

► Technical Datasheet MetriXFreight L23x

The L23x is specifically designed for pallets and bulky goods, delivering precise dimension and weight measurements.

It streamlines your logistics, saving time, reducing costs, and ensuring full transparency—whether in incoming goods, outgoing shipments, or transportation.



► Highlights

- Flexible access to the measuring area from all sides
- Up to 5 photos of each measurement object
- Low installation costs
- Extremely simple and self-explanatory operation
- Direct feedback on successful measurement on the screen
- Maintenance and customer service via remote maintenance
- Continuous monitoring of functionality

▶ 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.
Examples of installation locations	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 scale connected)
Calculated data (optional)	Actual volume, volume weight
Master data (optional)	Additional master data attributes
Photos	Color photo of the measured object, additional cameras optional
Certifications	
• L230	none
• L235	OIML, EU type examination certificate, NTEP

▶ Performance features

Minimum dimensions	
• Length	20 cm / 4 in
• Width	20 cm / 4 in
• Height	10 cm / 4 in
Maximum dimensions	
• Length	260 cm / 102 in
• Width	260 cm / 102 in
• Height	260 cm / 102 in
Measuring accuracy	OIML: ± 2.0 cm (length/width) / ± 1.0 cm (height) NTEP: ± 0.5 in (length/width/height)
Measuring time	~ 200 ms
Resolution (display)	
• 230	1 mm / 0.01 in
• 235	OIML 2.0 cm (length/width) / 1.0 cm (height) NTEP 0.5 in (length/width/height)
Operational throughput	300 - 600 pieces/h (incl. scan) (depending on the feed-in process)

▶ Trigger Interfaces

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

Floor Scale	Optional (only certified scales), easy to retrofit
Forklift Scale	Optional (only certified scales)
Handheld & Scanner	Yes (only certified scanners)
Additional Color Cameras	Up to 5 photos of each measured item
Screen	1 (standard), optionally 2 or more, can be positioned as required
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
NSP Detection Add-On	Optional, classification of freight as stackable or non-stackable

▶ Ambient conditions

Operating conditions	
• Temperature	OIML: -10° C - 55° C NTEP: -10° C - 40° C
• Air humidity	0 - 85 %
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: Ceiling**Dimensions**

• Length	400 cm
• Width	50 cm
• Height	50 cm + installation height
• Weight	~60 kg
Required Floor Space	325 x 325 cm (measurement zone plus additional safety margin)
Mounting Height	350 - 390 cm distance between bottom of truss and floor, scale, or conveyor

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.



Figure 1:

► Installation Type: V-Shape**Dimensions****• Length** 325 cm**• Width** 325 cm**• Height** 410 cm**• Weight** ~150 kg**Space Required for Installation** 350 x 350 cm**Floor Anchor & Protection** Setup has to be fixed to concrete floor. Additional impact protection may be necessary.

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

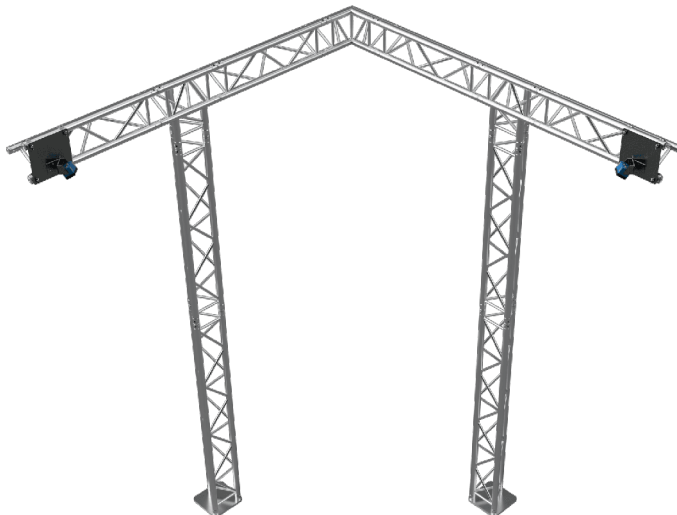


Figure 2: