



VISIDOT

The ImageID Traceability Solution

Visidot SCT (Supply Chain Traceability) solutions enhance logistics with 100% accurate, image-based, automatic data capture for multiple asset tracking.

- Eliminate shipping errors, avoid claims & returns
- Enhance logistics efficiency
- Complete product traceability
- Field proven in any environment

KEY BENEFITS

Eliminate shipping errors, avoid claims & returns

Error-free shipping verification

Shipping errors and delivery-related disputes often lead to product recalls and chargebacks, with negative effect on suppliers' bottom-line results and reputation. Visidot captures large field of view images of the outbound shipping pallets, simultaneously detecting and decoding hundreds of tags. Using the patented ImageID technology, Visidot automatically compares the tag information to shipping order data and applies predefined sets of business rules, such as content validation. Operators are given real-time alerts about any discrepancy or breach as well as missing or unreadable tags, along with visual guidance for corrective action. Additionally, Visidot may be configured to activate external flow control devices to ensure the most effective handling of any potential error in shipment content. Pallet images are archived in an image bank as proof of delivery and asset condition, to help resolve any delivery-related dispute.

Enhance logistics efficiency

Capture hundreds of tags in mere seconds

In today's market, minimal lead time between order entry and shipment dispatch is crucial for gaining a competitive edge. Visidot's innovative technology reduces the entire shipping verification process to a matter of mere seconds, ensuring leaner logistics and optimised manpower utilization.

Complete product traceability

Real-time web-based management and reporting

Demanding traceability legislation, inventory shrinkage, waste, counterfeiting and multi-site distribution operations - all make complete product traceability a necessity. Visidot's comprehensive multiple asset traceability assures complete supply chain visibility and control. With web-based reports and management tools and seamless interfaces with enterprise back-end ERP systems, Visidot complies with the strictest tracking and traceability legislation and regulations.



SHIPPING VERIFICATION APPLICATION



Field proven in any environment

More reliable and cost effective than RFID

Currently available RFID solutions demonstrate limited effectiveness and accuracy under rough environmental conditions. Visidot is highly reliable and 100% accurate in the harshest of environments, even when subjected to severe temperatures, humidity or RF/EM interference. Visidot supports existing low-cost, industry-standard barcodes (1D) or Data Matrix (2D) labels, requiring no additional investments in costly tags.

AIDC technology comparison

	Handheld Scanners	RFID (Passive)	Smart Camera	ImageID
Simultaneous multiple assets capture		✓	✓*	✓
100% accuracy			✓	✓
No added tag cost	✓		✓	✓
Visual proof of delivery/location/condition				✓
Tag capture from afar				✓
Visual alerts for missing/flawed tags				✓
Unaffected by environment	✓		✓	✓
No line of sight required		✓		✓**

* Few assets only

** Using Palletisation reader

A BROAD RANGE OF APPLICATIONS

Visidot offers custom-tailored applications for a wide variety of vertical markets, including fresh food, automotive, RPC, flower and pharmaceutical industries. The system is fully operational and field proven, performing such diverse tasks as:

- Outbound shipping verification
- Inbound scan-to-stock
- Production sequencing and verification
- Palletisation verification - when some of the stacked assets have no line-of-sight
- Dock-door loading verification
- Process quality assurance
- RPC (Reusable Plastic Containers) traceability



PRODUCT DESCRIPTION

Visidot Reader

Visidot Reader is a high-speed, large field of view Automatic Identification and Data Capture (AIDC) system. It comprises of industrial, high resolution cameras attached to mounting infrastructure and linked to a PC-based processing unit via high-speed Firewire/Gigabit Ethernet connections. Once triggered, Visidot Reader powers up its illumination units and initiates image capture, simultaneously scanning hundreds of assets in a single pass.

Captured images of asset labels, barcodes or other attributes are quickly analysed, decoded and stored in XML data files. This decoded data represents the number of items and their XY location coordinates. Sophisticated algorithms enable detection of tags in any orientation and even of partially damaged tags, and are capable of indicating the location of missing or illegible tags.

Visidot Reader's highly durable hardware allows it to perform reliably even in the harshest of environments. A wide selection of specially adapted cameras and lenses enables detection of items regardless of their location and orientation, including tags affixed to distant assets or items in motion. Industry standard power and network interfaces ensure fast and simple system installation.

Visidot Operator console

The Operator Console is the system's front-end interface. Operators can select specific orders for shipping verification and activate read operations. In case of a shipping error, a real-time alert is presented, along with visual guidance for corrective actions, on a user-friendly touch screen interface. The Operator Console also features an I/O interface used to control such external devices as illumination units, rotating tables and others.

Visidot Director

Visidot Director for SCT uses patented technology to automatically apply a set of business rules to XML data produced from the image capture process and alert operators in case of any discrepancy. The business rules may include content validation logic, order data or production sequences.

Additionally, Visidot Director may be configured to activate status indication lights, conveyor controllers, rotating tables, barcode printers and other flow control devices. Visidot Director is quickly and easily adapted to customers' existing logistics and production processes.

The modular architecture of Visidot Director enables seamless multiple site deployment in either centralised or distributed configuration.

Visidot Multi-site manager

The Multi-site manager aggregates data from Visidot Directors deployed at multiple logistics and manufacturing sites, providing such management tools as real-time Web-based inventory status alerts and manufacturing process reports.

Image bank archive

Visidot maintains an image bank with archived visual proof of delivery and asset condition, to help resolve any delivery-related dispute.



PROVEN TRACEABILITY

Visidot significantly enhances logistics and manufacturing process efficiency and reliability. It enables users in a broad range of industries to track and trace hundreds of thousands of assets a day - with 100% accuracy - maintaining lean logistics and complete supply chain control. Visidot can provide company management and authorised external handlers with a comprehensive view of the entire supply chain.



SPECIFICATIONS

Supported tags

Barcode (1D) Standards:

Code128 (UCC/EAN-128), EAN13, UPC-A, UPC-E, Interleaved 2 of 5, Codabar, Code39 and Code11, GS1 DataBar

Data Matrix (2D) Standards:

ISO 16022, ANSI/AIM BC11

QR Code, Micro QR Code

Performance

Viewing distance: 10 cm to 10 m

Maximal object speed: 5 m/s

Minimum module size:

- Barcode: 1.2 pixels

- Data Matrix: 2.8 pixels

Field of view (typical gate)

UPC-A Barcode 50 x 12 mm: up to 1,300 x 1,900 mm (4.25' x 6.2')

DM size 26 mm/density 18 x 18: up to 1,550 x 2,150 mm (5' x 7')

DM size 18 x 54 mm/density 12 x 36: up to 1,600 x 2,500 mm (5.25' x 8.2')

For information on other fields of view, tag sizes and densities, please contact Zetes.

Main system characteristics

Software modules: Visidot Director,
Visidot Controller,
Visidot Reader,
Visidot Viewer

Interfaces: Software SDK via LAN, RS232

Formats: XML, CSV or RS232

Enclosure: IP65/NEMA 4 aluminum body

Operating temperature: 0° - 50° C (32° - 122° F)

Relative humidity: 10% - 90% (non-condensing)

Power requirements: 100-240 VAC 50 / 60 Hz

Optional features

- Software / hardware plug-in support
- Data (regular expression) filters
- Visual (traffic lights) & audible alarms