TECHNICAL DATASHEET

MetriXFreight L23x.

Efficient pallet billing.

> The L23x is specifically designed for pallets and bulky goods and measures dimensions and weight precisely. It streamlines your logistics, saves time, reduces costs and ensures full transparency, whether in receiving, shipping or transportation.

HIGHLIGHTS

- Flexible access to the measuring area from all sides
- Low installation costs
- Direct feedback on successful measurement on the screen
- Predictive maintenance for high availability
- Up to 4 photos of each measurement object
- Extremely simple and self-explanatory operation
- Maintenance and customer service via remote maintenance
- Continuous monitoring of functionality

01 System characteristics

System type	Static, no moving components
Sensor type	3D and color cameras, additional color cameras optional
Applications	Warehouses (receiving and shipping), distribution centers, cross docking sites, master data acquisition, etc.
Installation location examples	Free area, above pallet wrappers, conveyor systems, in front of X-ray systems etc.
Measurement objects	Free-form objects. Restrictions possible with black foil and transparent or highly reflective surfaces
Acquired data	Length, width, height and weight (if a scale is connected)
Calculated data (optional)	Actual volume, volume weight
Master data (optional)	Additional master data attributes
Photos	Color photo of the measurement object, additional cameras optional
Person detection	People in the measuring area are detected

02 Performance characteristics

Min. object size (L × W × H)	20 × 20 × 10 cm / 7.9 × 7.9 × 3.9 in
Max. object size (L × W × H)	260 × 260 × 260 cm / 102 × 102 × 102 in
Measuring time	~ 200 ms
Operational throughput	300 – 600 pieces/h (incl. scan, depending on the process)
3D cameras	2
Color cameras	1
Screen	1 (standard), optionally 2, can be positioned as required; touchscreen optional

	L230	L235
Certifications	none	OIML R129, EU type-examination certificate (MID), NTEP
Measuring accuracy	—	OIML R129: ± 2 cm (length/width) OIML R129: ± 1 cm (height) NTEP: ± 0.5 in (length/width/height)
Display resolution	1 mm	OIML R129: 2 cm (length/width) OIML R129: 1 cm (height) NTEP: 0.5 in (length/width/height)

03 Trigger interfaces

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

04 Data interfaces

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

05 Periphery and customization

Handhelds & scanners	Yes (only certified scanners)
Floor scale	Optional (only certified scales), easy to retrofit
Forklift scale	Optional (only certified scales)
NSP Detection	Optional, classification of freight as stackable or non-stackable
Additional color cameras	Up to 4 photos of each measured item
Keyboard	Wireless (QWERTZ/QWERTY)
Connectivity	Ethernet (standard), WLAN (standard), 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

06 Ambient conditions

Operating temperature	OIML R129: -10 – 55 °C NTEP: -10 – 40 °C
Relative humidity	0 – 85 %
Sealing against environmental influences	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

07 Installation type: Ceiling

The ceiling installation is the most common installation type. It is the recommended setup for all locations that allow fixing the device at the ceiling of the building.



FOOTPRINT & PHYSICAL ENVELOPE

Ceiling-mounted overhead system.

LENGTH
396 cm

WIDTH
48 cm

HEIGHT
43 cm
plus installation height

WEIGHT
~ 60 kg

Space required for installation	260 × 260 cm / 102 × 102 in (plus 100 cm / 39 in clearance to objects and walls on every side)
Recommended mounting height	350 – 390 cm (distance between the underside of the truss and the floor, scale or conveyor)

08 Installation type: V-Shape

The V-shape installation is preferred installation type for systems including the NSP addon.



FOOTPRINT & PHYSICAL ENVELOPE

V-shaped gantry frame.

LENGTH	WIDTH
329 cm	329 cm
HEIGHT	**WEIGHT**
407 cm	~ 150 kg

Space required for installation	350 × 350 cm / 138 × 138 in
Floor anchoring & protection	Setup has to be fixed to a concrete floor. Additional impact protection may be necessary.

09 Installation type: Z-Shape



FOOTPRINT & PHYSICAL ENVELOPE

Z-shaped gantry frame, stand-alone or over a conveyor.

LENGTH

358 cm

WIDTH

321 cm

HEIGHT

414 cm