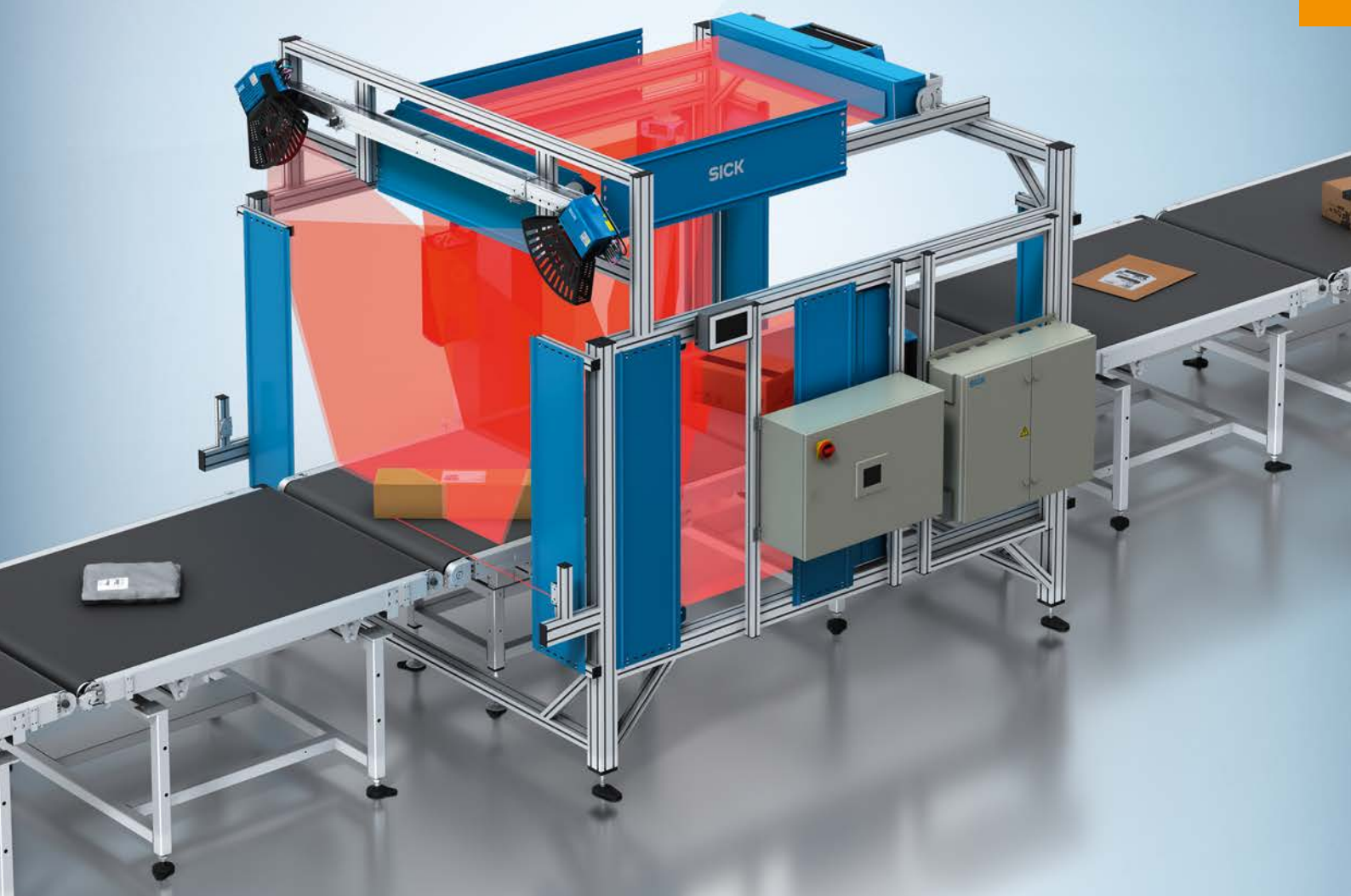




DWS Dynamic

DYNAMIC IDENTIFICATION, MEASUREMENT AND WEIGHING OF OBJECTS

Track and trace systems

SICK
Sensor Intelligence.



