What to check before choosing a portable SOS alarm for remote crews

Why remote work safety needs a different approach

Contractors and utility crews often work in places where a phone signal is weak, the terrain is rough, and help is not just around the corner. A standard mobile phone or a basic panic button may not be enough when someone is alone in a trench, on a power pole, or inspecting a remote substation. A portable SOS alarm designed for lone workers fills that gap, but not all devices are built for the same conditions. Knowing what to look for before buying one can make the difference between a tool that gives real protection and one that just sits in a pocket.

Check one: does the alarm work where your crew works?

Utility crews often move through areas with patchy mobile coverage. A portable SOS alarm that relies only on a cellular network may fail in a basement, a rural valley, or inside a concrete structure. Look for a device that uses multiple communication paths. Satellite-based options or units that combine cellular with satellite back-up keep the alert channel open even when the phone network drops out. For teams that travel between sites, a device that switches automatically between networks saves time and avoids gaps in coverage.

Check two: is the SOS trigger easy to reach under stress?

In an emergency - a fall, a confrontation, a sudden medical issue - a worker may not have fine motor control or time to unlock a phone screen and dial. A good portable SOS alarm has a large, tactile button that can be pressed through clothing or with a gloved hand. Some devices use a pull-cord or a breakaway lanyard that triggers the alarm when separated. Check that the trigger is protected against accidental presses during normal movement but still quick to activate when needed. A recessed button or a two-stage press can reduce false alarms without slowing down a real response.



Check three: does it know when someone stops moving?

Many lone worker incidents involve a person becoming unconscious or immobilised after a fall, a hit, or a medical episode. If the worker cannot press the SOS button, the alarm needs to detect the problem automatically. A portable SOS alarm with fall detection and man-down alerts uses built-in sensors to recognise a sudden impact or a period of no movement. The device then sends an alert to a monitoring centre or a designated contact. Look for adjustable sensitivity and a pre-alert period that gives the worker time to cancel the alarm if they are fine. This feature is especially valuable for utility crews who work at height, on ladders, or near moving machinery.

Check four: can a responder talk to the worker?

An alert that simply says "someone is down" leaves the responder guessing about the situation. A portable SOS alarm with two-way voice communication lets the monitoring team speak directly to the worker through the device. They can ask if the worker needs help, check on their condition, or guide them until emergency services arrive. For a contractor working alone in a noisy plant room or a quiet rural site, voice communication reduces uncertainty and helps the responder decide what resources to send. Make sure the device has a speaker and microphone that work in the environment where it will be used - some units struggle with wind noise or background machinery.

Check five: does the system fit the crew's routine?

A portable SOS alarm that requires complex setup, frequent charging, or a separate base station may not get used consistently. Look for a device that is simple to wear - a lanyard, a belt clip, or a wristband that feels natural under a hi-vis vest or rain jacket. Battery life matters: a device that lasts a full shift without recharging reduces the risk of it dying mid-task. Some models use rechargeable batteries that can be swapped quickly at the start of a day. Also consider how the alarm integrates with existing safety procedures. If the crew already uses a check-in system, the alarm should complement it rather than add another layer of paperwork.



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Putting it together: what a good portable SOS alarm looks like

A device that passes these five checks will typically combine SOS activation, fall detection, two-way voice, multi-network connectivity, and a practical wearable form. It should be robust enough to handle dust, rain, and knocks, yet simple enough that any crew member can use it without a training session. For New Zealand utility crews and contractors, the Mercari Lone Worker Alarm NZ is one example of a wearable alarm that includes SOS, GPS, fall detection, man-down alerts, and two-way voice communication without mandatory monitoring fees. The site loneworkeralarms.co.nz gives more detail on how such a device works in practice.

What to avoid in a portable SOS alarm

Some devices claim to offer lone worker protection but fall short in critical areas. Watch out for alarms that only work within a short range of a base unit, because a crew member may walk out of that range during a normal day. Avoid devices that require a subscription or a monitoring contract that locks the user into ongoing costs they did not budget for. Also be cautious of units that do not log location data. Without GPS tracking, the responder knows someone needs help but not where they are. For utility crews working across a wide area, location information is essential for a fast response.

Making the choice that fits your crew

Every crew has its own mix of risks. A team that works on overhead lines has different needs from a crew that inspects underground pipes. The best portable SOS alarm is the one that matches those specific hazards. Start by mapping out where and how each person works. Note the typical noise levels, weather exposure, and how far they are from the nearest help. Then compare devices against the checklist above. A few minutes spent checking these points before buying can save a lot of trouble later.



If you are responsible for the safety of contractors or utility crews, the Mercari Lone Worker Alarm NZ offers a portable SOS alarm that covers the main bases: SOS activation, automatic fall and man-down detection, two-way voice, and GPS location. The information on loneworkeralarms.co.nz explains the features in more detail and can help you decide whether it suits your team's work patterns. As with any safety tool, the real test is how well it fits the daily reality of the people who carry it.

Mercari Lone Worker Alarm NZ on social media YouTube