PORTABLE EDGE DATA CENTER

Solution Brief for Remote Field Operations

Redefining Field Mission Capability

Compute Anywhere. Sync Everywhere. Operate Without Limits.™

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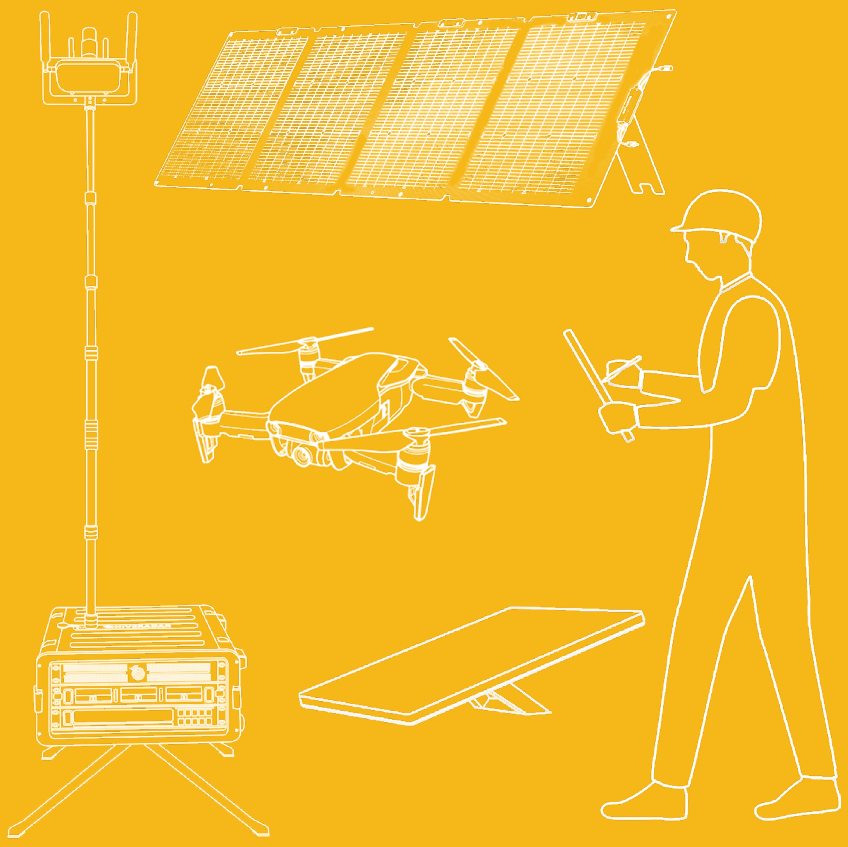
Redefining Field Mission Capability

Overview



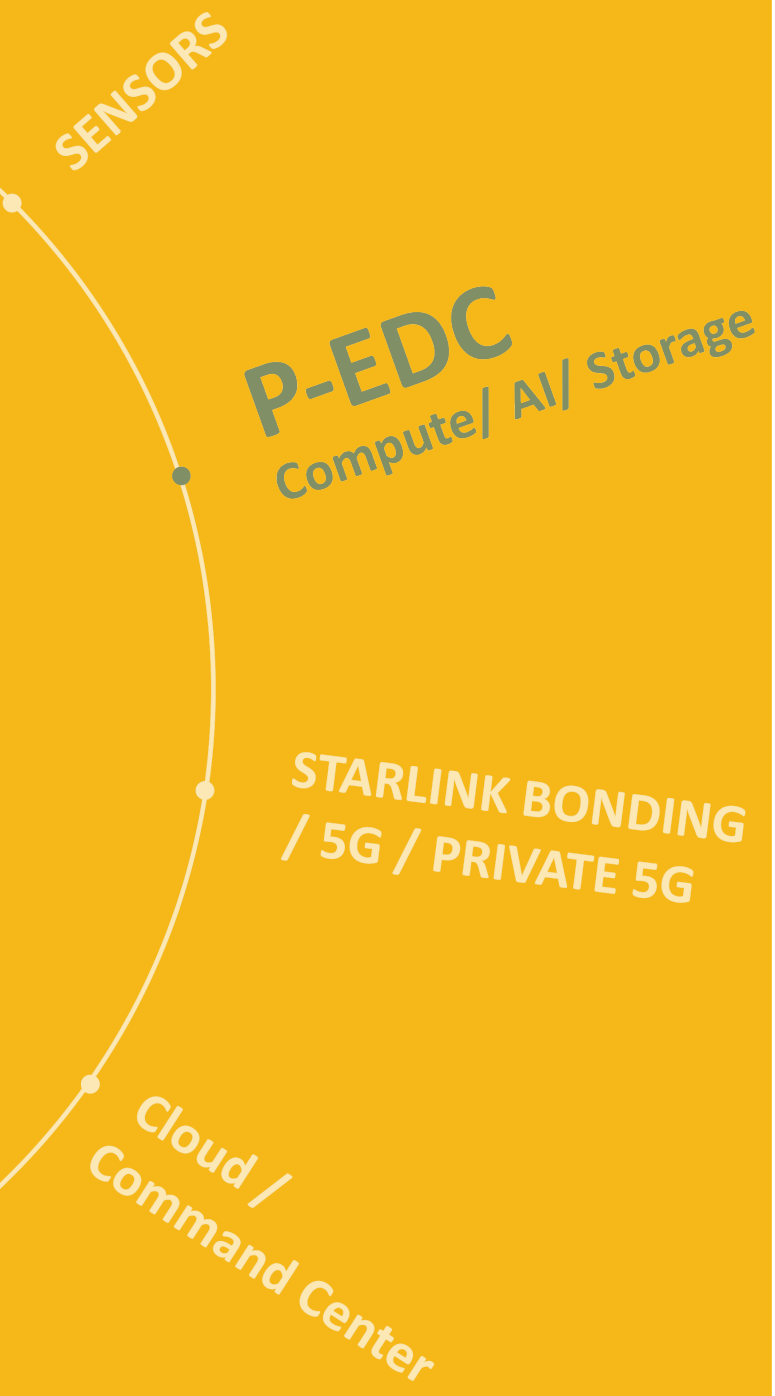
The HiveRadar Portable Edge Data Center (P-EDC) delivers full-scale data center capability in a single rugged, portable unit, built for demanding field environments where traditional infrastructure does not exist.

