

# **DATALOGIC**™

DATALOGIC AUTOMATION

VISION SYSTEM



## **NVS9000**™

**UNMATCHED PERFORMANCES  
CAMERA SYSTEMS**

IDENTIFICATION

1D Bar code - 2D Bar code

IMAGE CAPTURING

Data Archive  
Ready for Video Coding  
Ready for OCR

# UNMATCHED READING PERFORMANCES

## STOP&GO

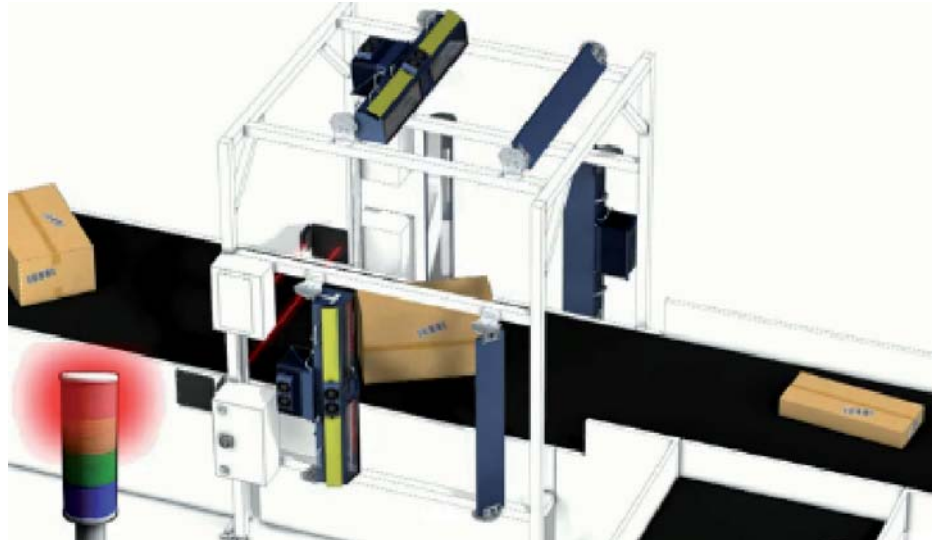
NVS9000™ can handle conveyor stops (STOP) with an item being across the scan line: at restart (GO) barcode will be read and the item successfully sorted.

### ADVANTAGES:

- Higher Productivity
- Easy Integration



Scan the QR-code to see Stop&Go in action



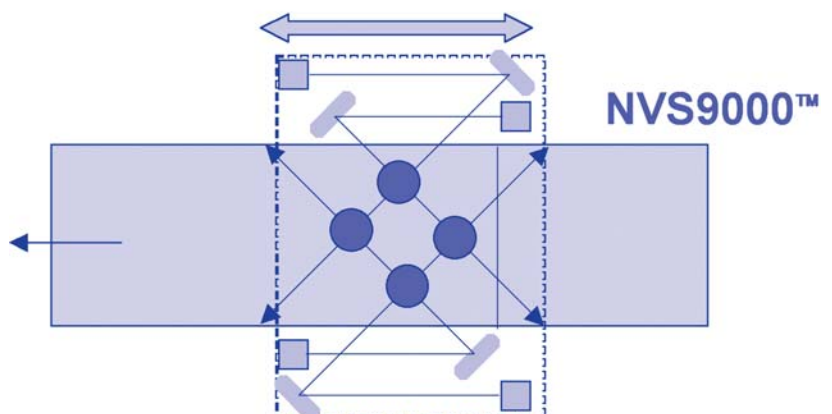
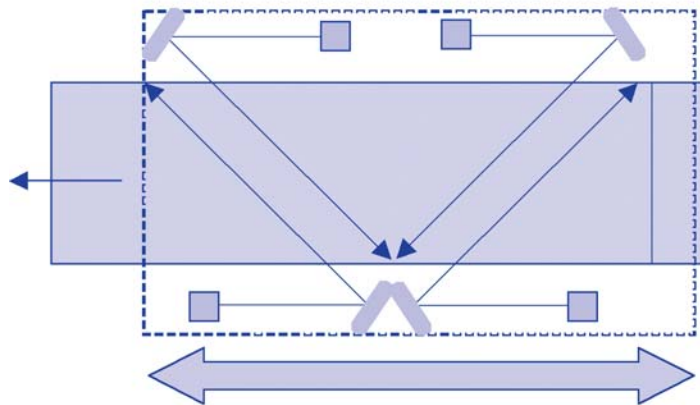
## PULSED LIGHT

50% reduction in footprint length due to patented technology allowing view lines to intercept each other without problems. One system (5 sides) can fit into only 2.2 meters length.

