

Field Tablet Solutions:

Essential Product Features and Uses



In 2016, 47% of all US jobs required outdoor work during at least a portion of the workday or work year. In fact, almost no industries were exempt from outdoor work, with even those employed in manufacturing production and office support roles reporting about 18% outdoor functions, while construction and extraction individuals reported more than 96% outdoor work.¹ To date, this has been a positive for the individuals who enjoy doing this type of work, but a net negative for the industries performing substantial outdoor work, as they've been unable to benefit from the improvements in safety, efficiency, and profitability that come along with automation.

Industries taking advantage of automation find that the decreases in costs and other improvements that come along with it have led to many benefits for their employees. In fact, history shows that large improvements in manufacturing and industrial technology almost always coincide with an increase in staffing, wages, safety, and employee satisfaction.² Unfortunately, until recently, the benefits of automation were frequently unavailable to the multitude of workers who must do all or a portion of their jobs outdoors. The necessary electronics and equipment for automation frequently don't mix well with bright sun, wind, rain, snow, sand, mud, debris, intense heat or cold, and the other hazards that come with being outdoors and on the move.

Rugged field tablets like those from Estone Tech make the difference, and help bring automation to outdoor jobs, whether it's a momentary trip, or day after day spent in the field. This whitepaper will examine some of the most common uses for rugged field automation tablets, and how the essential features of Estone Tech rugged tablets rise to these challenges.

ESTONE TECH

Field Inventory and Procedure Management

Explore the world of mobility



Tracking all of the materials & equipment on a construction site may be impossible without automation.

When working at a jobsite, whether construction, maintenance, demolition, or some other form of field work, keeping track of tools, equipment, and raw or prepared materials is essential. Nothing will set a project back faster than a scramble to locate a missing item, or uncertainty as to how to proceed with a job. A rugged tablet from Estone Tech provides all of the tools necessary for Field Inventory and Procedure Management.

Consider, for instance, an Oil & Gas drilling operation taking place in a remote area of the northwestern US. When arriving to the drilling site, it will be up to the field manager to ensure that all of the equipment that left the

¹ <https://www.bls.gov/opub/ted/2017/over-90-percent-of-protective-service-and-construction-and-extraction-jobs-require-work-outdoors.htm>

² <https://techcrunch.com/2016/10/09/industrial-robots-will-replace-manufacturing-jobs-and-thats-a-good-thing/>

company's base of operations has arrived at the field, organize it properly for work, and summon it at the appropriate time for swift, efficient drilling. For safety, the manager and crew must at all times be aware of exactly what has happened so far, and be ready with the next step in the drilling procedure without missing anything.

With rugged, durable field tablets from Estone Tech, each of these tasks is simplified. Drivers and logistics personnel can easily scan in and out each piece of equipment as it is loaded onto, and back off of, their transports with integrated barcode scanners and RFID readers; while on-site managers and foremen can record when and where equipment is stored and deployed on site so that no tool or bit of raw material ever needs to be searched for, or a replacement waited upon. If something arrived damaged or incorrect, a replacement can be automatically requested long before the part is needed – if a tool is lost, its history can be quickly tracked until it is located.

The automation of parts and tools used on site also comes with a second benefit – the streamlining of a supply chain and automation of maintenance. When a part is used on-site, its use can be automatically recorded and added to appropriate databases. Does Drilling Rig A require a new bearing every 1,000 hours of operation? The activation time has been automatically recorded in your database, and the replacement part put on order. Have 8 of 10 total pallets of part B been checked out of inventory? Your inventory manager has been automatically alerted – she can review upcoming orders or requests and decide on appropriate restocking.

Field Conferencing and Communication

In most industries, specific field positions exist to free up others from the responsibility and demands of going into the field themselves – but that does not mean that there is no need for those individuals to see what's going on in the field or communicate with employees or contractors there. A rugged tablet equipped with 4G cellular connectivity allows an individual to join the field from anywhere.



Officers in the field use a rugged tablet to communicate with an equipment specialist not deployed.

With a rugged base station, powerful connectivity, and professional quality cameras and microphones, anywhere can easily become an extension of the office or boardroom, allowing face to face communication just about anywhere. Those in the field will also be able to provide photos and detailed information about projects and progress, as well as review step-by-step instructions and special documentation while on the job. This allows individuals already in the field to complete specialized work with the remote assistance of specialists without the need to send them on-site, increasing efficiency and reducing risks from unmaintained equipment.

From the Field to the Office

In the past, individuals who spent time both in the field, and in the office or home facility, have wasted a good deal of time and expressed a good deal of annoyance at simply trying to transfer their findings and records from on-site work to their primary computers and the organization's central records and filing system. Estone Tech rugged field tablets come equipped with the most essential feature – a drop-in charging and data dock.



Drop-in docking creates a tool that works everywhere you do, equally well.

Frequently, rugged tablets are considered “field tools” reduced to something packed away, to be carried to the jobsite, used dutifully, and then packed away again when the job is complete. Estone Tech rugged tablets are much more. Estone Tech tablets have plenty of raw processing power, features, and bright, clear displays to allow them to be used for every job task. When one is headed to the field, they can simply pick up the tablet and go – working with the glove-friendly tactile display and programmable buttons. When returning to the office, one simply drop's the tablet into Estone Tech's rugged dock to connect to the company internet, keyboard, mouse, and other peripherals, and more. Estone Tech's rugged tablet docks have been designed to keep the display exposed, so that there's no need for an additional monitor or other equipment.

Frequently, rugged tablets are considered “field tools” reduced to something packed away, to be carried to the jobsite, used dutifully, and then packed away again when the job is complete. Estone Tech rugged tablets are much more. Estone Tech tablets have plenty of raw processing power, features, and bright, clear displays to allow them to be used for every job task. When one is headed to the field, they can simply pick up the tablet and go – working with the glove-friendly tactile display and programmable