It unifies compute, storage, networking, and connectivity so remote teams can securely collect, process, and synchronize mission-critical data anywhere on Earth.

Even in the absence of cellular networks, the P-EDC includes integrated Starlink storage for rapid deployment. With HiveRadar's optional bi-directional aggregation technology, multiple Starlink units and 5G gateways can be bonded to provide high-bandwidth, resilient connectivity with static IPs and end-to-end encryption - ensuring uninterrupted data flow between remote sites and command centers.

The system also supports local high-throughput wired or low-latency wireless connectivity for field teams, enabling seamless collaboration and device access. Connectivity can be further enhanced with Private 5G cellular networks, deployed through HiveRadar's technology partners, for secure, scalable field communication grids.

Core Capabilities



AI Supercompute (coming soon)

- Powered by NVIDIA GB10 processors for high-performance inferencing and modeling in the field.
- Execute AI workflows - object detection, environmental modeling, pattern recognition - without cloud connectivity.
- Enables autonomous decision-making, on-site analytics, and real-time situational awareness.

Cloud Sync & Centralized Storage

- Eliminates the need for personal drives or external storage devices.
- Automatically synchronizes data to the cloud once connectivity is established.
- Ensures version control, redundancy, and data security across distributed missions.

Multi-Link Connectivity & Encryption

- Bonds multiple Starlink Mini and 5G connections for greater bandwidth and resilience.
- Provides static IP addressing and encrypted VPN tunnels for secure global access
.
- Designed for seamless interoperability with HiveRadar's Private 5G partner ecosystems.

Off-Grid Power Ecosystem

- Ultra-efficient low-power design.
- Integrates with HiveRadar Smart Battery Systems, Solar Arrays, and Dual-Fuel Generators.
- Optional Portable Air-Conditioning Modules maintain stability in harsh conditions.

Edge Compute

- Centralized compute and storage for field operations.
- Process telemetry, drone, and sensor data locally, reducing latency and backhaul costs.

Rugged & Rapidly Deployable

- Weather resistant, shock-resistant, and field-tested.
- Deployable in minutes.

USE CASE SCENARIOS

Exploration & Research Teams

Geological, Geochemical & Archaeological Surveys

Process survey and mapping data on-site. Aggregate drone imagery and telemetry locally; sync securely to remote labs and data repositories.

Flora & Fauna Studies / Biodiversity Projects

Collect camera trap, drone, and sensor data to classify species, monitor habitats, and detect environmental changes in real time.

Ocean & Marine Exploration

Operate as the nerve center aboard research vessels, aggregating sonar, ROV, and telemetry data. Provides onboard analytics and real-time satellite synchronization for marine research or fisheries monitoring.

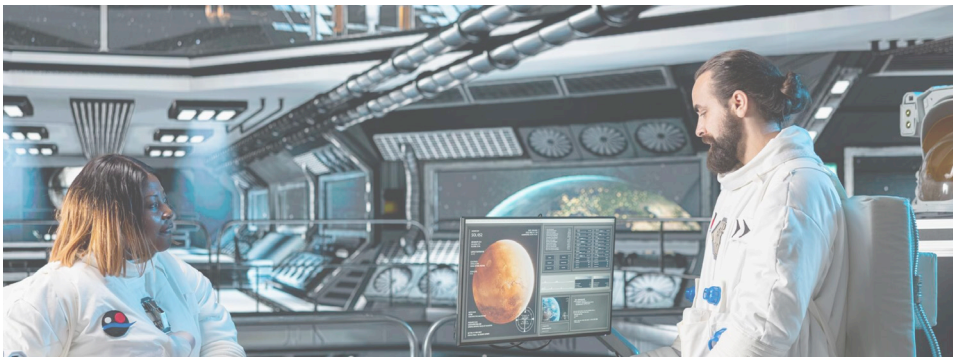
Exploration & Research Teams

Polar & Arctic Missions

Maintain autonomous command, communication, and data processing capabilities in low-temperature and low-infrastructure zones.

Adventure & Extreme Journeys

Enable mountaineering, volcanic, and desert operations with local edge compute, secure communications, and high-speed team connectivity.



Space & Off-World Siulation Bases

Support lunar and Mars simulation environments with onboard AI and networking - replicating autonomous base operations in hostile, infrastructure-free terrain.

CONCLUSION

The HiveRadar P-EDC redefines what's possible for remote operations - delivering AI-ready computing, resilient connectivity, and secure cloud synchronization in one portable, ruggedized system.

From polar research bases to deep-sea vessels and expeditionary camps, it fuses

THE POWER OF THE CLOUD, THE INTELLIGENCE OF AI, AND THE RESILIENCE OF THE EDGE.

CONTACT US

TO SCHEDULE A DEMO,
proof of concept, or trial deployment
tailored to your operational needs.

Instant Edge: Deploy. Connect. Compute.™

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