ELENIUM
PASSENGER EXPERIENCE SOLUTIONS

'Technology that moves you faster'

ELENIUM
AUTOMATION

FOUNDED **2015**

OUR **VISION**

Check-In Anywhere

3sec **Bag Drop**

5sec **Boarding**

OUR **HIGHLY SKILLED PEOPLE**

Industrial Designers

Data Scientists

UX Designers

Software Developers

Electronics Engineers

Project & Service Delivery Managers

Solution Consultants

Production Engineers

Quality Assurance Engineers

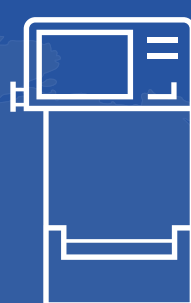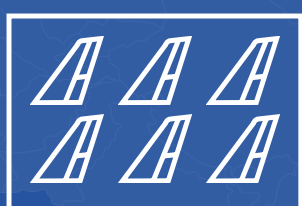Mechatronics Engineers
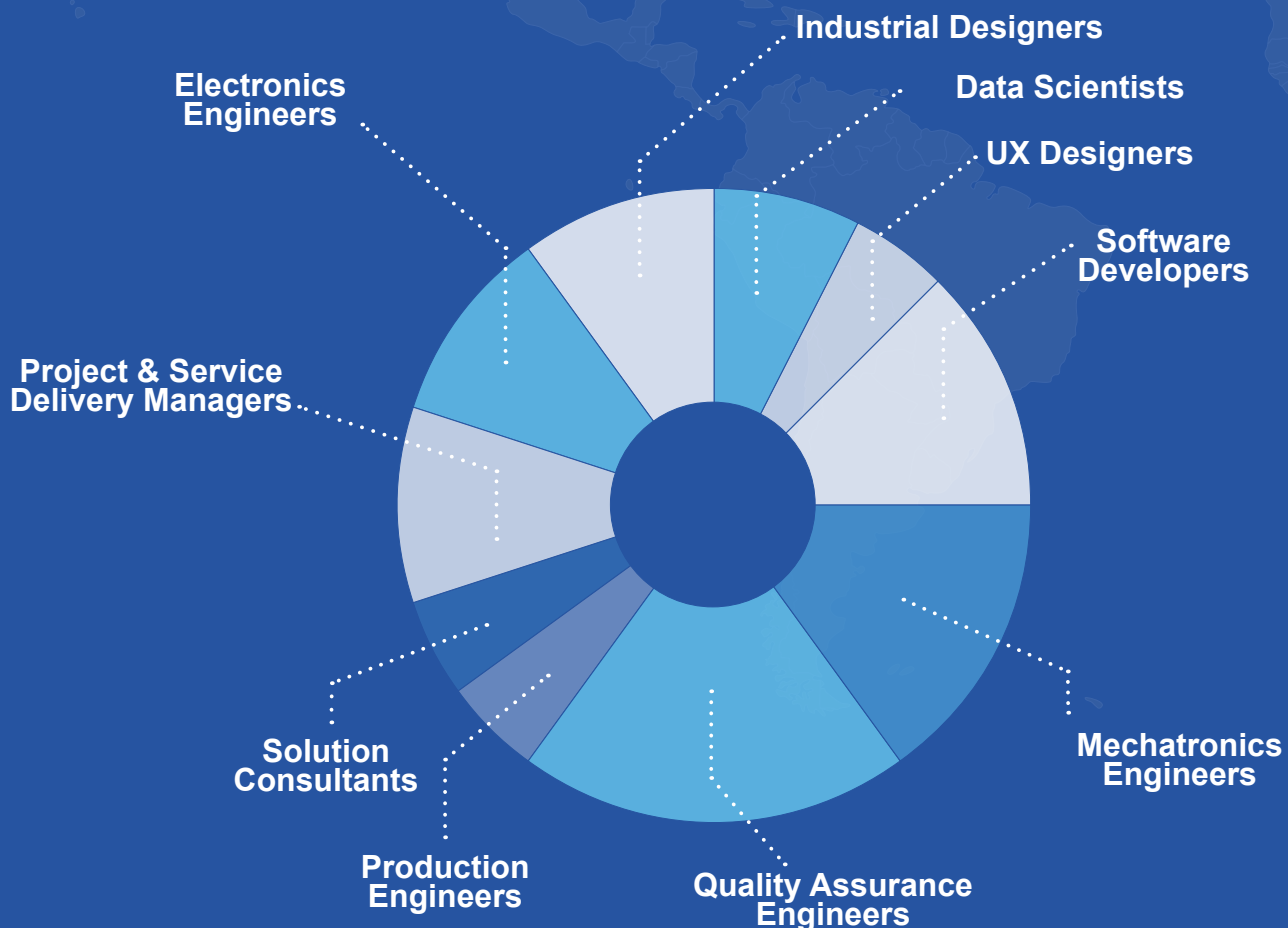
OUR SEAMLESS PRODUCTS