MEASURING, WEIGHING, SCANNING OBJECTS IN JUST ONE STEP

Logistics processes can be simplified, automated and made more efficient with DWS Dynamic systems. Correct and reliable recording of object master data, even with high throughput, is essential for logistical processes as well as for billing purposes.

The Dimensioning-Weighing-Scanning systems (DWS) from SICK determine the weight and volume of freight items and identifies them by reading 1D or 2D codes. They can be integrated into existing conveyor systems and work reliably at conveyor speeds of up to 2.9 m/s.



Validated revenue recovery of freight costs

- Recording of legal-for-trade volume and weight data
- Increase in legal-for-trade share



Optimization of plant utilization

- Increase in shipment throughput and sorting accuracy



Efficiency and process reliability for storage and conveying tasks

- Optimal storage utilization
- Custom-fit packaging sizes
- Traceability throughout the entire conveying and storage process



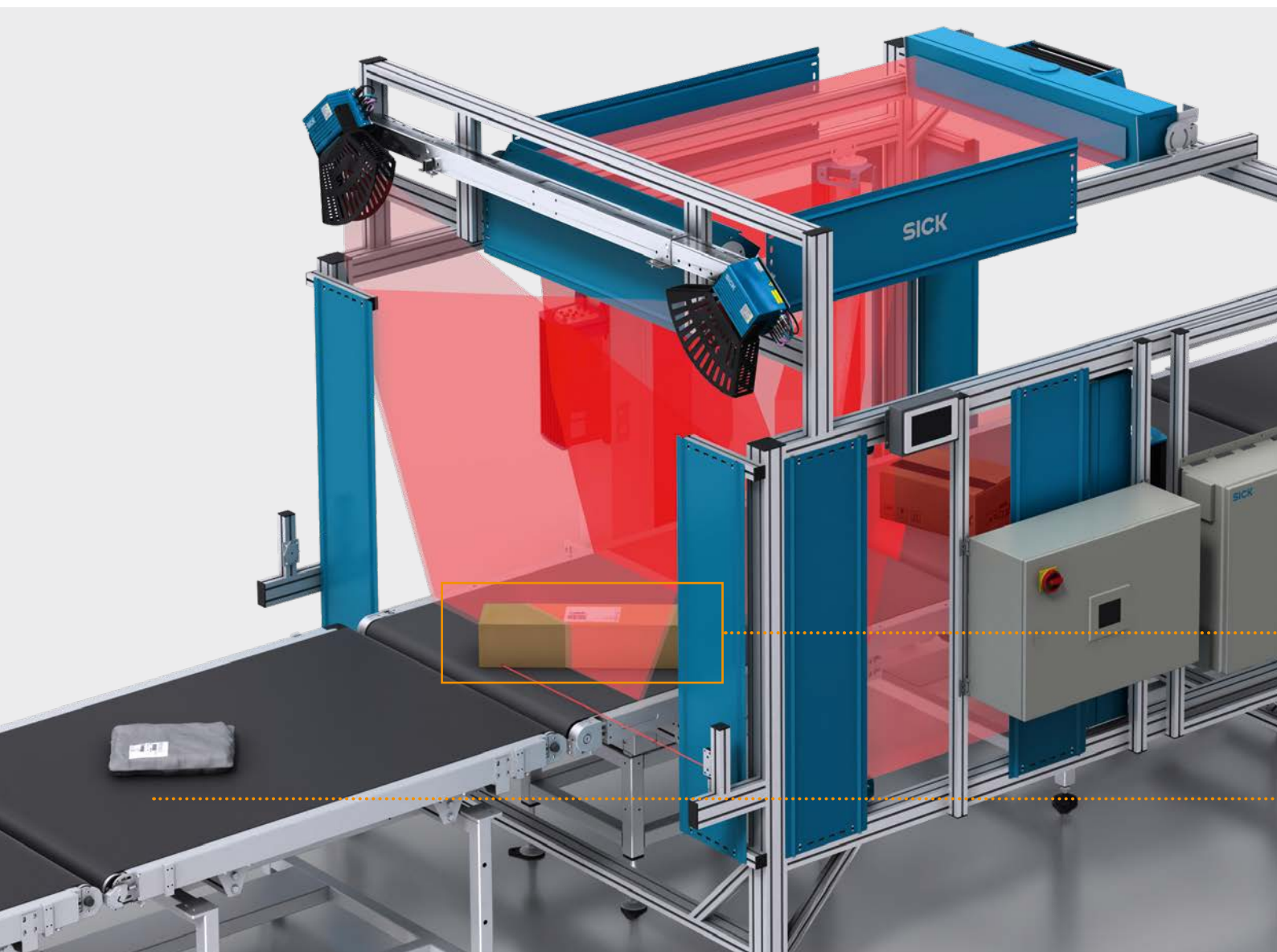
Optimal control of sorting and loading processes

