

► Technical Datasheet MetriXFreight S140

The S140 from Metrilus gives you fast and precise measurements of length, width, height, and weight.

Designed for warehouses and distribution centers, it streamlines your logistics with its easy handling and outstanding accuracy.

With automatic photo documentation, every object is visually recorded, giving you full transparency and security.



► Highlights

- Measurement of small objects
- Simple and self-explanatory operation
- Simply place the object on the scale, no alignment necessary
- Direct feedback on successful measurement on the screen
- Low installation effort
- Photo of each measured object
- Mobile use with optional battery pack
- Maintenance and customer service via remote maintenance
- Continuous function control

▶ Features of the system

| | |
|---------------------------------------|---|
| Equipment type | Static, no moving components |
| Sensor type | 2D, 3D cameras, additional color cameras optional |
| Applications | Warehouses (in- & outbound), distribution centers, cross docking sites, master data acquisition, etc. |
| Installation Location Examples | Stationary or mobile use |
| Measurement objects | Box and irregular shaped objects, except totally non-reflective or highly reflective objects. Particularly suitable for small boxes and very flat objects |
| Acquired Data | Length, width, height and weight |
| Calculated data (optional) | Actual volume, volume weight |
| Master data (optional) | Additional master data attributes |
| Photos | Color photo of the measured object, additional cameras optional |

▶ Performance features

| | |
|-------------------------------|--|
| Minimum dimensions | |
| • Length | 1 cm / 0.4 inch |
| • Width | 1 cm / 0.4 inch |
| • Height | 0 cm / 0 in |
| Maximum dimensions | |
| • Length | up to 120 cm / 47 inch |
| • Width | up to 85 cm / 33 inch |
| • Height | up to 70 cm / 27.5 inch |
| Measuring accuracy | < 5 mm / 0.2 inch (mean deviation) |
| Measuring time | ~ 200 ms |
| Resolution (display) | 1 mm / 0.04 inch |
| Integrated Scale | |
| • Resolution (Display) | 1 g |
| • Maximum Error | 3 g |
| • Mimum Weight | 50 kg |
| • Platform Size | 50 x 40 cm |
| Operational throughput | Up to 750 pieces / hour (incl. barcode scan) |

▶ Performance features

Due to the pyramid-shaped measuring cone of the camera, the maximum measurable object sizes vary depending on the height of the object.

Lower object heights allow for measurement of larger maximum horizontal dimensions, as visualized in the following graph.

The maximum side lengths [L (blue), B (orange), H (black)] can therefore not be measured at the same time. The axes are labeled as follows:

- X-axis: maximum object width/length (mm).
- Y-axis: object height (mm).

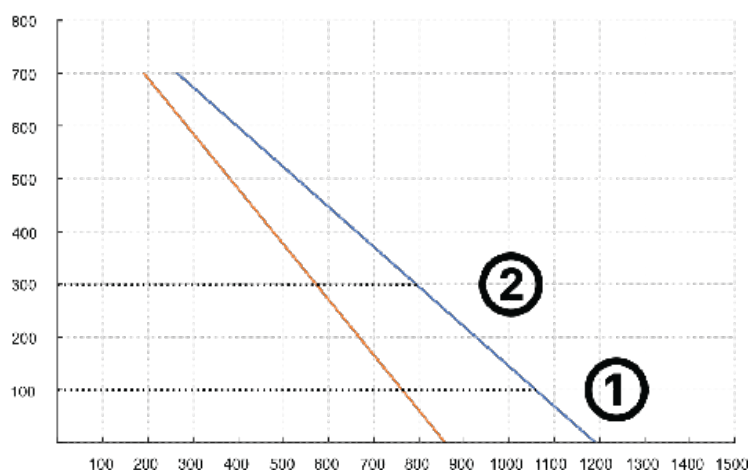
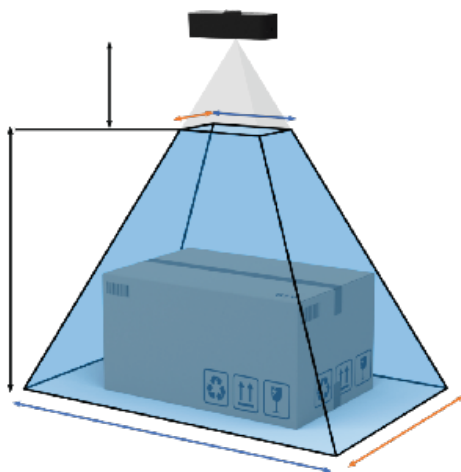
The figure shows two examples.

Example (1):

Object height (black): 100 mm | Maximum measurable length (blue): ~1050 mm | Maximum measurable width (orange): ~760 mm.

Example (2):

Object height (black): 300 mm | Maximum measurable length (blue): ~795 mm | Maximum measurable width (orange): ~570 mm.



▶ Trigger Interfaces

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|------------------------|---|
| Automatic | Measures whenever a stable measurement can be made |
| Barcode Scanner | Measurement triggered by connected barcode scanner |
| Programmatic | Trigger via REST API or customer specific trigger plugin (optional) |

▶ Data Interfaces

| | |
|----------------------|---|
| QR-Code | Display of a dynamically generated QR code containing dimensions and optional weight |
| File Transfer | Store or submit as CSV, XLSX, PDF optionally along with photos via email, FTP, SFTP or on network share |
| API | Submit data via standard JSON REST API or customer specific integration (optional) |
| Reportings | Customizable, with customer logo on request |

▶ Peripherals and customization

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|---------------------------------|--|
| Scanners | Wired barcode scanner (standard), wireless barcode scanner (optional) |
| Additional Color Cameras | Optional, for additional perspectives |
| Screen | 1 (standard), optionally with second screen for second screen apps |
| Keyboard | Wireless (QWERTZ/QWERTY) |
| Connectivity | Ethernet (standard) WLAN (optional) LTE (optional) |
| Customized UI | Option of additional text input/output on screen (Master Edition) or consolidation of measurements of several packaging units and transfer as a data record to the customer system |
| Battery Pack | Optional, rechargeable battery for mobile applications |
| Second Screen App | Optional, application for implementing customizable multi measurement workflows |
| Digital Caliper Gauge | Optional, for measuring very small objects |

▶ Ambient conditions

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|---|-----------------------------|
| Operating conditions | |
| • Temperature | 0° C - 40° C |
| • Air humidity | 0 - 90 % |
| Seal against Environmental Factors | IP50 |
| Lighting conditions | Indoors, no direct sunlight |
| Power supply | 100-240 V AC; 50-60 Hz |
| Maximum current | 2.3 A |
| Noise level caused | < 20 db |

► Installation Type: Table System**Dimensions**

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|----------|-------------------------------------|
| • Length | 100 cm |
| • Width | 90 cm |
| • Height | 190 cm - 220 cm (height adjustable) |
| • Weight | 105 kg |

