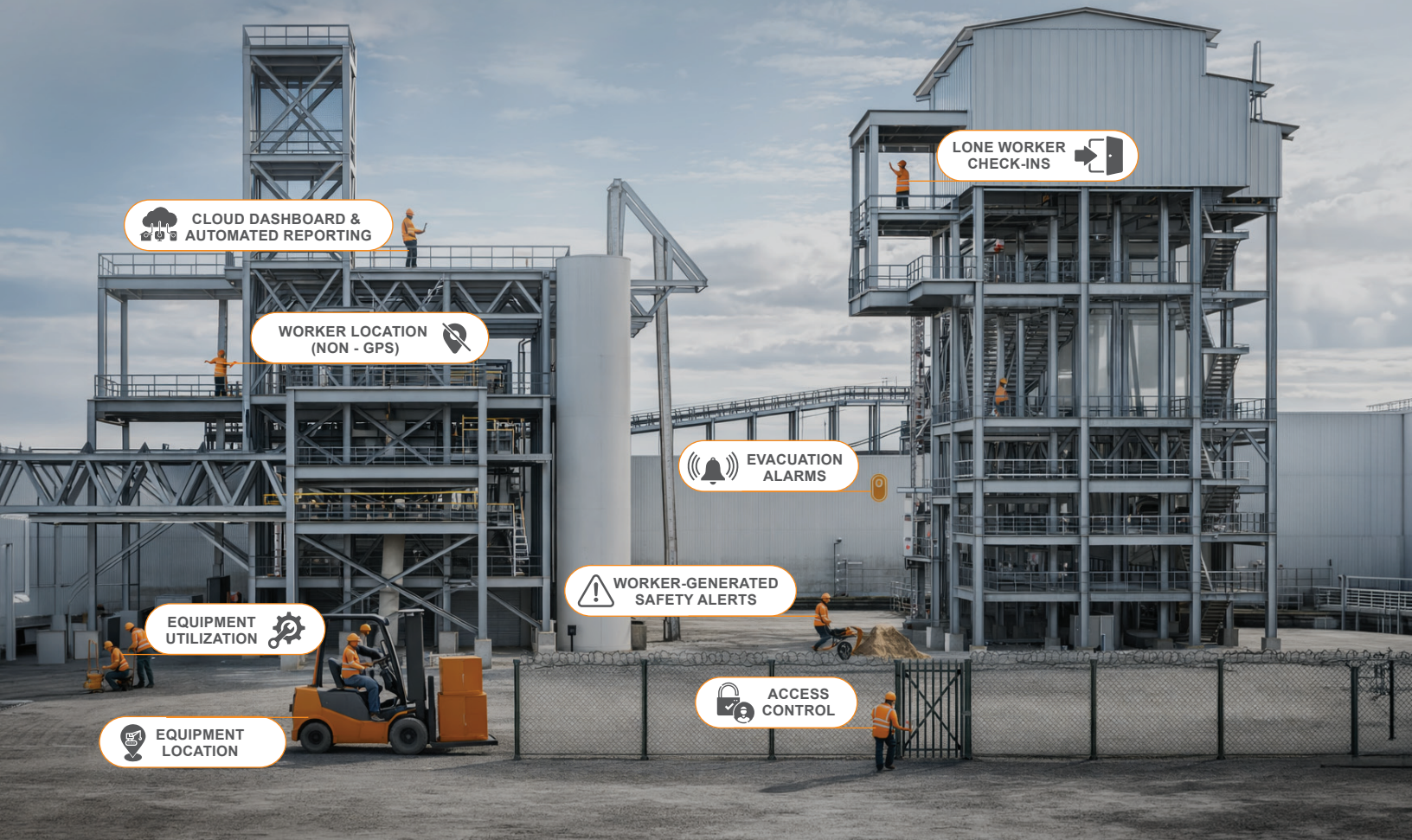




RTLS CONNECTED WORKER

**Simple to Deploy.
Safer Sites.
Smarter Decisions.**

Invixium's RTLS Connected Worker Solution delivers innovative, purpose-built technology for rugged environments, helping industrial and construction sites optimize labor, enhance resource allocation, and improve safety and productivity. By capturing hard-to-obtain data and transforming it into actionable insights, the solution enables smarter, more informed decision-making. Recognized as a leader in the emerging RTLS market, it stands out for its highly scalable network and the maturity of its product offering.