Mobile

Kiosk

Bag Drop

Airport Gates

Voyager

CUSS

Self-Service Apps

Flight Deck

OUR GROWING NUMBERS

30+ AIRLINES

600+ DEVICES

GLOBAL REACH

Y-TYPE KIOSK

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Certified for IATA CUSS 1.3,1.4 and 1.5.

LOW TOTAL COST OF OWNERSHIP

Cost efficient design and construction, makes this kiosk a viable option for a wide range of installations.

OPTION FOR OUTDOOR USE

Option available for kiosks to be IP33 Rated for outdoor use.

BIOMETRICS READY

Kiosks are designed and built to be biometrics ready; supports any biometrics supplier.

Overview

Available as either a fixed or portable unit, the Elenium Y-Type Kiosk offers a fully functional, robust kiosk at a price point unmatched in the market. Designed with a focus on flexibility and affordability, the Y-Type ensures viable self-service deployments. The Y-Type can be IP33 Rated for outdoor use, enabling the kiosk to be positioned in settings such as carparks. The fixed version of the Y-Type can also be supplied pre-assembled or in kit form.

Standard Features

- Touch Screen
- Boarding Pass Printer
- Bag Tag Printer
- Barcode Reader
- Passport Reader
- Wi-Fi and Ethernet
- Intel Core CPU
- 8GB Memory

- Brandable
- Windows 7 or 10, 64bit
- Standard LED Lighting
- Integrated UPS
- ADA Compliant Design

Optional Features

- ADA Keypad
- Cellular Data Network
- Biometrics - Facial, Iris, Fingerprint
- Loyalty Card Reader

- PCI-PTS Payment Device
- Paper Bin
- Weigh Scale

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Certified for IATA CUSS 1.3,1.4 and 1.5.

CUPPS

Slide out keyboard allows the kiosk to instantly switch to a CUPPS workstation.

PREMIUM FINISH MATERIALS

Aesthetically pleasing Corian finish.

BIOMETRICS READY

Kiosks are designed and built to be biometrics ready; supports any biometrics supplier.

Overview

Available as either a fixed or portable unit, the J-Type Kiosk is a highly configurable device with; up to 3 printers, additional LED lighting, a PCI-PTS payment device, an agent keyboard, premium finishing materials and a flexible industrial design. The J-Type Kiosk is robust, user-friendly and aesthetically pleasing; it makes self-service the first choice for passengers at your airport. It is also ergonomically designed to be ADA compliant.

Standard Features

- Touch Screen
- Boarding Pass Printer
- Bag Tag Printer
- Barcode Reader
- Passport Reader
- PCI-PT S Payment Device
- Wi-Fi and Ethernet
- 8GB Memory

- Intel Core CPU
- Windows 7 or 10, 64bit
- Integrated UPS
- Agent Keyboard
- Corian Trim
- Premium LED Lighting
- Brandable
- ADA Compliant Design

Optional Features

- ADA Keypad
- Cellular Data Network
- Biometrics - Facial, Iris, Fingerprint
- Additional Printer

- Loyalty Card Reader
- Flexible Industrial Design
- Paper Bin
- Weigh Scale

Portable Platform For Kiosks

The Elenium Portable Platform for kiosks is an option for both our Y and J Type Kiosks. It allows airports and airlines to have dynamically deployable kiosks with a hot swappable battery system providing 24x7 operations without being connected to mains power.

Battery Technology

Elenium Portable Kiosks can operate for 18-hours of continuous, high demand, use on a single charge. The hot swappable battery system means you can change batteries without returning the unit to a power point. Elenium also offers a portable battery charging station to make it easier to manage and maintain your fleet of portable kiosks.

Safety

Designed with a low centre of gravity, the Elenium Portable kiosk is very stable. When combined with the locking base, considerable force is required to tip the kiosk. Elenium Portable kiosks also have an automatic tip sensor, that instantly disconnects power to the internal systems if, in the unlikely event, a kiosk is ever knocked. Safe and simple to use, the Elenium Portable solution has been successfully deployed into a growing number of major airports.

No compromise, with all the flexibility

The Elenium Portable kiosk contains all the functionality you would expect from a self-service device. It supports both international and domestic applications including: check in, passenger rebook, ancillary revenue and loyalty programs.

