

Fieldintell Makes Industrial Equipment Monitoring Simple

Case Study

particle.io

Executive Summary



Problem

FieldIntell's original hardware provider failed to continuously upgrade its products and continued to offer a solution that was not compatible with some of their new customer requirements. The team had to decide whether to find a new vendor or build a full-stack IoT platform themselves.



Solution

FieldIntell found Particle's precertified hardware and flexible operating system also came with a robust backend with fleet management and built-in global connectivity that would simplify product development and allow FieldIntell to focus on improving their own cloud platform.



Results

FieldIntell was able to get to market faster with a drastically improved product offering that was easier for its customers to adopt.

The Company: FieldIntell

FieldIntell is an end-to-end cloud platform for managing and optimizing logistics and highly distributed-asset ecosystems. FieldIntell's platform makes it easy for companies in the oil & gas, mining, and agriculture industries to connect, collect, and control information from their remote equipment and assets at any time and from any location. FieldIntell's smart mesh of IoT-enabled devices works in concert to upstream critical edge-data directly to the cloud. Customers have the option to channel IoT metrics directly to their own data centers or use FieldIntell's SaaS cloud solution.

"We're relying on Particle as part of our future. We can expect them to keep us up to date with the latest developments in hardware and communications."

Arturo Gomez

President & CEO @FieldIntell

From 10 Seconds to 1

Reduction in the time it takes to execute a command via Particle vs. another IoT vendor

6 months

Time taken off the product development cycle

Problem

A Hardware Vendor That Failed To Innovate

FieldIntell initially developed its connected solutions with modems from a hardware-only vendor. FieldIntell was at a crossroads because the vendor hadn't updated its hardware in years, so it was becoming obsolete.

FieldIntell serves customers in the oil and gas, mining, and agriculture industries. They needed to be able to ensure stable connectivity of remote assets, push updates over the air, and enable remote control of complex assets. The current solution wouldn't allow FieldIntell to keep up with the demands of customers in these industries.

Art Gomez, President and CEO of FieldIntell, knew that he had to cut ties with the vendor. He needed another solution that would allow his team to continue innovating and differentiating themselves in the industrial asset monitoring market.

"At the time, it was stressful. I was like 'Oh, now I have to either find a new vendor or build my own modem,'" Art said.

The DIY option felt like a nonstarter for Art. It would add significant time to the product development cycle, and would force his team to focus their efforts on developing IoT hardware, connectivity, and software instead of on solving customer problems.

That was when a chance meeting with Particle's leadership team at a conference changed the trajectory of FieldIntell.



Solution

Fieldintell Finds Immediate Value In Particle's Platform

Art needed a quick solution. He was at an IoT conference when he met Particle's leadership team, and it seemed like a viable solution for his problem. Further meetings and platform tests confirmed his impression.

"Once we felt comfortable, we started designing a new board that we could put the Particle module on. We needed to reduce our dependence on our old supplier," Art said. "That was a game-changer for us. It wasn't just about the hardware component. Because Particle's operating system isn't as rigid and predefined as many other suppliers, we could gain a lot of efficiencies from building more software features our way."

Particle's global connectivity also took negotiating with carriers across multiple countries off FieldIntell's plate.

"In terms of scalability, Particle's connectivity collapsed the work we would need to scale considerably," Art said. "They have great partnerships with carriers across North America, and they take care of almost all of the certifications. It probably takes over 50 percent of the certification work away from us."

That connectivity would make it much easier to serve customers with remote assets, which is nearly all of FieldIntell's customer base. Being able to always see uptime and signal strength gave FieldIntell high levels of visibility into their devices, which would increase their credibility with customers.

"Particle has done most of the hard work for us to deliver a reliable solution," Art noted.

Results

Faster Time To Market and a More Sellable Product

Taking Six Months Off The Product Development Cycle

Particle's continued innovation on its hardware and development platform makes it much easier for FieldIntell to build new features and improve its core offering. It gets them to market faster and with more confidence in their product.