FEATURES

Invizium's RTLS Connected Worker Solution stands out for the use cases in outdoor, hazardous environments, with a minimum number of sensors. Where our solution has the edge:

- Low-tech, low-cost hardware
- Intrinsically safe certified hardware available, which is mandatory in the oil & gas industry
- Proprietary sub-GHz communication protocol
- No limitations on the number of devices
- Ease of installation
- Long battery life
- Ruggedness of products
- Proven solution with live sites and actual results

The solution is ideal for multiple industries, including energy, construction, heavy industrial sites, and mining. Across your worksite, a range of RTL sensors (tags) collect data and transmit it to our cloud-based software, Spot-r, over a standalone network independent of your internal IT infrastructure. You gain near-real-time insights into the activity and progress on your site. Analyze productivity pinch points, track equipment utilization, and reduce response time to safety incidents in the event of an emergency. Control costs, speed up progress, minimize risk and waste, and discover a safer, more productive jobsite.



BENEFITS

This solution provides hard-to-capture data and delivers it in an actionable format to empower better business decisions. This data can be used to create a safer and more productive workforce.

Worker Safety

↓ **60%**
Injury
Claims Rate

↓ **70%**
Time to
Safety

7 mins To evacuate the oil field & muster at assembly points

- Emergency Response
- Lone Worker Protection
- Digital Evacuation & Mustering
- Real-time Location of Workers
- Performance Analytics
- Worker Down Alerts

Equipment Utilization

30% Budget Returned on Under Utilized Fleets

↑ **\$\$\$** Savings from efficient equipment management

- Optimize Equipment Usage
- Equipment Inventory Cost Controls
- Real-time Location of Equipment
- Validated Contractor Billing
- Measure Utilization (Run-time vs Idle)

Labor Productivity

↑ **10%** Increase in Productivity

↑ **\$\$\$** In Labor Gains (Time on Tool)

- Contractor Cost Controls
- Onsite / Offsite Timestamps
- Productive vs Non-Productive Presence
- Crew & Craft Mix Analytics & Alerts
- Continuous, Real-Time Tool Time Analytics & Actions

WEARABLE TAGS

The Tag is designed for flexible and rugged use, available as a wearable with a lanyard or with an optional sleeve and belt clip for added convenience. It is also offered in an intrinsically safe version for hazardous environments. The device communicates with a Gateway using a proprietary, patented mesh network protocol operating on sub-GHz frequencies between 868MHz and 915MHz, delivering exceptional accuracy and reliability that cannot be matched by BLE, GPS, or UWB technologies. For worker safety, the Tag is equipped with an emergency push button and fall detection, and it features an integrated rechargeable battery that supports a long operational life of approximately 3 to 4 months on a single charge.



Mounting	Belt mount	Lanyard mount
Dimensions	3.1" x 2.1" x 0.9" (8.0 cm x 5.5 cm x 2.4 cm)	3.1" x 2.1" x 0.6" (8.0 cm x 5.5 cm x 1.5 cm)
Weight	2.3 oz (66 g)	
Battery Type	1,000mAh LiPo, integrated short-circuit & under-voltage protection	
Battery Life	Extended battery life; months between recharging	
Sensing	Temperature, barometric pressure, accelerometer	
Radio Freq.	US 915 MHz ISM band (optional EU 868 MHz), frequency-hopping spread spectrum	
Op. Temp.	-4°F to 140°F (-20°C to 60°C)	
Environment	Designed to meet IP67 standards; highly durable; water & dust resistant	

EQUIPMENT TAGS

The Tag utilizes the same core technology as the wearable version but is housed in a magnetic enclosure that transforms it into an equipment tag for tracking utilization. It is also available in an intrinsically safe variant for hazardous environments. The device communicates with a Gateway using a proprietary, patented mesh network protocol operating on sub-GHz frequencies between 868MHz and 915MHz, ensuring exceptional accuracy and reliability beyond what BLE, GPS, or UWB can achieve. It features an integrated rechargeable battery with a lifespan of approximately 3 to 4 months on a single charge and can be seamlessly installed on equipment using high-intensity magnets for secure attachment.



