



Master Data Analyzer

DIGITIZATION OF GOODS FOR OPTIMIZED LOGISTICS PROCESSES

Track and trace systems

SICK
Sensor Intelligence.

DIGITIZATION OF GOODS TO GO

SICK's Master Data Analyzer is a compact and complete out-of-the-box solution for the instant capture of master data. The mobile variant with industrial rechargeable battery and WLAN technology is flexible for installation in a variety of locations. If the signal is not strong enough for wireless data transmission, an internal cache is available.

The rugged industry-grade design and the clear and straightforward operating concept make for easy handling. The system's glass plate can be removed without tools, making it easy to clean. The user is provided with clear feedback about the measurement process via the indicators on the display. Through continuous self-diagnosis, the Master Data Analyzer is able to supply stable measured values in real time.



Unpack. Set up. Connect.

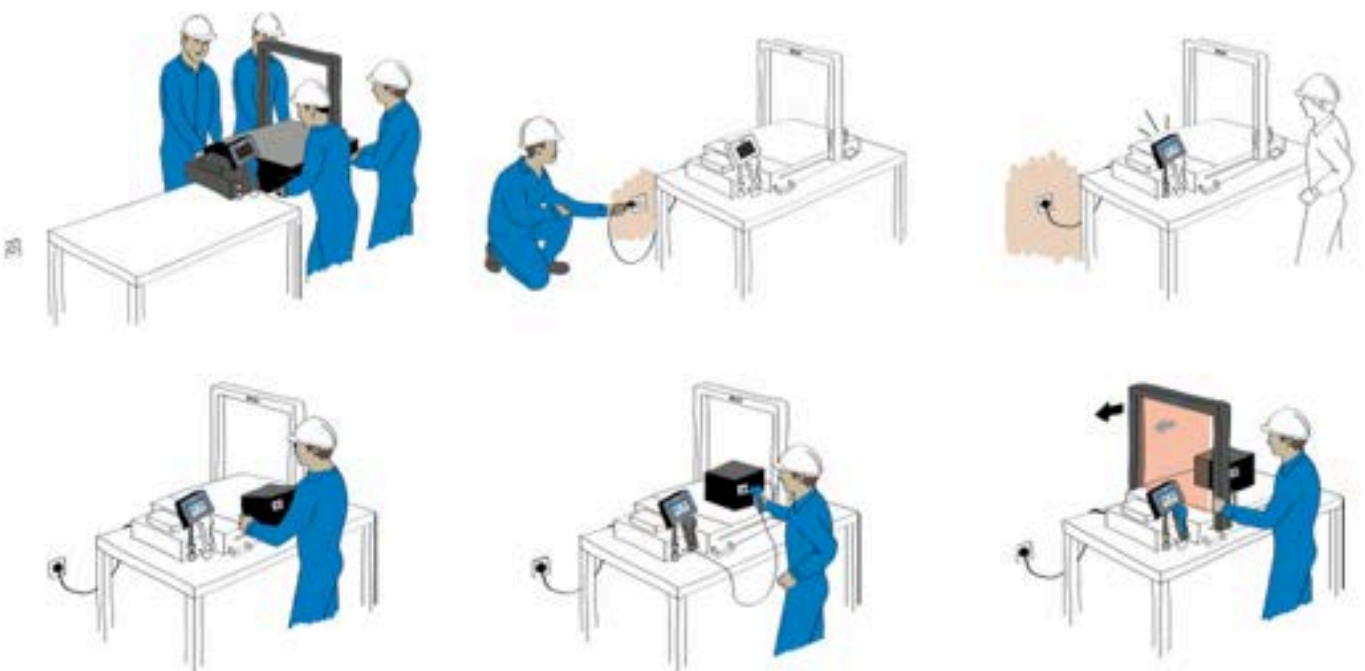
The Master Data Analyzer is as easy to operate as a television. Simply set up the pre-assembled system, connect to the power, and capture object data – goods digitization at your fingertips. All information – dimensions, weight, and bar code – is captured in a single step.