But it was Particle's certified hardware that made the difference for FieldIntell's speed to market.

"They took over a lot of the heavy lifting on the certification, so we could quickly do the rest and get Particle integrated into our existing platform really quickly, Art said. "I would say that took about six months off of the product development cycle and launch."

Creating 'Aha' Moments for Prospects and Customers

The rapid pace at which Particle's platform could execute commands made selling FieldIntell's solutions much easier. Most of their customers don't care about the intricacies of IoT. They just want something that works and makes their companies more efficient.

With Particle, FieldIntell doesn't have to tell prospects and customers how great the product is. They can just show it to them.

"We were able to collapse the execution of commands from seven to ten seconds to one second," Art said.

It's vital for companies with valuable remote assets to be able to control equipment remotely. This helps them manage their assets without requiring expensive service trips or adding headcount.

"When you go to a customer and show the solution on your phone - you turn on or throttle a pump, or you show some activity - and it happens immediately without a hitch, it's an absolute game-changer," he added.



Results

Faster Time To Market and a More Sellable Product

Making IoT Simple to Adopt

Most of FieldIntell's customers don't care about the intricacies of IoT. They just want something that connects their assets and makes their companies more efficient and profitable.

Because Particle simplified FieldIntell's solution, their sales team has a much easier time demonstrating the value of the platform for people in industries that have historically been slow to adopt new technology.

"We now have turnkey solutions for how our customers install the devices. In addition to that, our data plans are incredibly simple," Art said. "It takes all the intimidation out of the picture and makes it easier for them to adopt it."

The simplicity of Particle's platform gets passed on to FieldIntell's end user, and that's what makes the product much more compelling for them as they evaluate solutions.

"The future is going to be how our customers use the data they gather to really change their operations and gain efficiencies," Art said. "We allow them to analyze more areas of their business and find what's valuable to them."

Keeping FieldIntell at the Forefront of IoT

FieldIntell can continue to build solutions on top of Particle's platform knowing that the difficult infrastructural parts of IoT will always be taken care of.

"We're relying on Particle as part of our future. We can expect them to keep us up to date with the latest developments in hardware and communications," Art said. "With things like the introduction of 5G and eventual sunset of LTE, we know Particle will just handle it for us."

The same goes for the data management and security side of IoT as well. Art feels that he can stay focused on solving his customers' problems while Particle ensures he's always competitive on the features that form the foundation of his platform.

Work with Particle

Particle has helped market leaders and innovative new companies alike bring IoT projects to life for over a decade. What makes our platform different?

Secure and reliable

End-to-end encryption from hardware to connectivity to cloud, with SOC II and GDPR certifications, public/private key authentication, open event logging framework, encryption at REST, encrypted API messages, and firewall protection.

Scalable

We've helped connect and launch hundreds of thousands of devices, with a fully managed cloud infrastructure processing billions of messages a month and zero planned downtime.

Upgradable

Wirelessly reprogram your fleet of vehicles in the field with our over-the-air (OTA) software updates without any hardware or software scalability issues, and add product features, improve bugs, and avoid vehicle disruption with the push of a button.

Open

Use our APIs and open, referenceable system architecture to access and share vehicle data to multiple different stakeholders of your choosing or integrate seamlessly into existing software architecture without any security hassles.

Global Connectivity

Our IoT-specific SIM card is built into our hardware and is powered by over 350 carriers around the world that automatically connect to the best networks across 2G, 3G, and LTE technologies, designed to make IoT cellular management simple and unified.



All-in-one

A pre-configured network and applications so devices remain online



Secure by Default

End-to-end encryption, limited attack vectors, a firewall-protected cloud, and more



Scalable Infrastructure

Sensor hardware are cloud platform that works the same from your first prototype to your millionth unit



Domain Experts

Developer community, support, & engineering services ready to assist



Data Autonomy

Put your data where you want - integrate with AWS, Azure or anything with a REST API





About Particle

We love helping game-changing industrial monitoring companies build better-connected products, get to market faster, and win in competitive markets.

Speak to an expert today



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