



29/11/2016

## AUTOCUBE FIXED DIMENSIONING

**Honeywell**

# Product & Project Overview

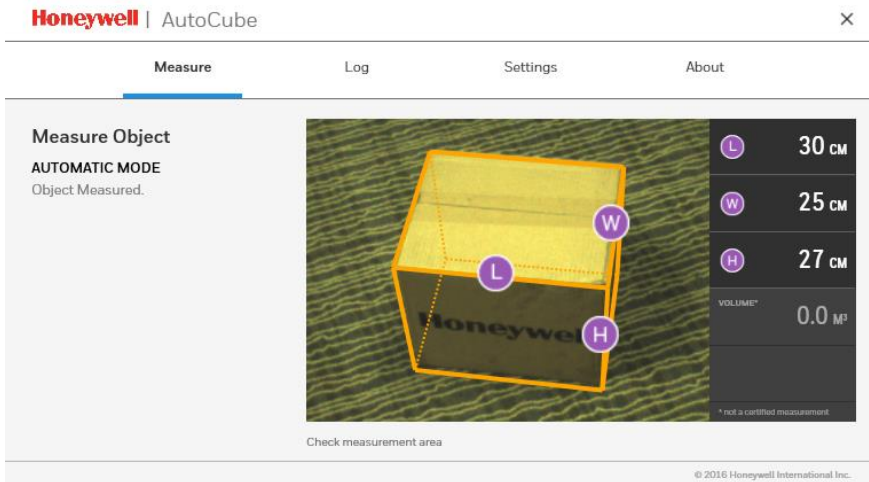
# What is AutoCube?

An electronic device that instantly measures the three dimensions of an object

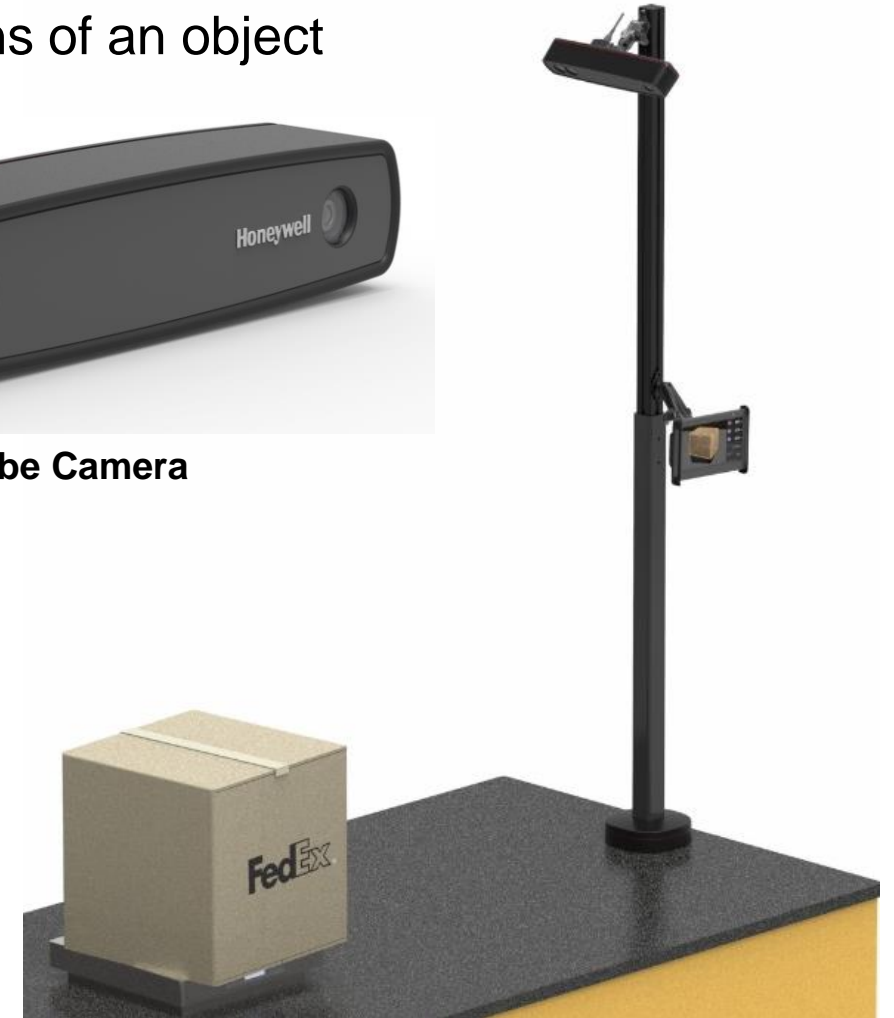
- Fixed device
- Mounted on a stand
- Connected to a host computing device
- Connection through a USB cable
- Software application on the host computing device



