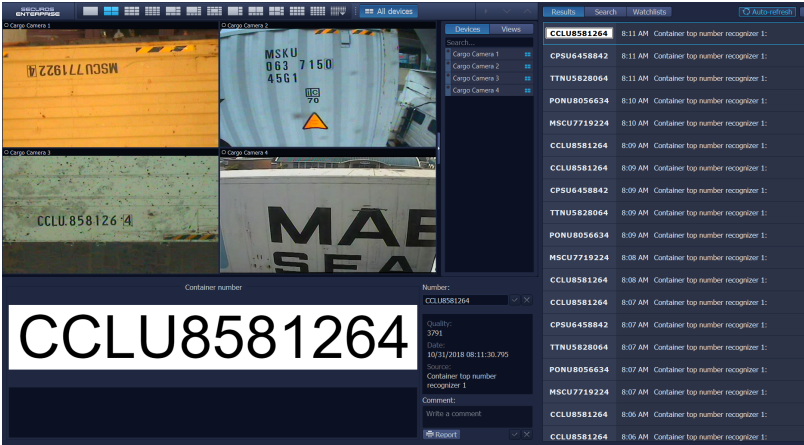




# SECUROS CARGO

## Container Number Recognition



SecurOS™ Cargo is an intelligent video analytics module for the SecurOS video management platform providing recognition of cargo container ISO codes in a variety of applications. It uses the most advanced native image processing software, the ISS SecurOS framework, and advanced algorithms for the recognition of codes on cargo containers.

SecurOS Cargo provides a number of unprecedented advantages for users, including the ability to recognize codes on cargo containers from numerous sides. By developing a container code recognition solution that integrates with cargo management processes at port, intermodal, and logistics centers, SecurOS Cargo can dramatically improve throughput and turnaround time, reduce liability, and be utilized to better locate and track containers in large facilities. To further the ability to manage the security of a facility, the automated system can also incorporate facial and license plate recognition, along with tracking capabilities, for a more comprehensive search and report.



[www.issivs.com](http://www.issivs.com)

## Technology Overview

### Hardware-agnostic System

No specialized cameras or other hardware is required. System is hardware-agnostic.

### Complete Logistics Management Solution

SecurOS Cargo can run on the SecurOS VMS platform alongside other ISS modules such as SecurOS Auto and FaceX. With the ability to integrate with other devices such as weigh scales, SecurOS Cargo can provide a complete logistics management solution.

### Varying Recognition Environments

System can support a number of different recognition environments including: truck, crane, forklift, as well as use of hand-held devices.

### ISS Native Technology

SecurOS Cargo is a completely ISS-native technology, making it easy to tailor our solution as per our client's needs.

### Advanced Recognition Engine

System recognizes container ISO codes printed horizontally or vertically, on the top, side, or back of the container.

### Streamline Operations

SecurOS Cargo helps improve port throughput and turnaround time and therefore increases the overall efficiency of operations.

## Applications

- Airport / port customs
- Container yards / depots
- Logistics management
- Customs borders
- Inspection stations

## Key Features

### Result Consolidation

If multiple cameras are used (e.g. both sides and top of container), system will consolidate results into one best result. Also video from all the cameras will be time synced and easily available for playback and export.

### Smart Search

Partial text/wildcard search for container codes against watchlist/external databases.

### Advanced Results Data

Search results will include the recognized ISO code, the container size and type, the corresponding video clip(s), the camera name, recognition time, date, as well as the recognition confidence value.

### Watchlists

Add container codes to local watchlists (black, white, info), and set custom alarms for matches against the watchlist.

### External DB Connectivity

Seamless connection to external databases, including prohibition/permission of pass, automatic notification regarding pass of container with flagged code.

### System Automation

Provides advanced reaction capabilities and automatic operator notification based on container code recognition and/or comparison with information from a database/watchlist.

### Reporting Tools

Quick report generation of the container(s): print frame and information about the recognized container code(s).

### Third-Party Equipment Integration

System integrates with most third-party equipment and devices such as gates, weigh scales, as well as port management software.

## Specifications

ISS Platform Support	
<b>Supported Operating Systems</b>	Windows 10 Pro Windows Server 2016 / 2019
<b>SecurOS™ VMS Version Support</b>	SecurOS Premium SecurOS Enterprise
Container Specifications	
<b>Container Types</b>	10, 20, 30, 40, 45, 53 feet
<b>ISO Standard</b>	ISO 6346
Supported Video Formats	
<b>Codec</b>	MJPEG, MPEG4, H.264, H.265, MxPEG
Additional Technical Data	
<b>Minimal Required Resolution</b>	640 x 480 (more than 800x600 not required)
<b>External Database Connectivity</b>	RESTful Web Service Microsoft ODBC
<b>System Output</b>	Camera name / ID Recognition result Container size and type Container tracking timestamps Container number track ID Quality of recognition result Container direction Container ISO code location in image Internal / External watchlist match info Container speed (optional) Snapshot of whole frame / container / ISO code (optional)
Ordering Information	
<b>SecurOS™ Cargo Part Numbers</b>	<b>IF-CNRT1:</b> SecurOS™ Cargo - Container Number Recognition (per Control Point Lane with 1 camera) <b>IF-CNRT2:</b> SecurOS™ Cargo - Container Number Recognition (per Control Point Lane with 2 cameras - for result consolidation) <b>IF-CNRT3:</b> SecurOS™ Cargo - Container Number Recognition (per Control Point Lane with 3 cameras - for result consolidation)