Mounting	high intensity magnets (<i>i.e. Slap-and-Track</i>)
Dimensions	3.4" x 2.5" x 1.4" (8.6 cm x 6.4 cm x 3.6 cm)
Weight	3.5 oz (100 g)
Battery Type	1,000mAh LiPo, integrated short-circuit & under-voltage protection
Battery Life	Extended battery life; months between recharging
Sensing	Temperature, barometric pressure, accelerometer
Radio Freq.	US 915 MHz ISM band (optional EU 868 MHz), frequency-hopping spread spectrum
Operating Temperature	-4°F to 140°F (-20°C to 60°C)
Environment	Designed to meet IP67 standards; highly durable; water & dust resistant

GATEWAYS

The Gateway is available in both standard and intrinsically safe versions, making it suitable for a wide range of environments. It serves as the central communication hub by collecting data from Tags and transmitting it to the Spot-r software platform for real-time location tracking and monitoring. The Gateway supports multiple communication options, including cellular (the preferred method), Wi-Fi, and Ethernet, offering flexibility based on site requirements. It can be powered through an AC adapter or a solar panel, enabling deployment in both powered and remote locations. Additionally, it can be seamlessly installed across various internal or external locations using high-intensity magnets for secure and convenient mounting.



Mounting	Wall, fence, pole mount via high-intensity magnets <i>(mounting should not be higher than 6 ft. from the ground plane)</i>
Dimensions (without antenna)	5.3" x 4.5" x 2.8" (13.5 cm x 11.4 cm x 7.1 cm)
Dimensions (with antenna)	11.2" x 4.5" x 2.8" (28.4 cm x 11.4 cm x 7.1 cm)
Weight	22 oz (624 g)
Power Input	12VDC, 2A line-in (optional solar kit available)
Battery Type	(2) 8,000mAh LiPo cells, integrated short-circuit, thermal, and under-voltage protection <i>(backup only)</i>
Battery Life	5 days in a typical use case <i>(backup only)</i>
Sensing	Temperature, barometric pressure
Cellular Connectivity	4G LTE
Radio Freq.	US 915 MHz ISM band (optional EU 868 MHz), frequency-hopping spread spectrum
Operating Temperature	-4°F to 140°F (-20°C to 60°C)
Environment	Designed to meet IP66 standards

RELAYS

The Relay is available in both standard and intrinsically safe versions and is designed to extend the coverage range of the Gateway for improved network performance. It operates on standard D-cell batteries, enabling flexible deployment without the need for wired power. The Relay can be easily installed across a variety of internal or external locations using high-intensity magnets, ensuring secure and seamless placement.



Mounting	Wall, fence, pole mount <i>(mounting should not be higher than 6 ft. from ground plane)</i>
Dimensions (without antenna)	5.3" x 4.5" x 2.8" (13.5 cm x 11.4 cm x 7.1 cm)
Dimensions (with antenna)	11.2" x 4.5" x 2.8" (28.4 cm x 11.4 cm x 7.1 cm)
Weight	21 oz (595 g)
Battery Type	(2) D-cell alkaline batteries
Battery Life	5-7 months in typical use
Sensing	Temperature
Radio Freq.	US 915 MHz ISM band (optional EU 868 MHz), frequency-hopping spread spectrum
Operating Temperature	-4°F to 140°F (-20°C to 60°C)
Environment	Designed to meet IP66 standards

SPOT-R SOFTWARE

Spot-r is the heart of the solution, currently offered as a cloud-based platform with the flexibility to be deployed on-premise if required. It powers a 915 MHz (optional 868 MHz) scalable mesh network operating on the proprietary Spot-r protocol, bypassing internal IT infrastructure while enabling fast data transmission rates of approximately 12–24 seconds. The platform delivers comprehensive monitoring, tracking, and analytics through interactive dashboards that support safety, emergency response, productivity, and time-on-tools insights. With features such as Single Sign-On (SSO), encrypted and secure communication, push notifications, and robust reporting capabilities, Spot-r provides real-time visibility into operations. Safety reporting includes real-time worker location, automatic mustering, worker-down alerts, targeted emergency response, and performance analytics. Productivity insights cover onsite and offsite timestamps, productive versus non-productive presence, and crew and trade mix analytics with alerts. Additionally, equipment productivity is enhanced through real-time equipment tracking, validated contractor billing, and utilization measurements such as runtime versus idle time.

