelligence on the fly, in real-time.

Kaleidoscope IoT Cloud
Our IoT Cloud platform allows you to manage all your devices, better leverage your live and historical data, and integrate with other enterprise software and Clouds.

Your Devices
Your sensors, gateways, and other devices frequently collect data and prepare it to be sent to the Kaleidoscope Cloud.

Real-time Secure API
Use our secure API's to connect to your existing On-Premise and Cloud applications with the data coming from your devices.

Real-time Alarming
Our alarming and event escalation system allows your organization to action upon collected metrics appropriately.

Data Storage & Processing
You worry about your business, we'll worry about the heavy lifting - Our platform will securely store your data, no matter what the scale

COST BENEFIT

The cost-benefit of Kaleidoscope is measured in time - Our platform shortens reporting from on-field physical data and API reporting. This allows information to be relayed and accessed quicker both for management and operational decisions.

Our product, the Kaleidoscope IoT cloud-based platform provides executive management and decision makers with accurate and timely data on the condition of the company's infrastructure, assets, and operations in actual time through mobile phone, tablet, or computer in a very secure manner via cloud technology.

Cost effective

The Kaleidoscope Cloud Software as a Service (SaaS) is a fully managed IoT platform which is continuously refreshed with new features and updates in a frequent release cycle. No software to manage and patch, and no specialised R&D teams to operate. By taking advantage of low-cost commodity hardware, Kaleidoscope can help slice your operational and logistical costs whilst increasing organizational productivity and revenue.

Drive business transformation

Transform your business operation results using real-time data; there is no need to settle for random data sampling, missing problems due to staffing resources or unreachable locations. The platform includes support systems that provide Big Data analysis tools for long and short-term business planning and road mapping, procurement and resource management, work programs implementation and monitoring, and reporting.

Open and flexible

The Kaleidoscope Cloud is designed to support open standards-based API integrations. RESTful Web APIs enable integrations with third-party software and systems such as ERP, Payroll & Accounting platforms.

Ongoing management

Our pluggable hardware architecture to allows you to easily deploy and manage IoT devices. Automating on-going tasks like security updates and auditing and patching of devices. Support for writing and deploying to custom sensor code or updating devices to use newer update artificial intelligence models processed in the cloud.

Trusted and secure

We hold the highest standards of security to ensure your data remains private and secure at rest in the Cloud. We utilize the same encryption standards that large banks and finance corporations use for all data moving in and out of the Kaleidoscope Cloud.

Each sensor has it's own secure connection to the Cloud, secured with its own paired certificate; if it gets compromised simply revoke access with a single click.