

DATASHEET

Unwired Edge Compute.

Feature List 2025/07/31

Scalable, secure container orchestration for fleet-managed industrial edge devices

Unwired Edge Compute brings cloud-native application orchestration to the edge—supporting everything from lightweight Docker runtimes on embedded devices to full Kubernetes clusters on advanced vehicle routers.

Designed for bus and rail environments, it enables reliable and secure container execution, configuration, and monitoring across large-scale fleets.

Container Runtime & Virtualization

- Supports any OCI-compliant container
- Runtime isolation and per-instance configuration
- LAN/WAN bridging and CloudLink uplink bonding
- Persistent storage and system resource constraints
- Native access to vehicle hardware interfaces

Flexible Orchestration

- Fleet-wide container rollout and versioning
- Lightweight mode and full Kubernetes support
- Application lifecycle decoupled from device OS
- Orchestration APIs for CI/CD pipelines

Use Cases

- Passenger Information & Onboard Services
- Video Surveillance and Analytics
- Occupancy and People Counting
- Custom OT integrations with CAN, GPIO, NPEs

Technical Highlights

- Linux-based secure Network OS
- Automated subnetting for multi-role devices
- Roaming and WAN redundancy with CloudLink
- Per-container API key injection with scoped access
- Time sync validation (RTC + system)

Monitoring & Deployment

- Metrics via OpenMetrics API
- CDN-backed container distribution
- Health monitoring and automatic rollback
- Registry support: GCR, GHCR, private repos