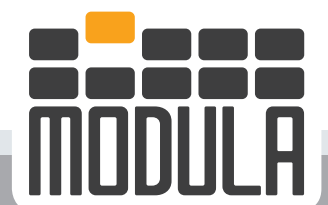




# Modula SLIM

Think Vertical, Think Modula

**ALL THE BENEFITS OF A VLM  
IN THE SPACE OF A VERTICAL CAROUSEL**



# Minimum depth, maximum efficiency

# Have you ever seen such a compact vertical VLM?

Modula Slim is the smart choice for anyone looking for a vertical storage solution with complete flexibility.

The best of the LIFT technology built in a:

- 3 m<sup>2</sup> of floor space
- 1,6 m depth

## ... and so flexible?

You can store all sorts of materials and products in your Modula Slim: loose materials, containers (boxes, bins, packs, cartons, cases), small items, spare parts, coils, flasks.



## What MODULA SLIM can do for you

- Recovers floor space, making the most of storage density
- Reduces picking times
- Makes materials accessible to all operators, quickly and ergonomically
- Keeps stock levels and all warehouse items under control
- Integrates easily into your company processes by communicating with all ERP systems
- Tracks picking and refilling operations, identifying who did what and controls every access
- Eliminates picking and refilling errors by guiding the operator through the process

# Easy, Fast Ergonomic



V-SHAPE  
STEEL REINFORCED  
TOOTHED BELT

Up to 7 meters

INTEGRATED ERGONOMIC  
TOUCH SCREEN INTERFACE

EMERGENCY  
BUTTON

LED ALPHANUMERIC  
BAR

END OF PICKING  
BUTTON

**1,6 m depth**

## Technical Specifications

Unit height:  
from 2.400 mm to 7.000 mm

Unit height increment:  
100 mm

Tray storage pitch:  
25 mm

Tray widths:  
1.300 - 1.900 - 2.500 mm

Tray depth:  
425 mm

Net tray payload:  
350 kg

Total gross payload:  
25.000 kg

Maximum storage height:  
650 mm

Bay delivery level height:  
835 mm

Tray wall height:  
45 mm

Throughput:  
up to 190 trays/hr (depending on the configuration)

Operator interface:

10.4" touch screen industrial console (Copilot)

Number of bays:

1

Types of bay:

internal with single delivery level

Low energy consumption:

1.2 kW/h for SLIM 1.3 model, H=7.000 mm

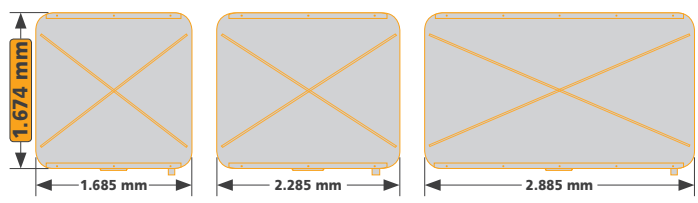
Power supply:

230V single-phase and 400V three-phase

Certification:

TÜV-GS

V-Shape steel reinforced toothed belt transmission (4 belts)



# Quick to install, easy to use

Modula Slim is built on a pre-assembled base module which is easy to move and quick to install. This means that the VLM can be set up in your plant and ready in 48 hours. Modula Slim also integrates quickly with your company ERP system thanks to Modula WMS (Warehouse Management System).

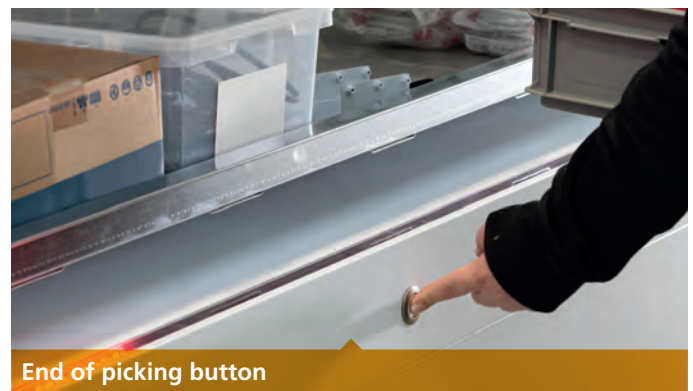
Not just easy and quick to install but also to use. It's really easy for your operators to interact with Modula Slim. They can use the user-friendly touch screen interface and simple controls integrated into the bay like the end of picking button, EKS reader, LED bar etc.

In just a few days, your Modula Slim can be used by anyone and you will see an incredible picking speed increase.