Safe and simple to use, the Elenium Portable solution has been successfully deployed into a growing number of major airports.

Bag Drop - Bag Tag Scanning Technology

How We Achieve Higher Accuracy at Faster Speeds

The Elenium Bag Tag recognition system operates up to 97% success rate (independently proven). It achieves this impressive performance by using cameras that zoom and focus to find the bag tag barcode in milliseconds irrespective of the bag's placement. Elenium's technically advanced approach generates superior outcomes to competing systems which can only read bag tags in a two dimensional line of sight.
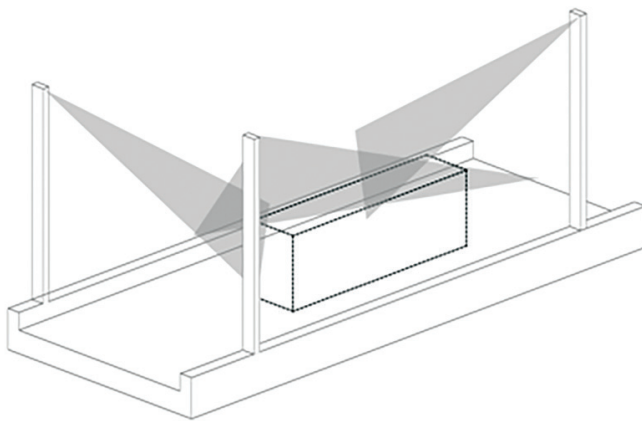
Competing systems field of view
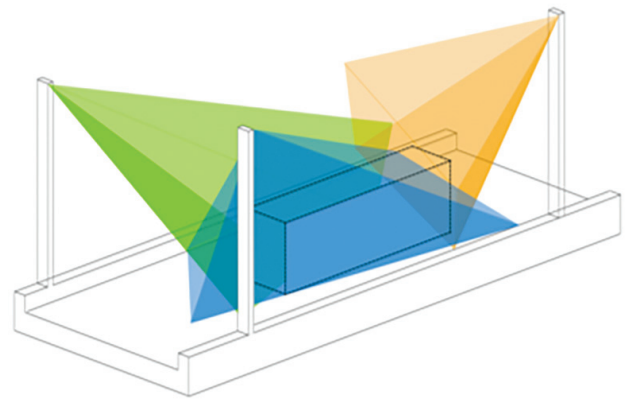
Elenium camera systems field of view

Elenium's Technology Advances

Our R&D team has been able to improve our technology by removing the need for any moving parts. Rather than requiring a physical gimbal to point and tilt the camera sensor, we have developed a miniature, high resolution, wide angle camera that allows us to achieve even better recognition rates.

To manage the high resolution cameras and still process the visual data in real-time, each camera streams directly into a small form factor embedded graphic processing unit (GPU). This allows the system to detect the location of a bag tag in real-time. With our sophisticated computer vision algorithms the system is able to crop out the area of interest and decode the barcode in 70 milliseconds, processing over 60 megapixels in that time.The performance improvement of our breakthrough development also allows us to scan bag tags on a moving conveyor belt, opening up new applications like inbound bag tag scanning.

R-TYPE BAG DROP - NEW FIT

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3 SECOND BAG DROP

Achieved using Elenium's advanced camera technology and predictive data system.

BIOMETRICS READY

Bag Drops are designed and built to be biometrics ready, supporting any biometrics suppliers.

SECURITY & SAFETY

Advanced intrusion detection system using high resolution cameras.

Overview

The New Fit R-Type Bag Drop provides a complete baggage solution in either Unassisted or Hybrid configurations. It also offers the flexibility to be used in either a one or two step process; i.e., the bag drop can operate as a check-in (print boarding pass and bag tags) and inject bag drop facility, or just as a baggage injection point.

Using high resolution cameras and sensors, the R-Type is fast and accurate - processing bags in as little as 3 seconds, with higher read rates than laser-based bag tag reading systems. It also offers as standard: intrusion detection, tub detection, dimensioning and low profile energy efficient conveyer belts.

Due to our innovative use of cameras, sensors and artificial intelligence for detection, the R-Type Bag Drop is able to be offered at an industry leading total cost of ownership.

