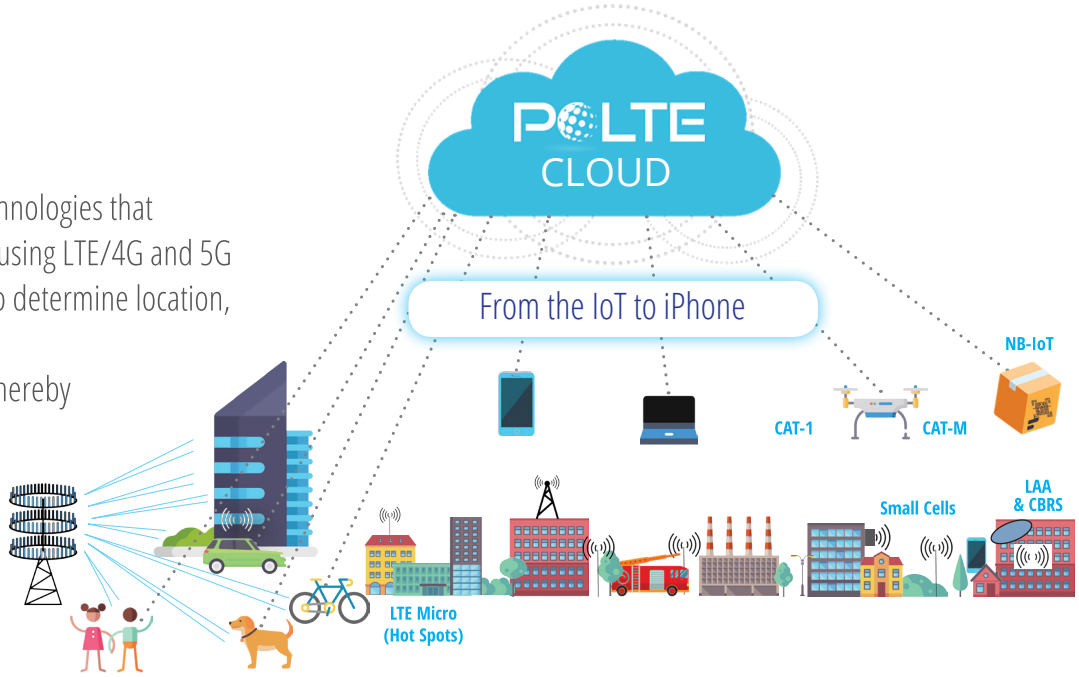
PRODUCT SUMMARY

PoLTE provides cloud-based location technologies that seamlessly track IoT and mobile devices using LTE/4G and 5G networks. By utilizing cellular networks to determine location, PoLTE enables device manufacturers to eliminate the need for multiple radios, thereby enabling the longest battery life, smallest device size and lowest cost. No other solution can deliver better uninterrupted location coverage and accuracy as objects travel between indoor and outdoor environments.



Patents include the network side of location determination.

COMPANY HISTORY

PoLTE is a privately-held corporation headquartered in the Dallas suburb of Richardson, Texas. In early 2018, PoLTE closed an over-subscribed funding round of $6M in a private placement.

PoLTE has 27 issued patents and 38 pending applying advanced radar location techniques to 4G and 5G radio signals to determine precise object location. With over 200 years of cumulative experience in wireless, telecommunications, radar, embedded devices and engineering, PoLTE employs a staff of 14.

MANAGEMENT TEAM

Thought leaders who provide strong management and deep experience across technology markets.

Ed Chao, CEO
- 26 years in wireless industry - Bell Labs, T-Mobile
- 3 patents in mobile technology

Russ Markhovsky, President/Founder
- 15 years in location space
- 12 patents in location technology

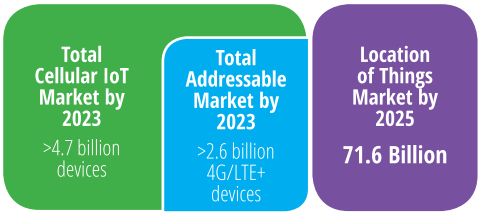
Robert Wondoloski, SVP Product Development
- 26 years in wireless engineering - MetroPCS, IoT
- 3 patents in LRE/Wireless Technology

Truman Prevatt, Ph.D., Chief Scientist
- 40 years in Radar, Signal Processing
- Algorithm Development - military/public sector

Steven Sherman, CFO
- 30 years CFO experience in telecom/technology
- Executive leadership at multi-national firms

MARKET OPPORTUNITY

As more use cases demand location as part of the solution, the market opportunity projections for cellular-connect IoT continue to be revised upward.