## PLUG & PLAY Installation in 48 hours



Touch screen console and integrated electrical panel



End of picking button

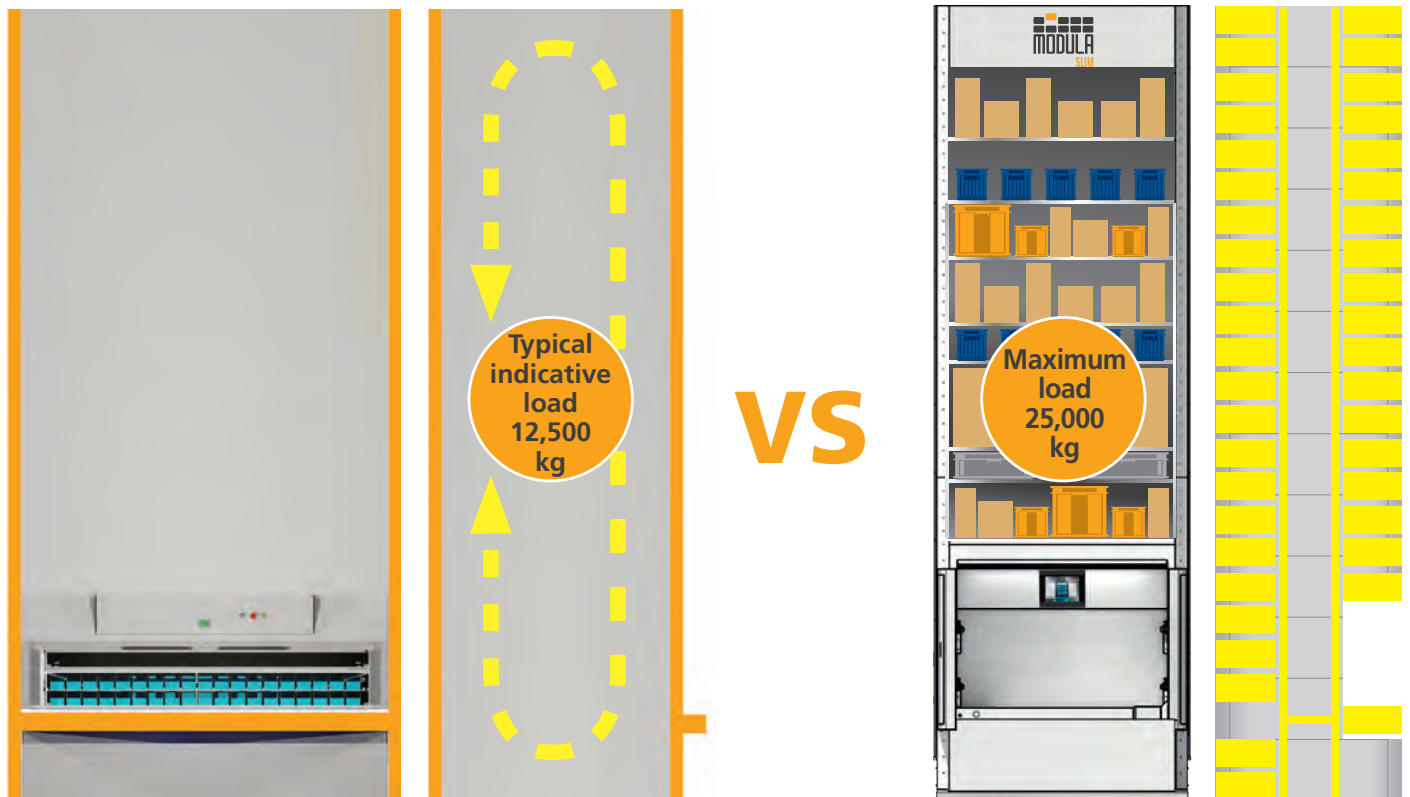


Trays with subdividing accessories

# Have you ever seen such flexibility?

Make use of all the space inside your Modula SLIM without limits or constraints. Choose dynamic storage without fixed heights and with a truly SLIM depth.

- Total payload is up to 25,000 kg with 7 metres in height **and no more than 1,6 m in depth**
- You can make use of all the available space in your VLM thanks to **dynamic tray** height storage: there are no fixed heights as the Modula Slim calculates the best place to put the trays and eliminates any wasted space between them
- With Lift technology and the way the elevator moves, there are no issues **with unbalanced loads** unlike with carousel systems
- Energy consumption is relatively low: less than **1.2 kW/h**
- You can choose to power the warehouse with a **three-phase (400V)** or a **single-phase (230V) supply**
- **Maintenance is limited**: the V-Shape toothed belt transmission system is super quiet, requires no lubrication and its self-aligning pulley system means it's super easy to install and adjust
- You can add all **options from the Modula range** such as visual aids, Put to light, access control systems, partitions, dividers and slotted tray walls to subdivide the trays.



