

INNOVATIVE INVENTORY TECHNOLOGY

OCTOBER 2020

PROVIDES ROBOTIC SCANNING AND DATA ACQUISITION IN A FORKLIFT-BASED PAYLOAD

- The barcode scanner, or other data collection devices (up to 5 can be used for faster scanning) are **mounted on the forklift**.
- The driver stays safely on the ground and drives the scanner(s) up to the pallets, while watching a live video feed of the scanning process and interacting with the user-friendly scanning software.
- By using IoT technology like lidars, the system can detect if there is a pallet missing, how high the pallet is, and automatically selects the correct bin location.
- In sub-zero Celsius warehouses, clients have reported a tenfold increase in operator efficiency.
- Clients enjoy the simple training for operators and the speedy impact on warehouse efficiency, using their existing forklift equipment.

The DroneScan Buffalo equipment consists of four robotic barcode scanners for conventional barcode scanning and a pallet counting sensor for counting pallets in multi-deep ("flow rack" or "shuttle rack") storage. The Buffalo unit is portable, and requires no fixed installation, it is easy to use and takes just seconds to install and start scanning.

"DroneScan have impressed us with the ease of use of their solution and the speed and enthusiasm with which they have turned around incremental innovations."

-Project Manager, A large FMCG multinational

DRONESCAN BUFFALO

Simple, robust system that attaches to existing MHE

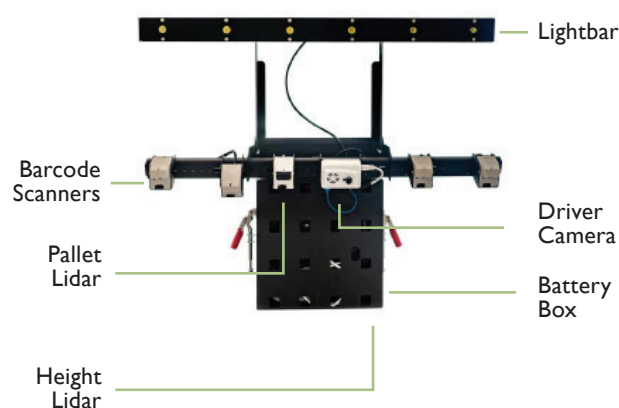
Uses only one person to operate

No people at height and no cage required

Proven operational use of 300 bin positions/hour/staff

Easy to use with little training required

Reduced impact to the environment



Barcode scanners. These are DroneScan specially designed scanner modules. They are wireless devices that communicate with each other and with the base station, they are mounted in a horizontal row on the scanner bar which can set at an upwards angle to scan barcodes on the high shelves. One scanner is optionally mounted lower down on the battery box to scan barcodes close to the ground.

Light Bar. This is a DroneScan specially designed bar that provides focussed illumination that improves the scan rate of the scanners. It can be mounted above or below the scanner bar.

Driver camera. This is a small camera that allows the driver to position the buffalo in front of the correct barcode. Its important in warehouses with difficult to scan barcodes, or hap-hazardly placed barcodes.

Height Lidar. This lidar aims at the ground, it continually measures the height of the buffalo which is used by the base station to calculate the current bin location

Pallet detector Lidar. This lidar aims towards the pallet. It measures whether or not a pallet is present and is also used to determine the vertical size of a pallet.

Battery box. This box forms the structure of the buffalo and is clamped securely onto the reachtruck forks. The battery box has charging terminals on the side and it houses the wifi router, down lidar and battery control circuit.

SPECIFICATIONS

Maximum Barcode Scanning Speed
(best possible barcode quality):
One barcode scan every 2 seconds

Typical Scanning Speed:
One barcode scan every 10 seconds

Target Scanning Speed:
One barcode scan every 5 seconds

Optimal Barcode Scanning Distance:
30cm – 90cm

To Scan/Section of 4 Racks with 10 Pallet Positions:
7 minutes

In comparison, traditional forklift and hand held scanner to scan 4 racks with 10 pallet positions: 80 “man” minutes

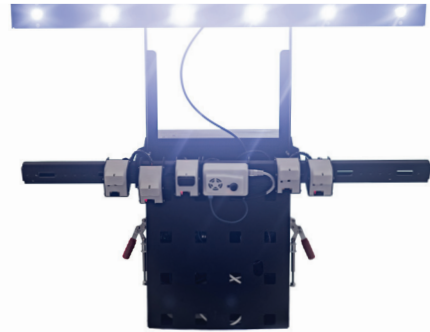
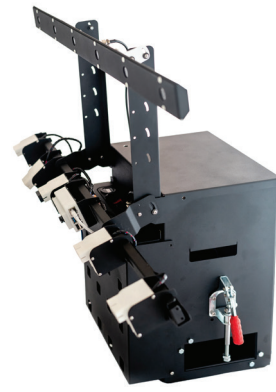
Battery Life (12Ah Battery):
6 hours / or powered by forklift

Dimensions:
90cm long x 54cm wide x 32cm high

Maximum Width of Warehouse:
No maximum

Maximum Height:
25m

Minimum Pallet Position Width:
50cm



CONTACT US

+27 (0)82 441 8667
salesteam@dronescan.co
www.dronescan.co

Dronescan, 34 Emoyeni Drive, Hillcrest, 3610
South Africa

1101 S.E.Tech Center Drive, Suite 150, Vancouver,
Washington, 98683, United States of America