### ADVANTAGES:

- Reduced footprint
- Optimized layout integration

## Other Solutions



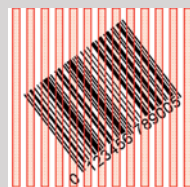
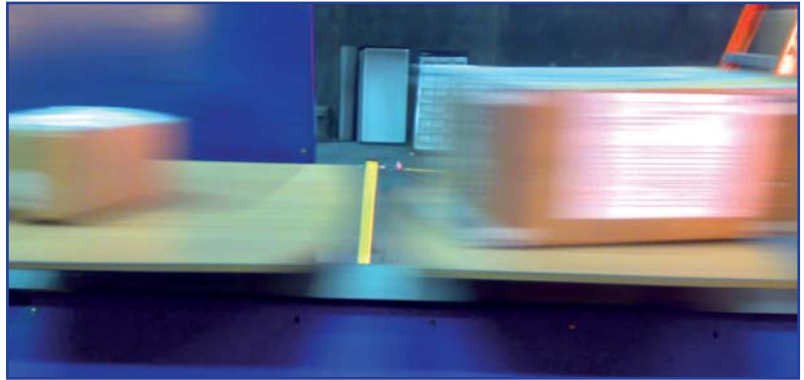
# ...MATCHING YOUR NEEDS

## ACQUISITION SPEED

NVS9000™ utilizes a state of the art high speed linear CCD sensor, achieving 33,000 scans per second. Compared to standard devices running at a lower 19,000 scans per second, the NVS9000™ gives users the flexibility to increase item speed or adjust the system for better quality image capturing.

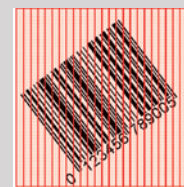
### ADVANTAGES:

- Higher Productivity
- Improved Reading Statistics



19.000 Hz @  
high speed

Partial  
image



33.000 Hz @  
high speed

Complete  
Image

## ENERGY SAVING

- NVS9000™ uses intelligent illumination, switches off when no items are inside the reading tunnel
- Low intensity "pre-heating" light is ready to flash when items enter the trigger line
- 50% energy savings around 150 W per hour for each NVS
- total yearly savings around 112 USD for each camera<sup>(1)</sup>
- total yearly CO<sub>2</sub> emission savings around 688 Kilos for each camera<sup>(2)</sup>