Measurements can be taken in both directions, so it does not matter which direction the goods are coming in from.

The rugged and compact system can even be relocated at any time.

No power or network nearby? The Master Data Analyzer can capture master data in rechargeable battery mode and transfer the data via WLAN.

For us, high-tech is all about making things easier.



MASTER DATA CAPTURE IN AN INSTANT



1. Place the measuring object on the Master Data Analyzer measuring field.

The object is weighed automatically. The object do not have to be aligned. Use the hand-held scanner to scan the object's bar code.



2. Slide the read portal past the end of the object.

Measurements can be taken in both directions. MLGs (measuring automation light grids) measure the object regardless of its reflective properties.



3. Data is output immediately after an object has been detected.

The system merges the data from the bar code with the object's dimension and weight data. The measurement process remains stable even if movements are interrupted or reversed.

MASTER DATA TO OPTIMIZE YOUR PROCESSES

Master data capture for picking processes

Workers at downstream packing stations are able to use the images recorded by the Master Data Analyzer during master data capture to visually verify that packaging is correct. This improves the quality of the packaging process.



Master data capture for transport processes

For optimum loading on swap bodies and to avoid blockages and misrouting during the loading of transport vehicles through to the projection of shipping or freight costs, the Master Data Analyzer supplies all relevant master data inclusive of geometries. This also helps to cut fuel consumption and leads to a reduction in the associated CO2 emissions.



Master data capture for storage processes

The intralogistical life cycle of goods starts with goods receipt. The increase in levels of automation is creating a demand for other information in addition to conventional master data. For optimum goods storage along with automated handling and retrieval, the Master Data Analyzer merges product master data with properties that are relevant from the point of view of logistics to create an updated new master data record.



DIGITIZATION OF GOODS FOR OPTIMIZED LOGISTICS PROCESSES



Product description

The Master Data Analyzer track-and-trace system captures the dimensions, the weight, and the bar code of objects in one step. Measuring automation light grids (MLG) enable measurements to be taken regardless of the object's reflective properties. This means that the Master Data Analyzer can be relied upon to deliver accurate measured data for objects packaged in foil in particu-

lar. It is not necessary to align objects. Measurements can be carried out in both directions. Data is sent directly after an object has been detected. Measurements can even be interrupted. The Master Data Analyzer also impresses with its rugged design, simple and intuitive operation, and maintenance-free mechanism.

At a glance

- Volume measurement accuracy of 2.5 x 2.5 x 2.5 mm and weight determination with accuracy of ± 5 g
- Bar code reading of all conventional 1D and 2D bar codes
- Maximum object size of 800 x 600 x 600 mm
- Mobile solution with industrial rechargeable battery and WLAN technology

Your benefits

- Reliable collection of master data – regardless of shape and surface
- High degree of storage optimization thanks to extremely high measurement accuracy
- Stable measurement thanks to continuous self-diagnosis, start and stop option
- Measurements taken in both directions, data output immediately after object measurement, and short measuring cycles result in high process reliability and save a great deal of time
- No further training necessary thanks to intuitive software design and Plug&Play functionality



Additional information

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➔ www.sick.com/Master_Data_Analyzer

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 | MSC800 controller MLG-2 Pro (2 x) Weighing cells (4 x) Hand-held scanners |
|-----------------------|------------------------------------------------------------------------------------|

