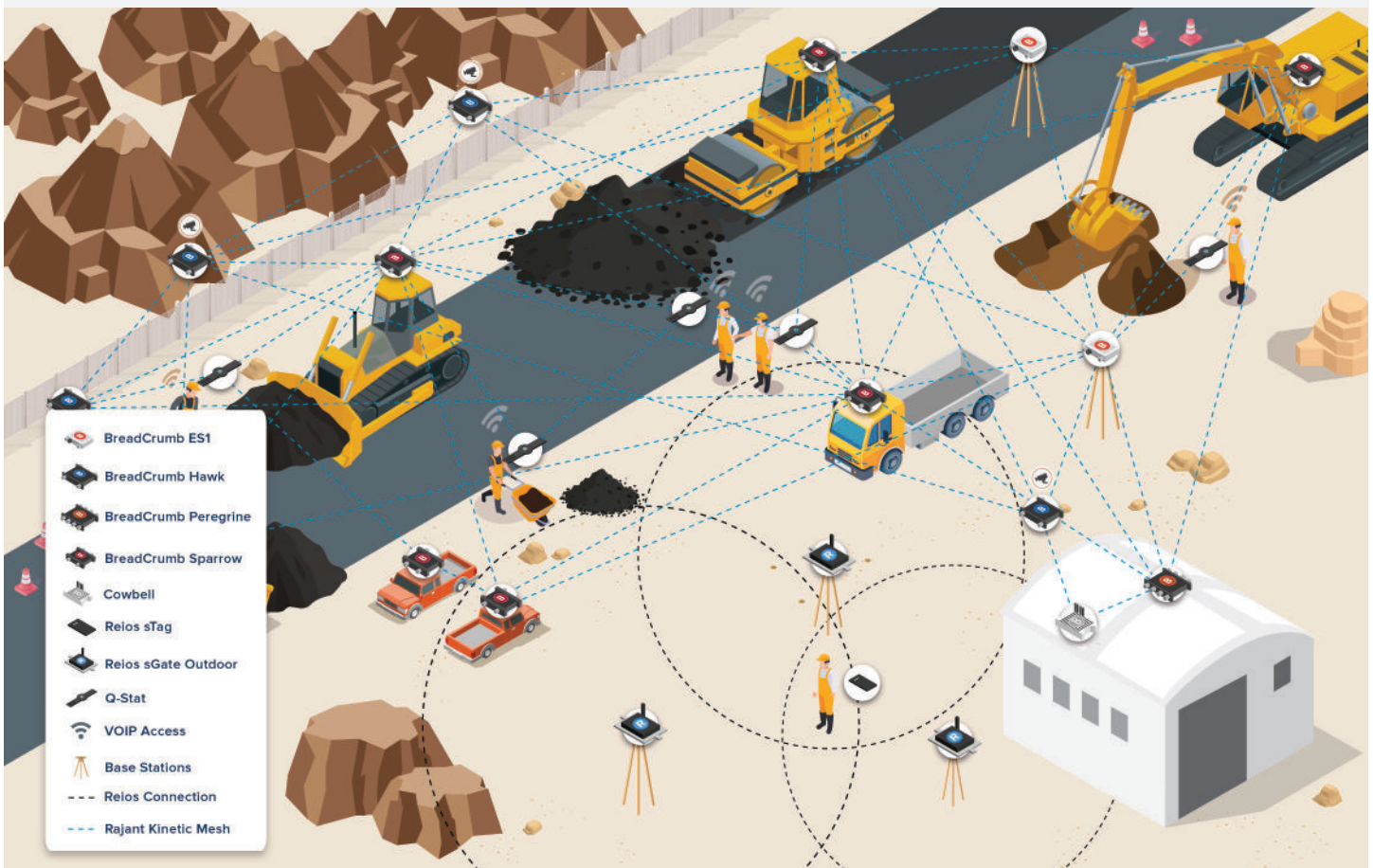# RAJANT

Rajant **Intelligent Edge**: Transforming Heavy Construction with **Seamless Integration**

Rajant Kinetic Mesh networks deliver seamlessly integrated solutions, empowering heavy construction sites to overcome connectivity challenges and enhance safety, productivity, and efficiency.

Seamlessly Integrated Mobility: Solving Jobsite Challenges

Heavy construction sites face unreliable networks, survey errors, and safety risks. Rajant's BreadCrumb® nodes, Reios tracking, and Q-stat analytics provide an intelligently integrated network that ensures real-time performance and scalability without LTE or Wi-Fi limitations.

- Eliminate Connectivity Issues: Instant, reliable private network with no dead zones or dropped data, supporting Terminal Operating System (TOS)-like functionality for construction.

- Reduce Survey Errors: Extended base station range minimizes survey grid mismatches, streamlining model creation.

- Enhance Safety and Productivity: Real-time Reios people and asset tracking and Q-stat analytics improve worker safety and site oversight.

Legend:
- BreadCrumb ES1
- BreadCrumb Hawk
- BreadCrumb Peregrine
- BreadCrumb Sparrow
- Cowbell
- Reios sTag
- Reios sGate Outdoor
- Q-Stat
- VOIP Access
- Base Stations
- --- Reios Connection
- --- Rajant Kinetic Mesh

Rajant Intelligent Edge: Enabling the Smart Construction Site

Rajant's integrated seamlessly network powers smart jobsites, supporting video streaming, remote machine guidance, and real-time telemetry for autonomous operations and operational efficiency.

- **Support Real-Time Applications:** High-capacity network enables live video surveillance and telemetry from remote sensors for proactive decision-making.
- **Enable Remote Machine Guidance:** Seamless M2M communications support precise control of heavy machinery, reducing wear and tear.
- **Scale with Ease:** Self-optimizing Kinetic Mesh adapts to changing site conditions, requiring minimal technical resources.

Seamlessly Integrated Innovation: Driving Safety and Cost Savings

Rajant's ruggedized BreadCrumb nodes, Reios, and Q-stat deliver a unified solution, reducing risks and costs while enhancing jobsite performance.

- **Boost Safety:** Reios man-down alerts and Q-stat analytics enhance worker safety and site security, preventing theft and vandalism.
- **Save Time and Money:** Fewer survey grids and faster model creation cut downtime and errors, saving costs.
- **Future-Ready Scalability:** Supports next-gen applications like drone-based mapping and autonomous machinery with Cowbell Edge AI.

Seamlessly Integrated Innovation: Ensuring Worker Safety and Jobsite Efficiency

When Rajant's partner SITECH was approached by a heavy construction customer seeking a network solution to reliably cover an extensive, remotely located jobsite, they knew Rajant's technology was up to the task.

The site had no existing LTE or 2-way radio service available, and no nearby reference station to tap into. SITECH deployed a Kinetic Mesh network was tied into the Internet as the jobsite and built a network out to cover the entirety of the project which spanned nearly 40 linear miles. What would otherwise have required 10-15 base stations - each with its own survey grid that would need to be reconciled with the next grid - was able to be covered with two base stations and two survey grids.

This saved significant time for the surveyors and model builders as well as resulted in a huge reduction of risk. Because the jobsite is remote, there is no LTE coverage, and because the terrain is so varied, push-to-talk would not work either. Fortunately, the customer's employees are able to communicate via WiFi calling a smart employee to cover a recent Kinetic Mesh network. This provides worker safety and accelerates productivity.

Rajant Kinetic Mesh: The Network with the Strength to Stand Up to Heavy Construction Demands

Discover how Rajant's seamlessly integrated solutions transform your jobsite. Visit rajant.com/heavyconstruction to get started.

Tel: **484.595.0233** | **www.rajant.com**

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