Cellular IoT - Growing Global Addressable Market Opportunity

DISRUPTIVE TECHNOLOGY

PoLTE's patented location solution changes the landscape for the cellular connected IoT and mobile device ecosystem. By utilizing the LTE/4G & 5G networks to determine location, PoLTE enables device manufacturers to eliminate the need for multiple radios, thereby reducing power demands, shrinking device size and lowering costs. By handing off computations from the device to the cloud, this solution is more than 25 times more power efficient than GPS for initial fixes and 3-4 times more efficient than other cellular-based location solutions. Using PoLTE's patented Super Resolution, this platform delivers the best location accuracy available utilizing only the cellular network.

Near instantaneous fixes – sub 1 second – enable the growth of new use cases, which will increasingly demand the least amount of latency possible.

With location information determination done in the cloud, PoLTE's solution provides a powerful data platform that enables advanced analytics and machine learning. Deeper insights are achieved by aggregating the signal information gathered from all devices connected to the PoLTE Cloud.

USE CASES

With ubiquitous location available for deployment, the use cases are endless for high-value asset tracking and enterprise applications. More information allows for better decision making all along the value chain. From the manufacturing floor to the end user, or the farm to the table, having location information allows for an entirely new set of applications that enable increased productivity, open new revenue streams, and enhance the human experience.

ASSET TRACKING

Getting product from the manufacturer to the end user requires multiple steps from door to door. From a giant warehouse in California, a dump-truck manufacturer can use a location sensor on a truck from the time it rolls off the assembly line while it's still inside the warehouse, then track it as it's loaded onto a flatbed truck, which takes it to a train yard to be shipped 1,000 miles away to the commercial construction company that purchased it. All along its journey, this dump-truck can be tracked, allowing the construction company to manage projects and crews more efficiently by understanding exactly when this new truck will arrive.

Once deployed in the field, the construction company can continue to track the location of the dump-truck and schedule the redeployment of the truck and applicable crews for the next job.

SHIPPING TRANSPORTATION

Millions of shipping containers travel around the globe transporting both hard goods and perishable products. Picture a shipping company that employs location-based technologies by using sensors that can detect moisture, temperature or velocity – or whatever criteria is demanded by the products being shipped. The shipping company can now not only track where the shipment is geographically but can also track if a refrigerated container is above a certain temperature, or if there is an abundance of moisture in a container that should be dry and air-tight.

Location-based technologies also allow the shipping company to more closely track where the containers are in relation to where new loads of cargo waiting to be shipped are located. The data sets from these applications can be paired with external data to understand how to more efficiently manage fleets of containers.

INDUSTRY 4.0 INDUSTRIAL IoT

The manufacturing industry is transforming with the advent of IoT applications, including predictive maintenance and asset tracking, not to mention the analytics that is generated through automation. Consider a huge factory floor with an assembly line that is fully automated, which communicates with maintenance crews when certain conditions flag a need for attention. Using location sensors, the maintenance crews can immediately locate each other, tools needed, understand the potential problem and find the exact location that needs maintenance. Utilizing the data generated from these communications allows future episodes to be addressed before they create a work stoppage.

PUBLIC SAFETY

Recent disasters, along with new E911 services, have put a focus on public safety applications, especially relating to location information. Consider the consequences of an earthquake and a building collapse in which people are trapped inside, or a flood that leaves people stranded either outside or inside a structure. Or an emergency where the patient might be incapacitated after contacting 911 services. The ability to quickly locate someone in peril can save precious minutes as well as save lives.

AGRICULTURE

Farms and ranches have used autonomous tractors for a few years, but the emergence of broadly available and less expensive location solutions gives rise to a completely new set of agricultural applications. Consider livestock health and the ability now to monitor the heartrate of a cow close to birthing a calf and her precise location, or the location of a feed truck when sensors indicate which troughs are close to empty, so feed deliveries can be rerouted to those troughs first. Location sensors can relay data on soil moisture in a given location to re-direct an irrigation system on where to focus its next watering cycle.

WEARABLES

From Fido to a Fitbit®, location information enables an entirely new set of applications for consumers to enjoy and business owners to utilize in promoting their products and services. The ability to track wearable devices inside to outside without missing a beat enables device manufacturers to create an endless array of form factors for new applications in the location market. And with extended battery life, consumers will not have the inconvenience of having to recharge every day.

PoLTE Corporation
polte.com
info@polte.com