### ADVANTAGES:

- Energy Savings
- Reduced CO<sub>2</sub> Footprint

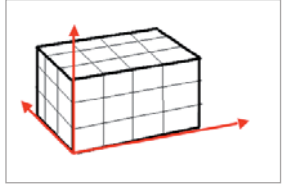
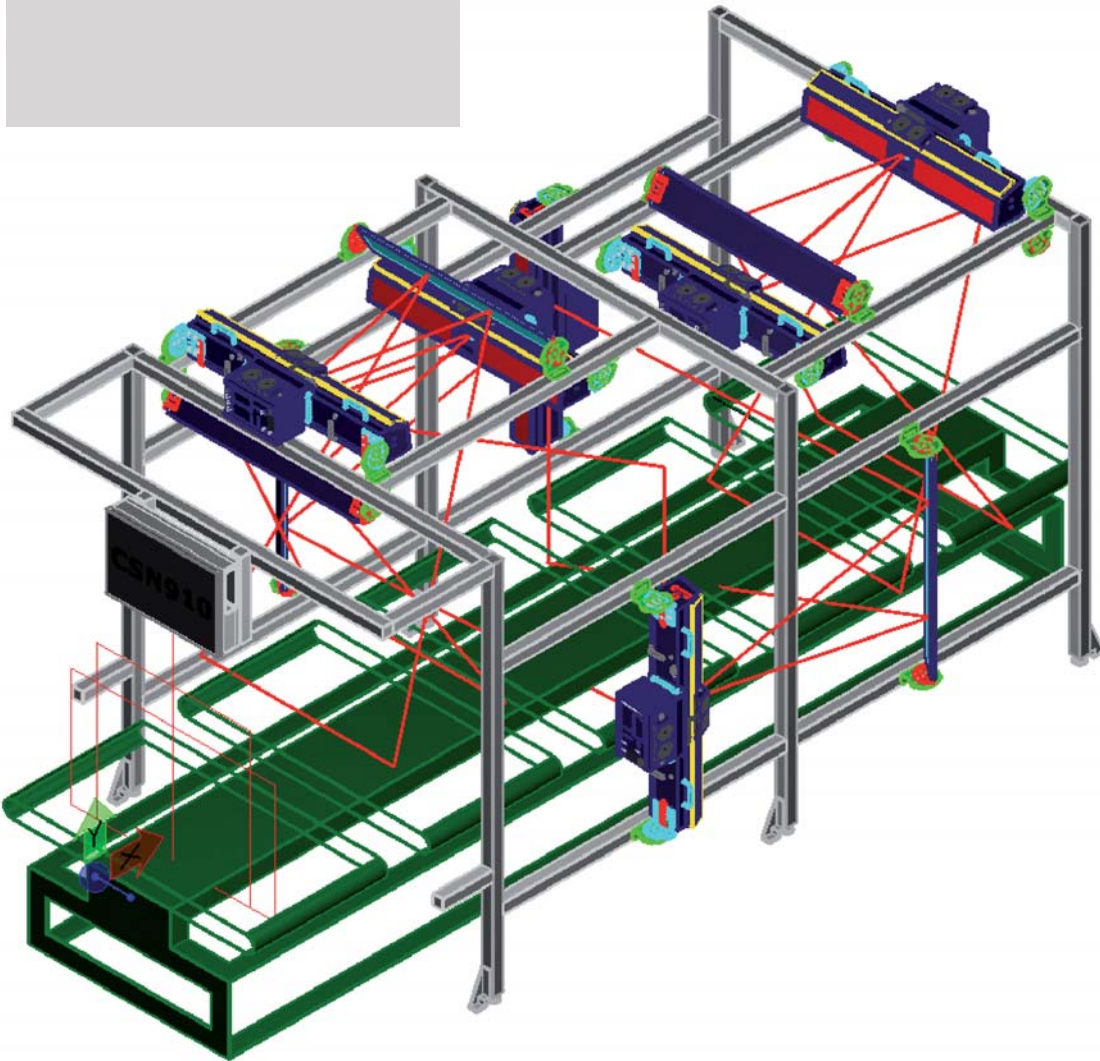


(1) @ 0.1 USD per kWh, 24 hours/day, 6 days/week - average 2011 energy retail cost in US, from EIA <http://www.eia.doe.gov/>  
(2) <http://www.nef.org.uk/greencompany/co2calculator.htm>



# SYSTEMS BEYOND IDENTIFICATION

NVS9000™ is the state of the art bar code reading systems and it is ready for a full suite of possible integrations.



VOLUME



IDENTIFICATION

ABCDEFGHIJKLMNØP  
QRSTUVWXYZÀÆÉÏÖÜ  
abcdefghijklmnp  
qrstuvwxyzàæéïöü&  
1234567890(¢£.?!?)

