



MCS **TRACK&TRACE DEVICES -** **AGGREGATION**

Pharmaceutical aggregation represents evolution of product serialization. It involves linking unique product identifiers to higher packaging levels—such as bundles, shipper cases, and pallets. Opticum devices ensure seamless integration into GxP-compliant environments and fully adhere to FDA 21 CFR Part 11 and EU GMP Annex 11/15 requirements, guaranteeing data integrity, traceability, and regulatory compliance.

MCS – UNIVERSAL AGGREGATION SYSTEM

The MCS is designed to aggregate products into shipping boxes or other storage containers. The device is suitable for products of both standard and non-standard shapes (e.g. large folding cartons, wallet packs), regardless of the side on which the data is printed.

Products are taken from the accumulation belt or table, where the operator scans them one-by-one on the integrated multi-plane scanner and then inserts them into shipping boxes. The fullness of the boxes is monitored by the number of scanned products, optionally also by case weighing. After the case is filled, the device enables printing of shipping box label. The operator manually applies the label and confirms the application using a handheld scanner.

In the case of pallet aggregation, after stacking is complete, the operator scans the codes on all shipping boxes with a handheld reader, prints the pallet label, applies it to the pallet, and verifies its presence.

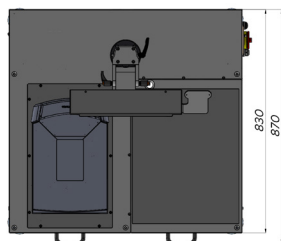
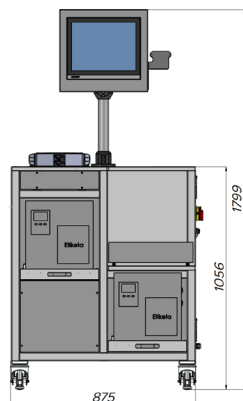
HIGHLIGHTS:

- **Flexibility:** Suitable for a wide range of products, including non-standard dimensions.
- **Compact Design:** Optimized for space-constrained environments, allowing easy integration into existing production lines.
- **Quick Setup:** No format parts required.
- **Mobility:** Available in a mobile version (on wheels).
- **Multi-plane scanner:** For seamless product scanning.
- **Optional Weighing Module:** Enables verification of box completeness, with adjustable reference weight and quantity via the user interface.
- **Modular software:** Ensures robust operation and reduced validation time in compliance with Good Documentation Practice (GDP).
- **Flexible communication interface:** Excellent connectivity with line controllers, recipe systems, and other systems.

TRACK & TRACE

The device's core software can be extended with a **Track & Trace** module, designed to meet the evolving demands of global pharmaceutical serialization and aggregation regulations. This module ensures compliance with all currently known regulatory requirements across key markets, including **Europe, USA, Russia, Japan, China, Saudi Arabia**, and more.

- **Shipping box aggregation:** Manual product aggregation into shipping boxes and trays based on decoding codes printed on products such as 2D DataMatrix or 1D China code.
- **Pallet aggregation:** Manual aggregation of Shipping boxes onto pallets using a handheld code reader.
- **Label printing:** Automated printing, manual application, and manual presence check of shipping box and pallet labels by using handheld code scanner.
- **Connectivity with various line controllers:** Compatible with CPC, FPPV, LM line controllers, with ability to change connection on the fly, during batch changeover.



TECHNICAL SPECIFICATIONS

Device dimensions (length x width x height) [mm]	875 x 870 x 1900
Device weight [kg]	300
Minimum shipping box dimensions (length x height x depth) [mm]	320 x 180 x 180*
Maximum shipping box dimensions (length x height x depth) [mm]	600 x 400 x 400*
Printer type	ThermoTransfer
Line integration	Integrated or standalone

**Specifications reflect the standard configuration and can be fully customized to meet specific customer requirements.*