AutoCube Camera



AutoCube Software Application

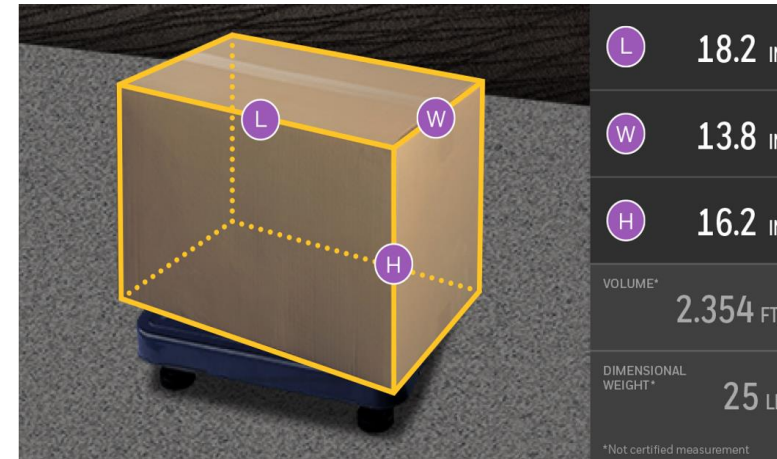


AutoCube Camera, Stand & Display

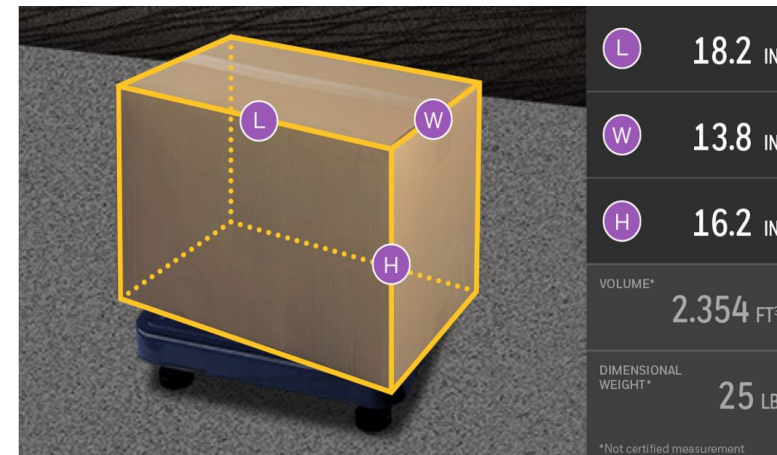
# What is AutoCube?

An electronic device that instantly measures the three dimensions of an object

For rectangular objects, the length, width and height are instantly determined



For non-rectangular objects, the length, width and height of the smallest bounding box around the object are instantly determined.

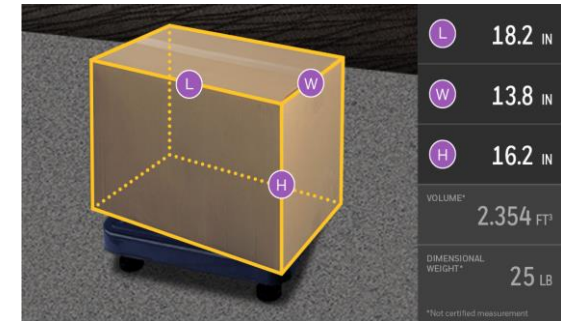




# Honeywell Dimensioning Projects

## AutoCube (Fixed Dimensioning)

- Dimensioning packages
- Fixed Device
- In Phase 4
- Launch in Q1 2017



## Marseille (Mobile Dimensioning)

- Dimensioning pallets
- Mobile Device
- In Technology Feasibility Analysis
- Launch in Q4 2017

