



MCLS 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.

MCLS - MANUAL AGGREGATION SYSTEM

The MCLS is designed for aggregation of folding cartons into shipping boxes or other containers for product storage. An optional accumulation table is available, which arranges folding cartons into rows. The operator then picks accumulated products and manually inserts them into the shipping box.

Once a layer of products in the box is complete, a high-resolution camera mounted on top of the device captures an image and verifies the printed codes. After shipping box is filled, the device prints a transport label, which the operator applies to the box and verifies its presence using a handheld code reader. Full boxes are then stacked on a pallet.

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

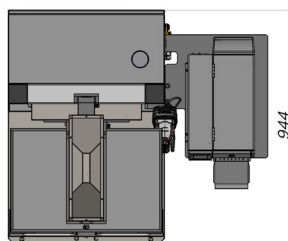
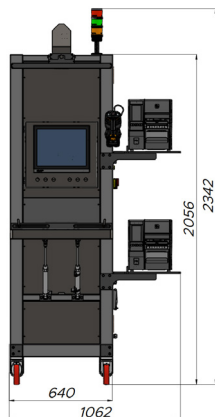
HIGHLIGHTS:

- **Processing speed up to 60 prod./min.**
- **Compact Design:** Optimized for space-constrained environments, enabling easy integration into existing production lines.
- **Quick Setup:** No format parts required.
- **Flexibility:** Suitable for a wide range of products, transport boxes, and trays (blue box) up to 600 mm wide.
- **Mobility:** Available on wheels or as an integrated line solution.
- **Accumulation Table:** Optional table for arranging products into rows.
- **Automatic Pneumatic Tilt:** Facilitates easier product insertion during box filling.
- **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 cases 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]	1062 x 944 x 2400
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.*