Standard Features

- Touch Screen
- Receipt Printer
- Bar Code Reader
- Premium LED Lighting
- Bag Tag Scanner

- Intrusion Detection
- Dimensioning Sensor
- Tub Detection
- Scale Conveyor
- Injector Conveyor

- BHS Integration
- Emergency Stop
- Bag Condition Camera
- Tub Holders

Optional Features

- CUPPS Hybrid
- 3rd Stage Conveyor
- Bag Tag Printer
- BLE Reader

- Boarding Pass Printer
- Heavy Tag Printer
- RFID Reader
- Passport Reader

- Loyalty Card Reader
- Biometrics - Facial, Iris, Fingerprint
- Paper Bin
- PCI-PTS Payment Device

Using high resolution cameras and sensors, the R-Type is fast and accurate - processing bags in as little as 3 seconds.

R-Type Bag Drop - New Fit

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LOW CAP-EX

Fits over existing infrastructure enabling cost effective re-use of belts and desks.

3 SECOND BAG DROP

Achieved using Elenium's advanced camera technology and predictive data system.

SECURITY & SAFETY

Advanced intrusion detection system using high resolution cameras.

Overview

The Retrofit R-Type Bag Drop provides a low complexity path to upgrading existing check-in infrastructure, thereby increasing the productivity of airport assets. The R-Type Retrofit is a hybrid unit that can be used both as a self-service and agent-assisted solution. It also offers as standard: intrusion detection, tub detection, dimensioning and optional reuse of existing conveyer belts.

Advanced camera-based dimensioning technology measures the size and shape of the bag prior to injection, which means that the bag is scanned in situ before it is moved to the next belt. This removes the need for reversable conveyor belts which may not be available on existing infrastructure.

Standard Features

- CUPPS Hybrid
- Re-use Existing Check-in Infrastructure
- Touch Screen
- Receipt Printer
- Bar Code Reader

- Premium LED Lighting
- Bag Tag Scanner
- Intrusion Detection
- Dimensioning Sensor

- Tub Detection
- BHS Integration
- Emergency Stop
- Bag Condition Camera

Optional Features

- Bag Tag Printer
- Boarding Pass Printer
- Heavy Tag Printer
- RFID Reader
- Passport Reader

- Loyalty Card Reader
- BLE Reader
- PCI-PTS Payment Device
- Stock Paper Bin

- Tub Holders
- Biometrics - Facial, Iris, Fingerprint
- Scale Conveyor
- Injector Conveyor

The R-Type Retrofit is a hybrid unit that can be used both as a self-service and agent-assisted solution.

Retrofit R-Type Bag Drop

R-TYPE - BAG TAG STATION

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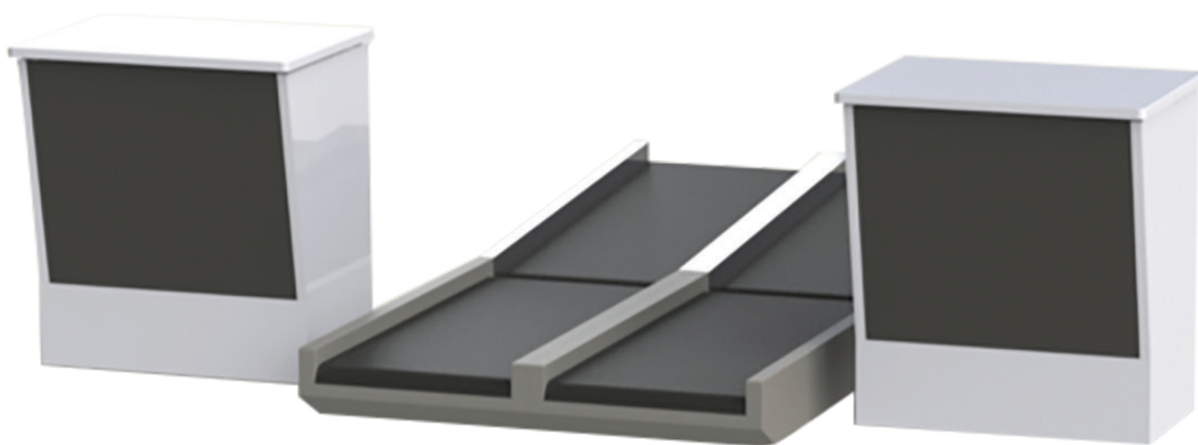
SMALL FOOTPRINT

Small footprint device for more efficient use of terminal spaces.

HIGH CAPACITY BAG TAG STOCK

Carries two rolls of bag tag stock to allow longer use between refills.

1&2 SUPPORTS 2-STEP BAG DROP

Print bag tags before bag drop for better passenger flow.

BRANDABLE

Bag Tag Stations can be flexibly built to support customised airport or airline branding.