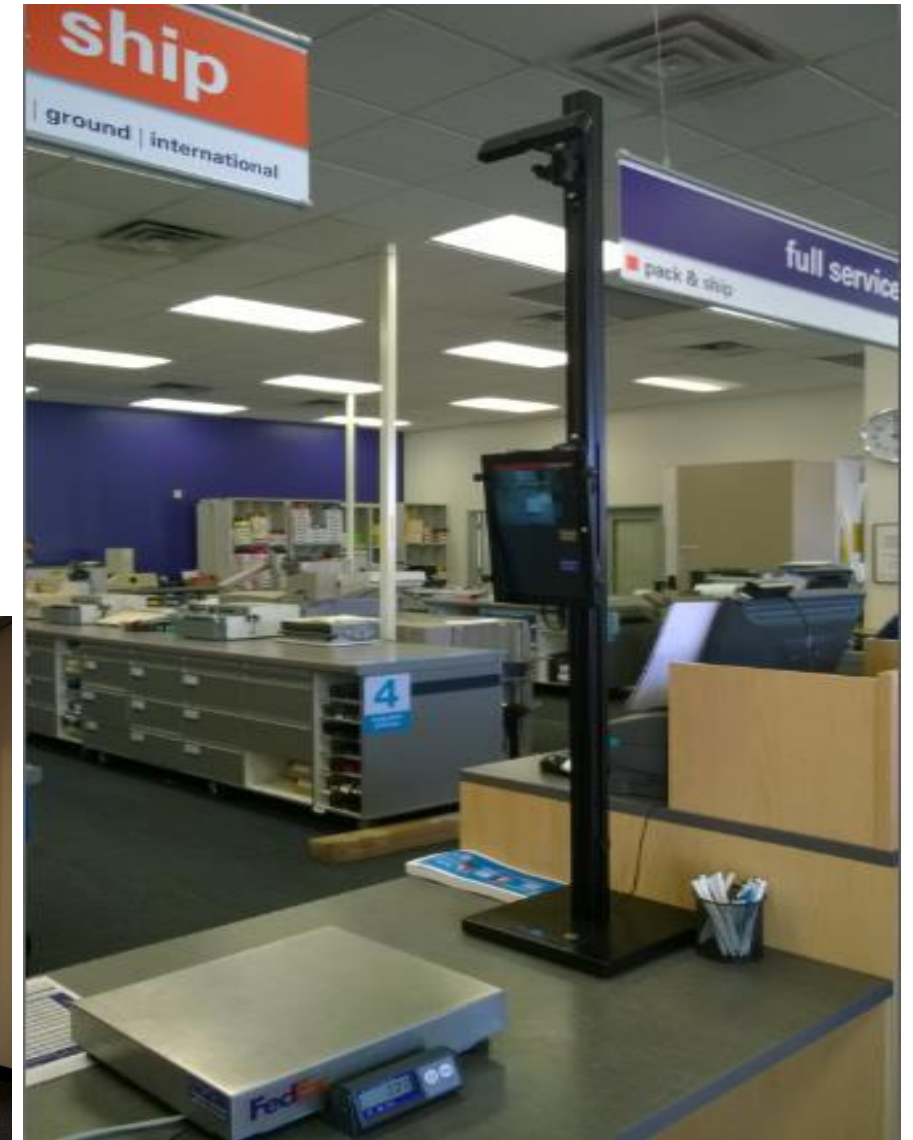


# Customer Value Proposition

# AutoCube Customer Segments

## 1. Package Drop Off Locations

- Primary Customer Segment
- Parcel centers (FedEx Office, UPS Store)
- Post office locations (USPS)
- Other package shipping centers





# AutoCube Customer Segments

## 2. Warehouse Package Operations

- Secondary customer segment
- Warehouse shipping stations
- Warehouse receiving stations
- Warehouse inventory update





# AutoCube Value Proposition – Summary

## Package Drop Off Locations

- Accurately bill customers
- Increase productivity
- Increase customer satisfaction
- Vehicle space optimization