# Modula Options

Trays can be fitted with options such as partitions and dividers to create compartments, meaning you can store materials or containers which might be very different from each other.

These options mean that the layout of materials in the trays is incredibly flexible and easy to modify.



Tray accessories

**VISUAL AIDS** These give a visual indication of the location of the requested item and speed up picking and refilling operations. They guide the operator to the location of the items within the tray and noticeably reduce errors.



LED bar



Alphanumeric bar



Laser Pointer

**ACCESS CONTROL** These devices protect stored materials from unauthorised access. You can give different users access to different trays/materials or compartments based on their permissions. Access can be granted using a login and password entered into the console, or it can be achieved using a strictly personal device which makes the operation very quick.



RFID Reader



Magnetic badge Reader



EKS Reader

**OPTIONS WHICH INCREASE PRODUCTIVITY** 1D/2D barcode readers can quickly scan the product and avoid any manual checks, integrated Put to Light increases the number of order lines processed at the same time or handles multiple orders simultaneously, electrostatic discharge protection systems (ESD) protect sensitive items.



ESD protection system



1D/2D barcode Reader



Put-to-Light

# Some Modula references

**BEVERAGE**

AKIJ FOOD AND BEVERAGE Bangladesh  
 BODEGAS JOSE ESTEVEZ Spain  
 COCA COLA Belgium, USA  
 CONTRI SPUMANTI Italy  
 GINESTET France  
 MOTHER PARKERS USA  
 NATURAL WATERS OF VITI Fiji  
 NESTLE WATERS UK  
 PEPSICO USA, Australia, UK, Germany, Brazil  
 SPENDRUPS Sweden  
 SUNTORY Mexico

**MECHANICAL METALLURGICAL**

ALSTOM TRANSPORT INDIA India  
 BIESSE Italy, USA, Malaysia  
 BONFIGLIOLI RIDUTTORI Italy, India, USA, China  
 SATURN FASTENERS USA

**AUTOMOTIVE**

AUDI Mexico, Belgium, Spain  
 BMW China, Belgium, Germany, Mexico, Canada, UK  
 BREMBO Italy, Poland, China, Czech Rep., USA  
 BRIDGESTONE CANADA Canada  
 CNH INDUSTRIAL Spain, Italy, Belgium, Netherlands  
 CONTINENTAL USA, Germany  
 FCA Brazil, Poland, Italy, Serbia  
 FERRARI Italy  
 TRELLEBORG UK  
 GOODYEAR Germany, Canada  
 HARLEY DAVIDSON USA  
 JAGUAR Belgium  
 MASERATI Italy  
 MICHELIN France  
 PEUGEOT-CITROEN France  
 PORSCHE Germany  
 RENAULT France  
 SUBARU USA, Canada  
 VOLKSWAGEN Germany, China, Spain, Argentina

**CHEMICAL PHARMACEUTICAL BIOMEDICAL**

GLAXOSMITHKLINE Italy, UK, USA  
 INNOMED USA  
 INTAS PHARMACEUTICALS India  
 JOHNSON & JOHNSON USA, Brazil  
 ORFIT Belgium

**ELECTRICAL ELECTRONIC**

BHARAT ELECTRONICS India  
 EATON CONTROLS Mexico  
 PT INFINEON Singapore  
 SIEMENS France, India, Mexico  
 WURTH Germany, Slovakia

**HYDRAULIC PNEUMATIC**

BOSCH REXROTH Mexico, Germany, USA, Italy  
 WALVOIL Italy, USA  
 GUNTER TATA HUOTECHNIKA Hungary  
 MECANIZADOS ALCOY Spain

**AGRICULTURAL MACHINERY**

CNH INDUSTRIAL Brazil, Italy, Spain, Belgium  
 KOMATSU Italy  
 JOHN DEERE USA  
 RANGER INDUSTRIES USA

**TRANSPORT**

METROPOLITAN TRANSPORTATION AUTHORITY USA  
 NEW YORK CITY TRANSIT AUTHORITY USA  
 SNCF France  
 TORONTO TRANSIT COMMISSION Canada