OCR



VIDEO CODING



IMAGE DATA  
ARCHIVE



WEBSENTINEL  
DIAGNOSTIC AND  
STATISTICAL TOOLS

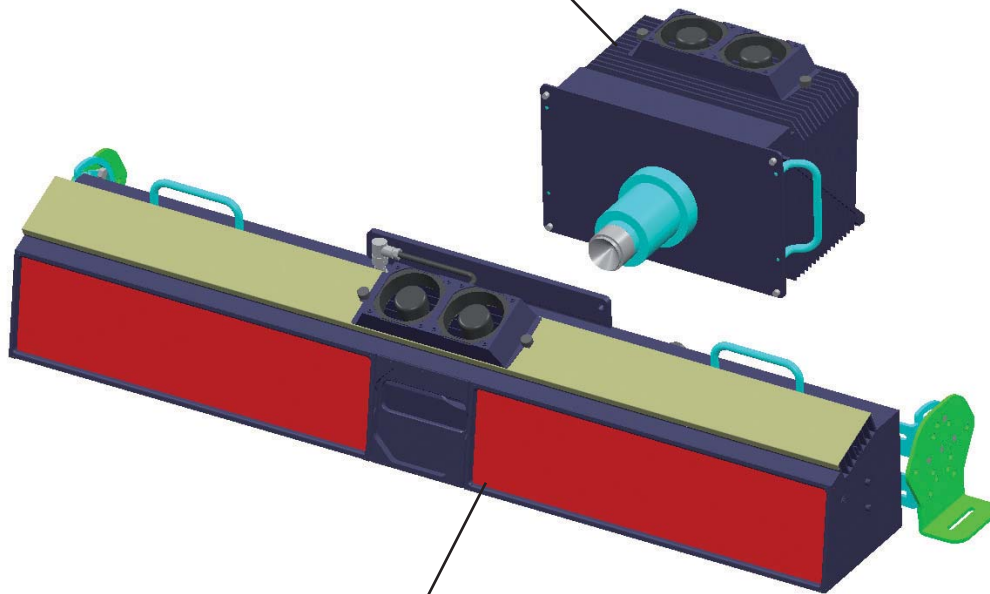


HOST  
CONNECTIVITY

# NVS9000™ AT A GLANCE

## 4 Camera Models:

- 60 mm (lens)
- 80 mm (lens)
- 105 mm (lens)
- 135 mm (lens)



## 3 Lighting Models:

- short 845 mm
- medium 1150 mm
- long 1480 mm

## THE PRODUCT...

- 33KHz acquisition speed
- Extended reading coverage:
  - FOVxDOF=1400x1000 (mm),
  - 1D code resolution 0.38 (mm)
- Industrial dependability:
  - 0-50 °C (op. temp.)
  - IP65 (enclosure rating)
  - Redundant fan system
- Gbit Ethernet interface
- Embedded System Controller function (master unit, no need for additional external controller)

## ...AND AROUND!

- Ease of installation, including auto-calibration procedure
- Ease of maintenance (full automated replacement procedure)
- Integration with laser bar code readers (8000 series)
- Integration with dimensioning system
- Remote monitoring and statistics: **WebSentinel** software package

## MODULARITY MEANS FLEXIBILITY

- Lighting and camera body can be ordered separately, creating the optimal solution for every application
- Spare parts management is more efficient, thus reducing total cost of ownership





