



PAL **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.

PAL – AUTOMATIC PALLETIZER

The palletizer is designed as an auxiliary unit for the case packer (side-load and top-load models) and connects directly to its outfeed. It enables a fully automated palletizing process, including the aggregation of shipping boxes onto pallets. A robotic arm picks up boxes from the case packer's outfeed conveyor and places them on pallet. During stacking, anti-slip coating is applied to each box bottom, or anti-slip paper is inserted between pallet layers, ensuring pallet stability during transport. After stacking is complete, the system prints and applies a pallet label.

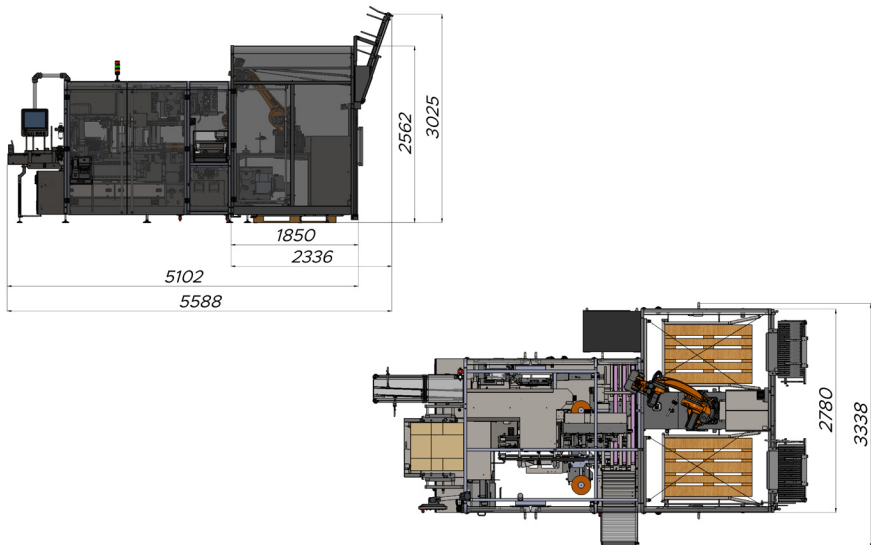
HIGHLIGHTS:

- **Automatic palletizing:** Stacking shipping boxes onto pallets in various configurations.
- **Pallet stability:** Option to apply anti-slip coating to boxes bottom or insert anti-slip sheets between box layers for greater pallet stability during transport.
- **Pallet labeling:** After stacking, the system prints and applies the pallet label.
- **Intuitive HMI interface:** Operated via the case packer's screen or an additional palletizer screen.
- **Two pallet positions:** Allows pallet unloading during machine operation.
- **Flexible configuration:** The robotic arm supports various stacking patterns on pallets.
- **Pallet aggregation:** Fully automatic pallet aggregation based on decoding codes on shipping box labels.
- **Pallet label printing:** Automated printing, application, and presence check of pallet labels.

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.

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TECHNICAL SPECIFICATIONS

Device dimensions (length x width x height) [mm]	1850 x 2800 x 2600*
Device weight [kg]	500
Minimum shipping box (length x width x height) [mm]	320x180x180**
Maximum shipping box (length x width x height) [mm]	600x400x400**
Maximum stacking height on the pallet [mm]	1600
Line integration	CP auxiliary unit

*Device dimensions for a configuration with anti-slip coating application.

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