Features

| | MDA650 2,5 (Image) | MDA650 5 (Image) | MDA800 2.5 mm (Image) | MDA800 5 (Image) |
|---------------------------------------|---------------------------------------------------------------------------------|---------------------|--------------------------|---------------------|
| Camera type | IP camera | | | |
| Controller | MSC800 | | | |
| Code resolution | ≥ 0.08 mm ²⁾ ≥ 0.18 mm ²⁾ | | | |
| Covered conveyor width | 650 mm | | 800 mm | |
| Reading distance ³⁾ | 30 mm ... 380 mm | | | |
| Read field width | 600 mm | | | |
| Read field height | 600 mm | | | |
| Depth of field | IDM2xx-xxxS Standard Range reading field diagram | | | |
| Laser class | II | | | |
| Heating | No | | | |
| Legal-for-trade | No | | | |
| Applications | Master data acquisition Master data capture incl. images (depending on type) | | | |
| Application | Industrial environment Stand Alone | | | |
| Scanner design | Hand-held scanners | | | |
| Including image recording | - / ✓ (depending on type) | | | |
| Misalignment of the object | 360° | | | |
| Number of object sides | Free (hand-held scanner) | | | |
| Conveyor type | Glass plate (static) | | | |

¹⁾ Valid for Code 39.

²⁾ Valid for Data Matrix code.

³⁾ For details, see reading field diagram for the IDM26x corded.

Performance

| | MDA650 2,5 (Image) | MDA650 5 (Image) | MDA800 2.5 mm (Image) | MDA800 5 (Image) |
|---------------------------------------------|--------------------------|---------------------|--------------------------|---------------------|
| Code types | 1D 2D Stacked code | | | |
| Travel speed of measurement axis | Depending on operator | | | |
| Maximum object size | 650 mm x 600 mm x 600 mm | | 800 mm x 600 mm x 600 mm | |
| Minimum object size | 10 mm x 10 mm x 5 mm | | | |
| Number of codes per reading interval | 1 | | | |
| Throughput | 900 pph | | | |
| Number of codes per scan | 1 | | | |
| Identification of parcels | Yes | | | |
| Accuracy of object coverage | ± 2.5 mm | ± 5 mm | ± 2.5 mm | ± 5 mm |

| | MDA650 2,5 (Image) | MDA650 5 (Image) | MDA800 2.5 mm (Image) | MDA800 5 (Image) |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------------------|---------------------|
| Accuracy of scale | 0.005 kg (up to 15 kg), 0.01 kg (up to 30 kg) | | | |
| Certificates | CE in accordance with EMC 2014/30/EU | | | |
| 1D code types | Code 39 Code 39 Trioptic Code 32 Code 93 Code 11 Codabar Code 128 GS1-128 / EAN 128 UPC / EAN / JAN (with addition) MSI/Plessey UK/Plessey IATA Interleaved 2 of 5 Standard and Industrial 2 of 5 Matrix 2 of 5 Telepen GS1 DataBar Australian Post China Post German Post US Planet US Postnet British Post Intelligent Mail Japan Post Korean Post Dutch KIX Post | | | |
| 2D code types | Data Matrix QR code MicroQR-Code Aztec MaxiCode | | | |
| Number of objects per second | 0.25 Objects per second | | | |

Interfaces

| | |
|-------------------------|----------------------------------|
| Optical indicators | 7" touch display (800 x 600 RGB) |
| Output data | XML TXT |
| Configuration interface | Ethernet (RJ45) |
| Identification | Hand-held scanners |

Mechanics/electronics

| | MDA650 2,5 (Image) | MDA650 5 (Image) | MDA800 2.5 mm (Image) | MDA800 5 (Image) |
|------------------------------------|----------------------------|---------------------|----------------------------|---------------------|
| Dimensions, system (L x W x H) | 1,210 mm x 900 mm x 900 mm | | 1,360 mm x 900 mm x 900 mm | |
| Measuring height | 600 mm | | | |
| Measuring area of system | 650 mm x 600 mm | | 800 mm x 600 mm | |
| Measurement area of platform scale | 650 mm x 600 mm | | 800 mm x 600 mm | |
| Enclosure rating | IP20 | | | |
| Protection class | III | | | |
| Electrical safety | EMC Directive: 2014/30/EU | | | |