# APPLICATIONS

Postal and Courier Express sorting



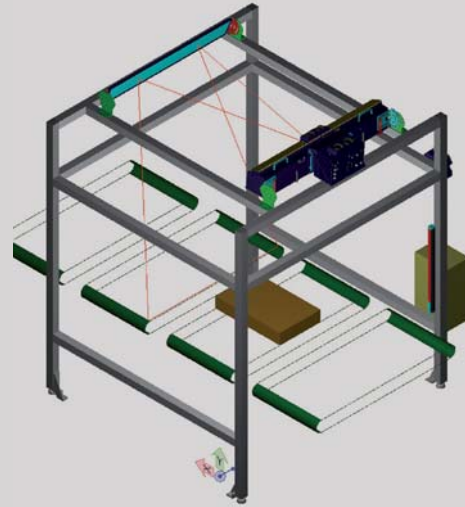
Distribution Centre



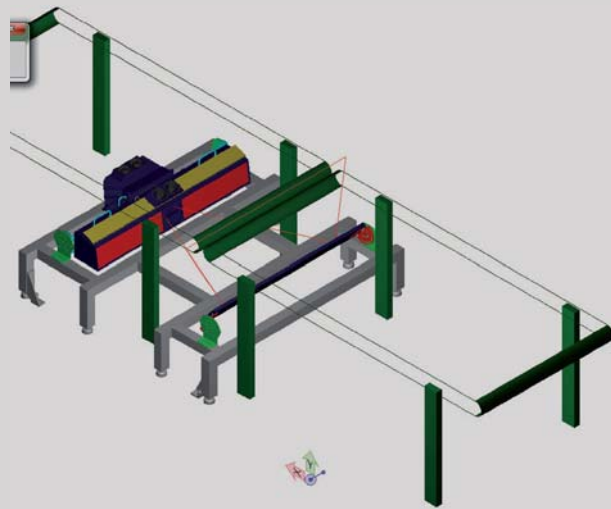
Tire industry



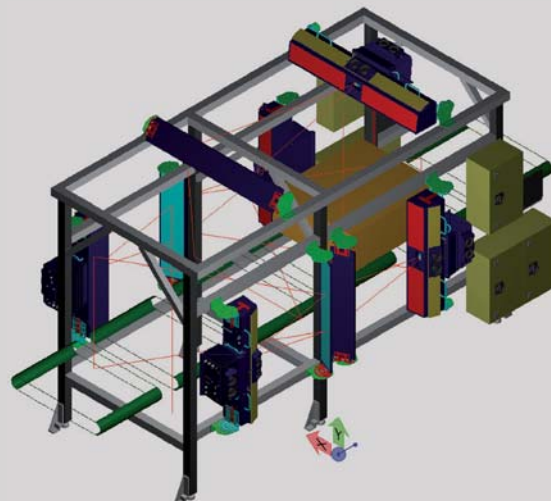
## TOP READING CAMERA SYSTEM



## BOTTOM READING CAMERA SYSTEM



## 5 SIDES READING CAMERA SYSTEM

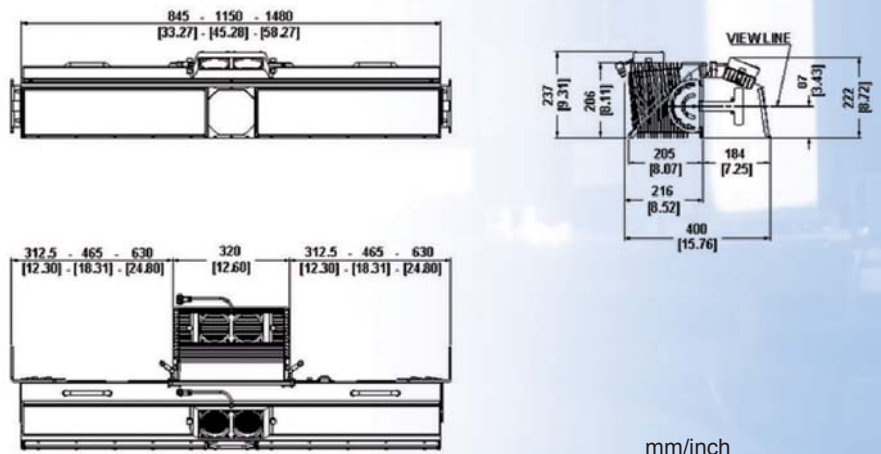


# SPECIFICATION

## TECHNICAL DATA

NVS9000™	
DIMENSIONS	See drawings
WEIGHT	NVS9000™: 11 kg (24 lbs)
	NLS9000:
	Short 12kg (26 lbs) Medium 15kg (33 lbs) Long 19kg (41 lbs)
HOUSING	Aluminium die casting
OPERATING TEMPERATURE	0° to + 50 °C (32 to 122°F)
STORAGE TEMPERATURE	-20° to + 70 °C (-4 to 158°F)
HUMIDITY	95% non condensing
PROTECTION CLASS	IP65
CCD SENSOR	8192 pixels, 8 taps
SCAN RATE	Max 33KHz
LENS OPTIONS	60 mm, 80 mm, 105 mm, 135 mm
ILLUMINATOR (NLS9000) MODELS	Short, Medium, Long
DEFLECTION MIRROR MODELS	Short, Medium, Long
FOCUS	Dynamic
IMAGE RESOLUTION RANGE	110-260 DPI (application dependant)
FOV FROM TOP	up to 1400 mm
DOF FROM TOP	up to 1200 mm
MAX. CONVEYOR SPEED	3 m/s (590 ft/min) for a resolution of 250 DPI
	4.5 m/s (885 ft/min) for a resolution of 170 DPI
	> 5 m/s (985 ft/min) for a resolution of 100 DPI
DECODER CPU	Core 2 Duo
RAM	2 Gbytes
MEMORY CARD FOR PARAMETERS SAVING	2 Gbytes Compact-Flash
OPERATING SYSTEM	Windows XP Embedded
DECODER SOFTWARE	Datalogic Automation proprietary
READABLE SYMBOLOGIES	All standard 1D and 2D symbologies
SETUP INTERFACES	USB port, VGA port, Ethernet Gb
HOST DATA INTERFACE	RS232/RS485 full duplex up to 115.2 Kbit/s (optoisolated)
	Ethernet Gb
IMAGE DATA OUTPUT	Gigabit Ethernet, C-Link
DIGITAL I/O	Presence Sensor input, Speed sensor input
	4 Input / 4 Output NPN or PNP open collector input/output, optoisolated
LEDS AND INDICATORS	GENERAL: Power, Ready, Good, Status
	COMMUNICATION: Position Sensor, Speed Sensor, Trigger, Video Sync, Chain Sync, COM
SUPPLY VOLTAGE	24 VDC +/-10%
POWER CONSUMPTION	360 W average (450 max)
LED CLASS	Class 2M

## DIMENSIONS



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