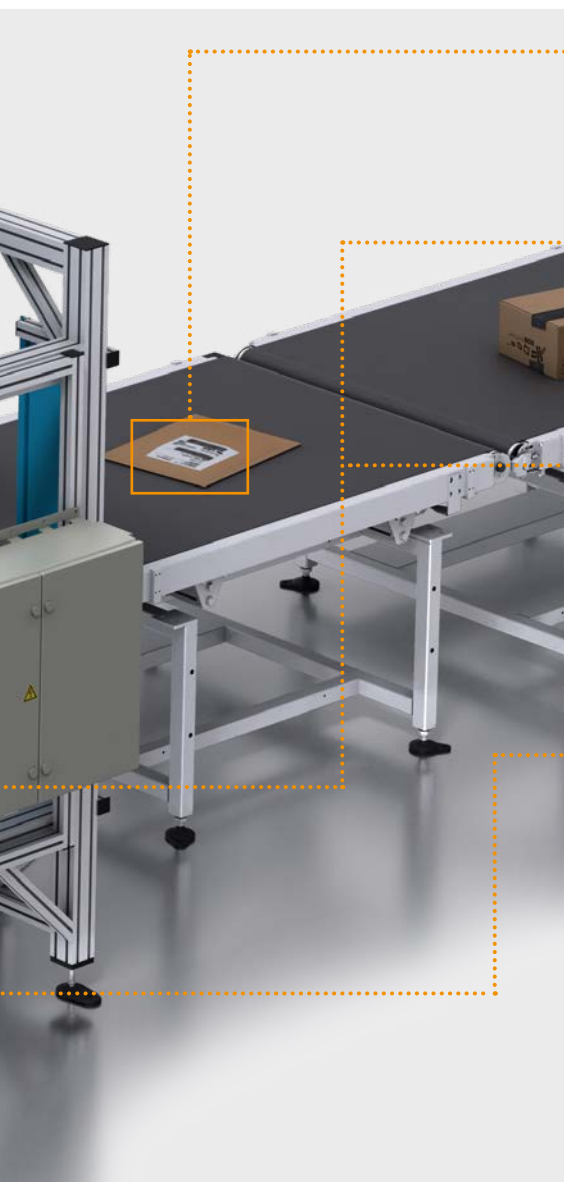
- Provision of data for discharge
- Optimization of load composition
- Controlled presorting for sorter systems

RELIABLE DATABASE – DYNAMIC RECORDING OF MASTER DATA

The challenge here is precise and reliable dimensioning, identification and weighing.

DWS Dynamic systems are the right choice for nearly any master data collection requirement for automating sorting, storage and conveying tasks and increasing turnover per parcel.





Identification of all common code types

Technologies: Laser, camera, RFID

Scan mode: manual or automatic

Weighting of objects

Object weight: from 0.01 to 150 kg

Scale types: Single, double or triple scales

Accuracy: ≥ 2 g

Measurement of a wide range of parcel sizes and shapes

Object data: L / W / H

Accuracy: ± 5 mm / ± 5 mm / ± 2 mm

Technologies: Laser, camera

Object type: cubic and irregular

Performance

Speed: up to 3.4 m/s

Throughput: up to 19,000 pph

Additional functionalities possible

2D/3D Vision Solutions for reliable object verification



SCAN THROUGH THESE BENEFITS

The high-performance DWS systems from SICK save time and money. They can be integrated flexibly into your existing conveyor technology or used as stand-alone solutions. Pre-installations can considerably speed up commissioning. They are compatible with other modular expansion stages and all common system controllers, which ensures future-proofing and high system availability.