| | MDA650 2,5 (Image) | MDA650 5 (Image) | MDA800 2.5 mm (Image) | MDA800 5 (Image) |
|--------------------------------------------|----------------------------------------|---------------------|--------------------------|---------------------|
| Output voltage of the power supply modules | 24 V | | | |
| Electrical connection | Mains plug / Battery system | | | |
| Supply voltage | 230 V | | | |
| Mains frequency | 50 Hz ... 60 Hz | | | |
| Panel PC | 7" touch display (800 x 600 RGB) (SIU) | | | |
| Trigger | During bar code scanning | | | |
| Encoder | SICK wire draw encoder | | | |
| Power consumption | 36 W | | | |
| Lens | Wide angle | | | |
| Housing | Steel enclosure on aluminum baseplate | | | |
| Housing material | Powder-coated metal housing | | | |
| Total weight | 90 kg | | 100 kg | |
| Housing color | Deep matt micaceous iron oxide | | | |

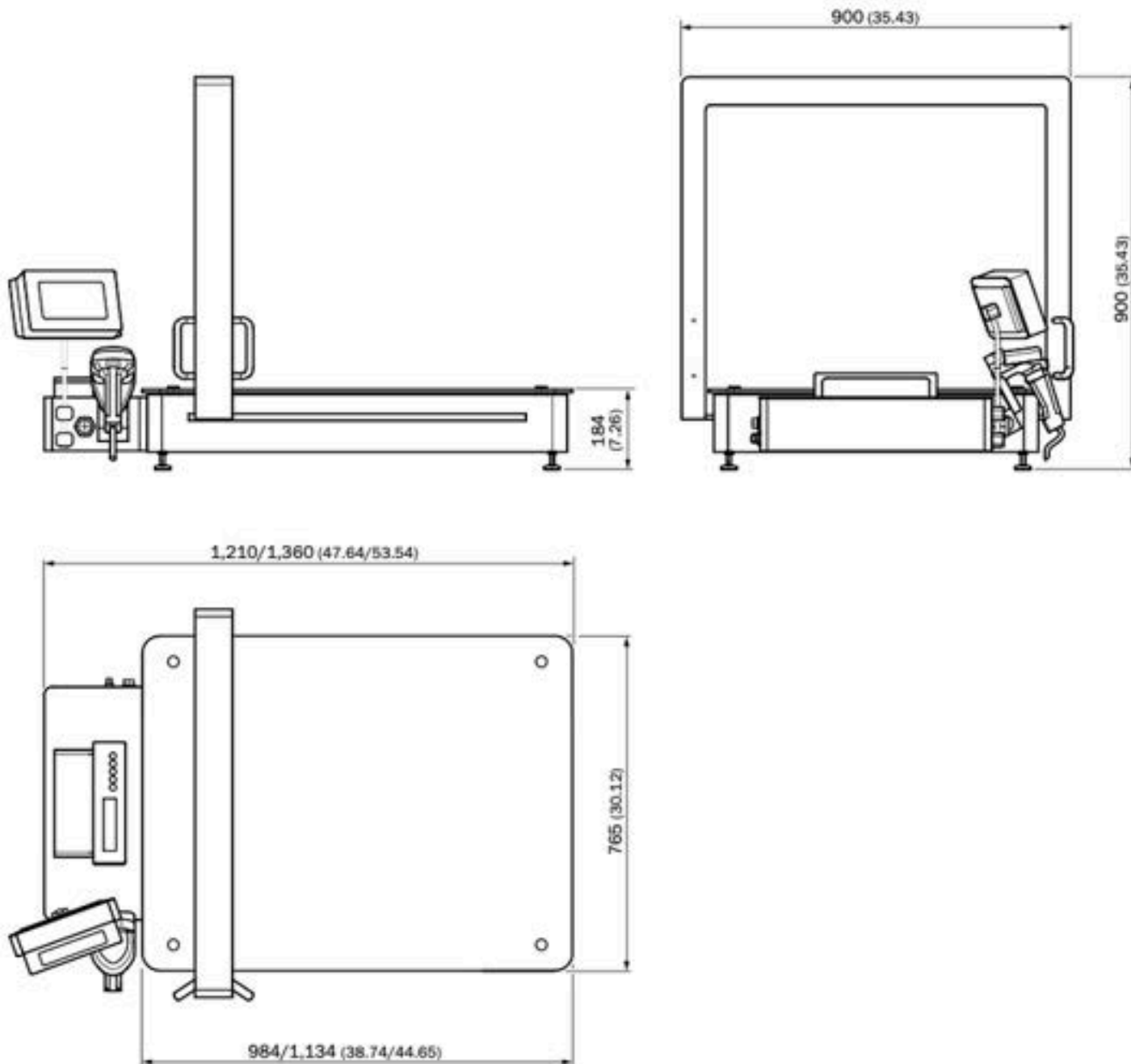
Ambient data

| | |
|-------------------------------------|-----------------------------------------------|
| Permissible relative humidity | ≤ 90 %, Non-condensing |
| Electromagnetic compatibility (EMC) | Low Voltage Directive EN 61000-6-2 |
| Ambient light immunity | Constant light, Indirect, 150,000 lx |
| Shock load | Normal transport load Stationary operation |
| Shock resistance | Normal transport load Stationary operation |
| Vibration load | Normal transport load Stationary operation |

Ordering information

| Covered conveyor width | Including image recording | Accuracy of object coverage | Type of system | Part no. |
|------------------------|---------------------------|-----------------------------|------------------|----------|
| 650 mm | - | ± 2.5 mm | MDA650 2,5 | 1087605 |
| | ✓ | ± 2.5 mm | MDA650 2,5 Image | 1087607 |
| | - | ± 5 mm | MDA650 5 | 1079161 |
| | ✓ | ± 5 mm | MDA650 5 Image | 1079163 |
| 800 mm | - | ± 2.5 mm | MDA800 2,5 | 1087606 |
| | ✓ | ± 2.5 mm | MDA800 2,5 Image | 1087608 |
| | - | ± 5 mm | MDA800 5 | 1079162 |
| | ✓ | ± 5 mm | MDA800 5 Image | 1079164 |

Dimensional drawing (Dimensions in mm (inch))




Accessories

Connection systems

Modules and gateways

| | Type | Part no. |
