

Taskit - RFID/BLE Mobile Tool Management



Headed configuration with Full LCD Touch Panel shown
Headless configurations are also available



Tool Management with Mobility

Venture Research has developed the most comprehensive mobile tool drawer management system with extensive features to satisfy the most demanding tool management environments. Designed with MRO in mind, tool attributes such as calibration, wear usage, expiration and user accessibility are managed in a mobile battery powered drawer system. FOD (Foreign Object Debris) can now be completely managed.

Users Can Focus on the Task, not the Screen

The Taskit can be purchased in a "headless" configuration as a standalone autonomous tool management system or a "headed" configuration that has a full integrated touch screen LCD display to allow additional attributes to users and tools to be administered. The headless configuration uses voice prompting to guide simple administration tasks such as adding user badges and tools.

Integrated Secure Lock with Badge Reader

The Taskit has an integrated lock that insures tool access is only allowed to users that have badge authorization. A built-in badge reader that is compatible with most industrial badges provides the security and accountability of knowing every person that uses a tool. Multiple users can share tools in the same Taskit but each user is accountable for the tools they use. Facial recognition is also available as an option for the utmost in secure access.

Tool in/out visibility with high visibility LEDs

Even from across the room, the visibility of tools out or all secure is provided by integrated LEDs. Supervisors can now just walk around and if all the Taskit's LEDs are green, they know all the tools are secure and checked in.

Mobile Battery Powered

The Taskit has integral dual high amperage batteries that allow removal and insertion while the unit is powered on. The system is designed with low power consumption in mind and has been tested to be able to be used for a full 24 hours without battery replacement. Convenient cradle chargers are available and the Taskit has a built-in charger if direct wall power is available.

Extensive Communication Options

As a mobile device, the Taskit can communicate directly to the cloud or premises systems with built in WiFi a/b/g/n support. Additionally, the unit can optionally support cellular communications to allow it to be truly standalone. Direct wired Ethernet is also provided for static installation. The Taskit can act as an IoT node with support for popular cloud services such as AWS.

Local or Remote Administration

The Taskit has all tool management functions available in the headed configuration for administration but also supports a flexible API (Application Programmers Interface) that allows interfacing to all features of the Taskit externally. Web services interfaces and direct interfaces to existing enterprise tool management software is also available.

Headless configuration that requires no screen interaction

Features	Benefits
Mobile autonomous usage	No connection to a network required for it to perform the tool management function
High capacity dual battery powered with internal or external charging	Operation up to 3 shifts without a battery change
Accommodates any tool* tagged with RFID or BLE	Designed to read and track even the smallest tools
Designed for cloud usage	Can connect to premises systems or direct to the cloud
Built-in Tool Tag characterization Surface Reader	Adding new RFID tags to tools can be tested with the built-in tag tester before assigning to a drawer
Voice prompting guides the workflow and provides alerting	Requires no screen interaction for operators to use the Taskit
Badge or facial recognition Secure Access	Only authorized users can access tools in the Taskit
Can work with existing tool management software as the system of record	Powerful API allows seamless movement of personnel and tool information to the Taskit

*With approved tags from Venture Research

Specifications

Electrical Specifications

Model	VR_TASKIT_HEAD_001 VR_TASKIT_HEADLESS_001 Size = 40" H x 20.5" W x 28.5" D
Cabinet	Default configuration is 8 drawer Qty 4-12" W x 23.5" D x 2" H - Usable Qty 3-12" W x 23.5" D x 3" H - Usable Qty 1-12" W x 23.5" D x 5" H - Usable Manual and Electronic Lock Integrated
RFID Reader	1 Watt (30 dBm) Class 1 GEN2 (ISO 18006c) reader, US (902-928 Mhz) (European frequencies ETSI - 865-868 Mhz/1/2 watt also available)
Power Requirements	Embedded Charger - 24v x 3A Batteries - Dual 14.4v - Li-ion with sense
RFID Antennas	Drawers - Exclusive Venture Research Array with per drawer accuracy Outrigger Location Tracking Antennas on each side Cabinet Top Commissioning Antennas
Badge Reader	HF (HID iClass or prox) or UHF
BLE	Reads iBeacon and Eddystone BLE tags

Interfacing

Communication	WiFi (802.11 a/b/g/n), BLE, CAN Bus, Optional Cellular Serial Console - Ethernet 10/100, USB-A
Storage	Removable SD card up to 32 GB - optional
Secure Lock	Integrated with Manual Open Sense
Drawer Sense	Independent Drawer Sensors
Additional Sensors	Facial Recognition, Front facing prox personnel sensor, Accelerometer
Indicators	Front facing super brite PWM programmable, Tri color feedback indicators
LCD/Touch screen	For headed units - 1200x800 with capacitive touch screen
Speaker	Integrated voice prompting and alerting
Annunciator	96db programmable for drawer open too long, low battery conditions

Software/OS

Processor	Quad core, 1 Ghz, 4 Gb Ram, 512 Nand, 8 Gb EMC
Operating System	Linux 4.9 - Sumo build, Android also available
Protocol	SSH for direct interaction, transactions delivered to REST interface built in, Telnet for configuration, standard Venture Research API support, TLS Security
Cloud Computing	Store and Forward with all filtering/aggregation being performed in the reader. Direct Web Service update capability using HTTP Post. AWS compatibility



Taskit Options

Power

Battery Charger - Single Battery	TASKIT-OPT-BATT-CHRG1
Battery Charger - Quad Battery	TASKIT-OPT-BATT-CHRG4
Spare Battery	TASKIT-OPT-BATT
24v 3 Amp Power Supply	TASKIT-OPT-POWER

Communications

4G LTE Module	TASKIT-OPT-CELL
Carrier Service - 1 Year	TASKIT-OPT-CELL-CARRIER

Storage

SD Card - 32 Gb	TASKIT-OPT-SD32
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Sensor

Facial Recognition	TASKIT-OPT-FACEREC
HID iClass - HF Badge Reader	TASKIT-UHF-BADGE-RDR

Operating System

Open Embedded Linux	TASKIT-OPT_OS-LINUX
Android 4.0	TASKIT-OPT_OS_ANDROID4

Cabling

CANBUS Interconnect Cable 15'	TASKIT-OPT_CAN_15
Serial Interface Cable to USB	TASKIT-OPT-USB-SER

Software

Venture Research Tool Management Software Integrated into Taskit	TASKIT-OPT-APP
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Applications

Tool Management, Critical Storage, FOD Management

Notes:

- Cellular requires yearly service contract
- Specify Cellular service provider at time of order
- ETSI/EU - 865-868 MHZ Version available at extra cost
- Specify Badge reader requirements at time of order
- Warranty - 1 year parts and labor. Extended warranty agreements available
- Other drawer configurations are available