Exact revenue recovery of shipment dimensions and weight

- Legal-for-trade recording of volume and weight data with integrated code reading for automatic billing
- Integrated alibi memory for central storage of legal-for-trade data
- Certified according to MID and NTEP (OIML)



Short investment payback time thanks to high overall read rate

- A wide range of objects can be identified, measured and weighed at high speeds in just one step
- Optimization of object distances with start/stop function for object singulation



Flexible usage and adaptability

- Use as a stand-alone solution or integrated into existing conveyor technology
- Easy replacement or expansion of components and functions thanks to modular system setup
- Can be combined with manual and motorized in- and outfeed
- Forward/Reverse mode
- Simple repositioning of the system
- Functional enhancements for object verification thanks to 2D / 3D vision software

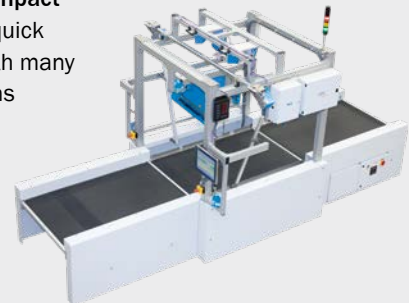
DWS Dynamic Smalls

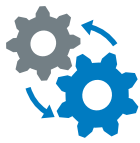
Solution for small parcels and objects with maximum throughput



DWS Dynamic Compact

Ideal solution for quick commissioning with many additional functions





High system availability

- Intelligent system setup for quick and easy maintenance without cost-intensive disassembly
- Additional side guards on the conveyor technology to prevent accidents
- Compatible with all common system controllers



Quick Start

Fast commissioning

- Shorter downtime thanks to pre-installation and commissioning by SICK



Cost-effective retrofitting

- Future-proof thanks to compatibility with existing SICK solutions
- Additional modular expansion stages are available depending on the shipment throughput
- The use of several host interfaces with free parameterization options means that no additional identification systems are necessary

DWS Dynamic Flex
Customized solution for application-specific requirements



DWS Dynamic Eco
Modular system concept keeps pace with customer requirements



DYNAMIC IDENTIFICATION, MEASUREMENT AND WEIGHING OF OBJECTS



Product description

The DWS Dynamic (Dimensioning-Weighing-Scanning) track and trace system identifies, measures and weighs objects dynamically in just one step. Recorded master data makes it possible to automate sorting, storage and conveying tasks. High overall read rates ensure the shortest investment payback times on the market. The modular system setup

ensures compatibility with other solutions from SICK and enables adaptations to customer-specific requirements. In addition, the certified system variant enables the use of master data for billing purposes. DWS Dynamic works as a stand-alone solution, but can also be integrated easily into existing conveyor systems.

At a glance

- Identification, weighing and measurement (L/W/H) of objects
- Modular system concept for flexible upgrading and conversion options
- Integrated alibi memory for central storage of LFT data
- Certified according to MID and NTEP (OIML)
- Expanded control of conveyor processes, e.g. for object singulation

Your benefits

- Identify, measure and weigh objects in just one step
- Short investment payback times thanks to very high overall read rates
- Increase in the legal-for-trade (LFT) rate based on a reliable database for automatic billing
- Cost-effective retrofitting due to compatibility with existing SICK solutions
- Shorter downtime thanks to pre-installation and commissioning by SICK
- Flexible area of application and simple system conversion
- Increased system availability thanks to efficient maintenance



Additional information

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→ www.sick.com/DWS_Dynamic

For more information, simply enter the link or scan the QR code and get direct access to technical data, CAD design models, operating instructions, software, application examples, and much more.