|-------------------------------------------------------------------------------------|--------------|----------|
|  | Wifi adapter | 2087193 |

Power supply units and power supply cables

| | Brief description | Type | Part no. |
|----------------------------------------------------------------------------------|-------------------------------------|--------------------------------------|----------|
|  | Power supply COLD Device-C14, 2.5 m | Power supply Master Data Analyzer CD | 2092752 |
| | Power supply EU-SCHUKO, 3.8 m | Power supply Master Data Analyzer EU | 2087223 |
| | Power supply US-NEMA, 3.8 m | Power supply Master Data Analyzer US | 2091880 |

Further accessories

Hardware

| Description | Type | Part no. |
|----------------------------------------------------|--------------------|----------|
| Sliding table with rollers for positioning the MDA | Table with rollers | 2092736 |

Rechargeable batteries and battery chargers

| Description | Type | Part no. |
|----------------------------------------------------------------------------------|---------------------------------------------|----------|
| Sliding table with rollers and integrated charging station for mobile use of MDA | Table with rollers and rechargeable battery | 2087217 |

SICK AT A GLANCE

SICK is a leading manufacturer of intelligent sensors and sensor solutions for industrial applications. With more than 7,400 employees and over 50 subsidiaries and equity investments as well as numerous agencies worldwide, we are always close to our 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.

We have extensive experience in various industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services round out our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is "Sensor Intelligence."

Worldwide presence:

Australia, Austria, Belgium, Brazil, Canada, Chile, China, Czech Republic, Denmark, Finland, France, Germany, Great Britain, Hungary, India, Israel, Italy, Japan, Malaysia, Mexico, Netherlands, New Zealand, Norway, Poland, Romania, Russia, Singapore, Slovakia, Slovenia, South Africa, South Korea, Spain, Sweden, Switzerland, Taiwan, Thailand, Turkey, United Arab Emirates, USA, Vietnam.

Detailed addresses and further locations → www.sick.com