



## Lantern Tracking Application

Lantern Tracking Application uses certified products supported by software built on distributed microservices, allowing for containerization, automated testing and delivery via CI/CD pipelines, and relational and NoSQL databases. The software is optimized for cloud networking.

- Can be high availability
- Designed to run on premise – additional functionality unlocked when connected to the cloud
- Designed to be scaled across multiple sites
- Ease of integration
- Modern software delivery methods
- Competitive pricing with hardware retailing up to 90% lower than competitor products.

Examples of tracking uses include:

- Enhanced worker safety in environments with extreme and challenging physical conditions
- Improved worker productivity through the removal of inefficient manual muster exercises
- Real-time visibility of on-site personnel and infrastructure through IoT connected devices
- Self-healing stand-alone networks that require little maintenance in extreme conditions

### Lantern Tracking Application Specifications<sup>1</sup>

#### Tracking specifications

Maximum sensor density:	1,000 per cubic meter
Maximum device (Sensor/Router) count:	25,000+
Maximum number of hops in mesh:	30+
Multi-gateway support:	Yes
Mesh networking protocol:	Wirepas
Tracking technique:	Multi-lateration
Tracking accuracy:	Min 3m

<sup>1</sup> Specifications listed here may be subject to change



Tracking update rate:

Programmable (30sec – days)<sup>2</sup>

### Application features

View sensor positions on private maps:	Yes
Site and location occupancy reporting:	Yes
Site radio silence mode during explosives handling:	Coming soon
Go/No-go zones:	Yes
Alarms and notifications:	Yes
Personnel record management:	Yes
Exportable data:	Yes
3 <sup>rd</sup> party integration supported:	Yes
System monitoring and logging:	Yes

### Hardware management

Sensor firmware over the air updates:	Yes
HarshPro™ Router / HazPro™ Router firmware over the air updates:	Yes
Secure server-device wireless communications:	AES 128 Encryption
Device telemetry data reporting:	Yes
Mesh network diagnostic tools:	Yes
Desktop support:	Chrome browser
Mobile device support	iOS/Android OS – Chrome browser

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<sup>2</sup> Tracking update rates are subject to mesh network capacity planning