Overview

Only 25cm deep, the R-Type Bag Tag Station is designed to use a minimal amount of terminal space. It allows passengers to print bag tags prior to bag drop, resulting in faster passenger flow through the check-in hall. The Bag Tag Station is a dedicated bag tag printing device that holds multiple bag tag printers allowing for a longer operating time between stock replenishments.

Standard Features

- Bag Tag Printer
- Display Screen
- Bar Code Reader
- Premium LED Lighting
- Wi Fi & Ethernet
- Intel Core CPU

- Windows 7 or 10, 64bit
- Integrated UPS

Optional Features

- ADA Keypad
- Cellular Data Network
- Biometrics - Facial, Iris, Fingerprint
- Touch Screen
- PCI-PTS Payment Device
- Stock Paper Bin
- Weigh Scale
- Additional Bag Tag Printer

CUSS

Certified for IATA CUSS 1.3, 1.4 and 1.5.

SIMPLE & AFFORDABLE

Simple, cost conscious design, makes this bag drop a viable solution for any airport.

PASSENGER CONTROLLED

Passenger controlled device that enables full self-service.

QUICK TO DEPLOY

Low complexity device enables fast deployment.

Overview

The Y-Type Bag Drop is an entry level hand scanner device that provides a cost effective, self-service capability within the airport terminal. It can be deployed as a hybrid unit, able to be used both as a self-service and agent-assisted solution. The Y-Type Bag Drop is also easily installed as a retrofit or new fit deployment.

Standard Features

- Touch Screen
- Receipt Printer
- BHS Integration
- Hand Scanner
- Wi Fi & Ethernet

- Intel Core CPU
- 8GB Memory
- Windows 7 or 10, 64bit
- Emergency Stop

Optional Features

- ADA Keypad
- Cellular Data Network
- Biometrics - Facial, Iris, Fingerprint
- PCI-PTS Payment Device
- Scale Converter

- Injector Conveyor
- Bag Tag Printer
- Boarding Pass Printer
- Passport Reader
- Loyalty Card Reader

COMMON USE

CUPPS compliant hardware.

ADVANCED BOARDING SOFTWARE

Elenium Native Boarding Software is able to validate passengers in less than 50ms thanks to unique architecture.

PROVEN TECHNOLOGY

Motor drive system is rated for 30 million cycles.

SAFETY

Elenium's boarding gates sensor system ensure safety of passengers.

Overview

The R-Type Airport Gate operates as an automated gate in any airport setting, including boarding, security and lounge access. Its high capacity and advanced sensor systems process more passengers efficiently and accurately, increasing the productivity of the ground agents and allowing them to focus on increased customer service.

The R-Type Airport Gate is compatible with CUPPS compliant applications and with Elenium's boarding and access control software, providing maximum airport infrastructure efficiency.
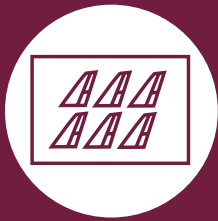
Standard Features

- Barcode Reader
- Drive System
- Premium LED Lighting
- Wi Fi & Ethernet
- Intel Core CPU
- Window 7 or 10, 64bit
- Integrated UPS

- Emergency Stop
- Passenger Detection
- Safety Zone

Optional Features

- Touch Screen
- Receipt Printer
- Passport Reader
- Biometrics - Facial, Iris, Fingerprint

COMMON USE

CUPPS compliant hardware.

PORTABLE

Elenium Native Boarding Software is able to validate passengers in less than 50ms thanks to unique architecture.

FULLY FEATURED

Designed to be ultra portable, able to be moved at a moment's notice.

RUGGEDISED

Employ in a CUTE environment and easily use your existing applications.

Overview

The Y-Type and J-Type Suitcase Service Desks offer a portable service desk solution to meet contingency or high volume periods, as well as applications outside the airport. The Suitcases are fully featured, including boarding pass, bag tag printing and passport reading.

Standard Features - Y-Type

- Carry Case
- Touch Screen
- Bag Tag Printer
- Boarding Pass Printer
- Receipt Printer
- Handheld Scanner
- Keyboard and Track Pad
- Wi Fi & Ethernet

Optional Features - Y-Type

- Swipe Passport Reader
- PCI-PTS Payment Device
- Cellular Data

Standard Features - J-Type

- Carry Case with Trolley Wheels
- Touch Screen
- Bag Tag Printer
- Boarding Pass Printer
- Receipt Printer
- Hanheld Scanner
- Keyboard and Track Pad
- Wi-Fi and Ethernet
- 4-Hour Battery System

Optional Features - J-Type

- Full Page Passport Reader
- PCI-PTS Payment Device
- Cellular Data

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INTERNATIONAL