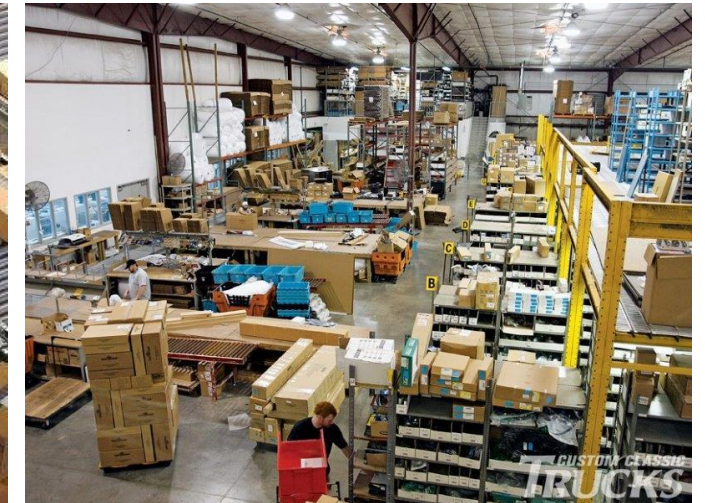
## Warehouse Package Operations

### Warehouse Shipping Operation

- Accurately bill customers
- Increase productivity

### Warehouse Receiving Operation

- Optimize workflows
- Increase productivity



# Product Features & Competition

# AutoCube - Features

- **Measurement Accuracy**
  - **Provide high accuracy on each of the dimensions.**
    - 10mm (0.4 inches) Guaranteed
    - 5mm (0.2 inches) Typical
- **Package Size Range**
  - **Covers large package size ranges which accounts for most of the packages seen in package drop off locations and warehouses**
    - Retail (1.5m stand)
      - 6cm x 6cm x 6cm - 90cm x 90cm x 90cm (5mm Accuracy)
      - 6cm x 6cm x 6cm – 140cm x **100cm** x 70 cm (10mm Accuracy)
    - Industrial (1.8m stand)
      - 6cm x 6cm x 6cm – 110cm x 110cm x 110cm (5mm Accuracy)
      - 6cm x 6cm x 6cm – 140cm x **120cm** x 70cm (10mm Accuracy)



# AutoCube - Features

- **Type of Objects**
  - **Regular – Rectangular packages**
  - **Irregular – Non Rectangular Packages**
    - Cylinders
    - Prisms
    - Polybags
- **Measurement Time**
  - Packages can be measured in less than a second
- **Image Capture**
  - Images of the packages being measured are captured and stored for claim verification purposes
- **Certification**
  - AutoCube is Weights and Measures certified for different regions
    - NIST (US), OIML(Europe, ANZ, META), MID (Europe), Measurement Canada (Canada)

# AutoCube - Features

- **Temperature Range**
  - -10C to 50C
- **Environmental Sealing**
  - IP54
- **Interface**
  - AutoCube connects to a customer computing platform using USB interface.
- **Power Supply**
  - AutoCube is powered through the USB cable and does not require a separate power supply
- **Host Computing Platform**
  - AutoCube can be connected through a USB port to a PC or laptop with Windows 7, 8 or 10 operating system or a tablet with Windows 8 or 10 operating system.
- **Table Mounts**
  - AutoCube can be mounted on a table or counter using a 1.5m high table mount (ideal for courier customers) or a 1.8m high table mount (ideal for warehouse customers)

# AutoCube - Features

- **Usage Modes**

- **Automatic**

- AutoCube can be used in the automatic mode where the packages are measured as soon as a package is placed in the field of view

- **User Controlled**

- AutoCube can be used in the user controlled mode where the packages are measured as soon as the user presses the 'measure' button on the software application.

- **Integration Modes**

- **Standalone**

- In this mode, AutoCube usage is controlled by Honeywell application and the measurement results are displayed in the Honeywell application.

- **Full Integration**

- In this mode, API and SDK is available for the customer application to fully control and get the results from AutoCube. The API is offered in C++, C# and Java.

- **Mixed Mode**

- In this mode, Honeywell application is used to control AutoCube, and the results are displayed in the Honeywell application as well as transferred to the customer application.



# AutoCube Competition - Tape Measure

## AutoCube Advantages

- Higher Accuracy
- Faster Measurement
- Images for claim verification
- Certified For Trade

## Tape Measure Advantages

- Lower Price