**PLASTIC**

CONTITECH CHINA RUBBER & PLASTICS TECHNOLOGY China  
 MILACRON PLASTIC TECH USA  
 KLINTPACK Thailand  
 WESTLAND GUMMIWERKE Germany

**FOOD**

CHOBANI USA  
 GRISSIN BON Italy  
 OISHI - LIWAYWAY CHINA China

**AERONAUTIC**

BOMBARDIER Germany  
 CHINA ACADEMY OF SPACE TECHNOLOGY China  
 HINDUSTAN AERONAUTICS India  
 LOCKHEED MARTIN USA  
 LUFTHANSA China

**CERAMICS**

FLORIM Italy, USA  
 PORCELANOSA MEXICO Mexico  
 PORCELANOSA NEW YORK USA  
 ROCA SANITARIO Spain  
 SACMI Italy, Spain, Mexico

**CLOTHING**

GIORGIO ARMANI Italy  
 HERMES Italy  
 NIKE USA, Belgium  
 PRADA Italy  
 VALENTINO Italy

**COSMETICS**

AIR-VAL INTERNATIONAL Spain  
 IBERCHEM AROMAS Spain  
 L'OREAL China  
 MARIA GALLAND Germany  
 RUSI COSMETIC Germany

**OPTICAL**

ALCON USA  
 BUHLER LEYBOLD OPTICS China  
 LUXOTTICA Italy  
 MEKRA LANG Germany

**JEWELLERY**

LUCE BIANCA Italy  
 MIDAS CHAIN USA  
 OTTAVIANI INTERNATIONAL Italy  
 PERLUNICA Italy

**ENERGY OIL&GAS**

BAKER HUGHES UK  
 GE ENERGY USA  
 KUWAIT NATIONAL PETROLEUM COMPANY UAE  
 PETRO CANADA Canada  
 PETROLEO BRASILEIRO Brazil, Poland, Italy, Serbia

**PAPER**

AKIJ PRINTING AND PACKAGES Bangladesh  
 BIC ECRITURE France  
 CCL LABELS USA  
 INTERNATIONAL PAPER USA  
 HACHETTE LIVRE France

**ARMY**

DDDC DEFENSE DISTRIBUTION DEPOT CAL USA  
 DLA-AVIATION USA  
 U.S.A.F. - MCCONNELL AIR FORCE BASE USA  
 U.S. AIR FORCE DOVER AFB USA

**SUPERMARKET**

CONAD DEL TIRRENO Italy  
 CONSUM COOP Spain  
 OTK KART USA USA  
 SUPERMERCATI TOSANO CEREAL Italy  
 WOOLWORTHS SUPERMARKET Australia

**FURNITURE**

ALLIANCE LAUNDRY Czech Rep.  
 BIG HOME SHOP UK  
 INTERFACE USA  
 SCAVOLINI Italy  
 SANA TRENNWANDBAU Germany

**PACKAGING**

AETNA GROUP USA  
 POPLAST USA  
 SOFLOG France  
 TETRA PAK Italy

# Modula Worldwide presence



Modula is present in 5 continents with dealers and branches located in over 50 countries.

## **SINGAPORE**

Vallen Singapore Pte Ltd  
101 Eunos Avenue 3, #07-01  
Singapore 409835  
Tel: (65) 6216 1600  
Email: [Sales.SG@vallen.asia](mailto:Sales.SG@vallen.asia)

## **THAILAND**

Vallen (Thailand) Co., Ltd. (**Bangkok**)  
9/145-146 UM Tower,  
14th Floor Ramkhamhaeng Road,  
Suanluang, 10250, Bangkok  
Tel : (66) 2 7173 9214  
Email: [Sales.TH@vallen.asia](mailto:Sales.TH@vallen.asia)

## **MALAYSIA**

Vallen Singapore Pte Ltd (**Penang Branch**)  
Plot 97, Solok Bayan Lepas,  
Kawasan Perindustrian Bayan Lepas,  
11900 Bayan Lepas, Penang  
Tel : (604) 611 0382 | (6012) 481 8061  
Email: [Sales.MY@vallen.asia](mailto:Sales.MY@vallen.asia)

## **MALAYSIA**

Vallen Singapore Pte Ltd (**KL Branch**)  
13, Jalan U1/35A, Section U1,  
Hicom Glenmarie Industrial Park,  
40150, Shah Alam, Selangor  
Tel : (603) 5879 8447  
Email: [Sales.MY@vallen.asia](mailto:Sales.MY@vallen.asia)

