

Handheld Employee Location & Task Tracker

Custom Hardware Design

Embedded Firmware

Cellular & GPS

Mapping Integration

CLIENT

A US-based company providing field workforce management solutions.

THE PROBLEM

Managers of field workforces had two separate problems that were really one problem: they didn't know where their people were, and they didn't know what those people were currently working on. Asking employees to carry a smartphone and check in manually was unreliable — people forget, phones run out of battery, apps get closed. The client wanted something purpose-built that did both jobs — location and task status — automatically, and presented the result somewhere managers already knew how to look: a familiar online map.

WHAT WE BUILT

We designed a dedicated handheld device with its own screen and keypad, so it didn't depend on an employee's personal phone at all. The device periodically — without any action from the employee — reports its location and current task status to a remote server. On the device side, employees can view their assigned tasks and update their status using the keypad, so the "what am I working on" half of the picture comes from the same device as the "where am I" half. On the server side, that combined stream of location and task data gets plotted onto a familiar online map interface, so managers see both pieces of information together without switching between systems.

WHAT IT DOES

- ✓ Reports the employee's location automatically at regular intervals, with no action required from the employee
- ✓ Sends current task status to a remote server alongside location data, from the same device
- ✓ Displays assigned tasks on-device and lets employees update status directly using the keypad
- ✓ Plots both location and task status together on a familiar online map for managers
- ✓ Operates as a self-contained handheld unit, removing dependence on personal smartphones, battery habits, or app usage

OUTCOME

Managers got a single, reliable view of where their field employees were and what they were working on, updated automatically without relying on employees to remember to check in — addressing both halves of the visibility problem with one purpose-built device.