Detailed technical data

The exact device specifications and performance data of the product may deviate from the information provided here, and depend on the application in which the product is being used and the relevant customer specifications.

General notes

Items supplied	Identification, dimensioning and weighing technology including mechanical frames User interfaces (electrical, mechanical, data transfer) Infeeds / outfeeds on request Additional functions & features (e.g. 2D / 3D Vision Solutions) on request
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Features

	DWS Dynamic Eco	DWS Dynamic Smalls	DWS Dynamic Compact	DWS Dynamic Flex
Industries	Courier, express, parcel, and postal Retail and warehousing			
Products by tasks	Identification Dimensioning Weighing			
Object identification	RFID System CLV System Lector65x System ICR System			
Object dimensioning	VMS4x00/5x00 VMS6x00/7x00 VML			
Scale type	Single scale	Single scale Double scale	Single scale Double scale Triple scale	
Object infeed and outfeed	Automatic Semi-automatic		Automatic Semi-automatic Manual	Automatic Semi-automatic

Performance

	DWS Dynamic Eco	DWS Dynamic Smalls	DWS Dynamic Compact	DWS Dynamic Flex
Transport speed	0.4 m/s ... 0.8 m/s	≤ 2 m/s	≤ 3.4 m/s	
Minimum object size	50 mm x 50 mm x 20 mm			
Maximum object size	1,200 mm x 800 mm x 800 mm (more on request)	410 mm x 410 mm x 200 mm	1,500 mm x 1,000 mm x 800 mm (more on request)	2,200 mm x 1,600 mm x 800 mm (more on request)
Throughput	1.300 pph (depend- ing on speed and object length)	12.000 pph (depend- ing on speed and object length)	5.000 pph (single scale) / 11.000 pph (double scale) / 19.000 pph (triple scale) (depending on speed and object length)	
Accuracy of scale	e = 20 g to e = 50 g (depends on appli- cation)	e = 2 / e = 5 g (de- pends on application)	e = 20 g to e = 50 g (depends on appli- cation)	e = 2 / e = 5 g (de- pends on application)
Allowed weight for legal-for-trade weighing	0,25 kg ... 60 kg	0,01 kg ... 15 kg	0,025 kg ... 120 kg	0,01 kg ... 150 kg
Authorizations	Legal-for-trade approvals, OIML R 129, OIML R 51-1, Measuring Instruments Direc- tive 2004/22/EG (MID)			

Ambient data

Ambient temperature, operation	-10 °C ... +50 °C
Ambient temperature, storage	-20 °C ... +70 °C
Permissible relative humidity	95 %, Non-condensing

Ordering information

Object infeed and outfeed	Allowed weight for legal-for-trade weighing	Scale type	Throughput	Transport speed	Type	Part no.
Automatic Semi-automatic	0,25 kg ... 60 kg	Single scale	1.300 pph (depending on speed and object length)	0.4 m/s ... 0.8 m/s	DWS Dynamic Eco	On request
	0,01 kg ... 15 kg	Single scale Double scale	12.000 pph (depending on speed and object length)	≤ 2 m/s	DWS Dynamic Smalls	On request
Automatic Semi-automatic Manual	0,025 kg ... 120 kg	Single scale Double scale Triple scale	5.000 pph (single scale) / 11.000 pph (double scale) / 19.000 pph (triple scale) (depending on speed and object length)	≤ 3.4 m/s	DWS Dynamic Compact	On request
Automatic Semi-automatic	0,01 kg ... 150 kg	Single scale Double scale Triple scale	5.000 pph (single scale) / 11.000 pph (double scale) / 19.000 pph (triple scale) (depending on speed and object length)	≤ 3.4 m/s	DWS Dynamic Flex	On request

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SICK AT A GLANCE

SICK is a leading manufacturer of intelligent sensors and sensor solutions for industrial applications. With more than 10,400 employees and over 50 subsidiaries and equity investments as well as numerous agencies worldwide, SICK is always close to its customers. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents, and preventing damage to the environment.

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Detailed addresses and further locations → www.sick.com