

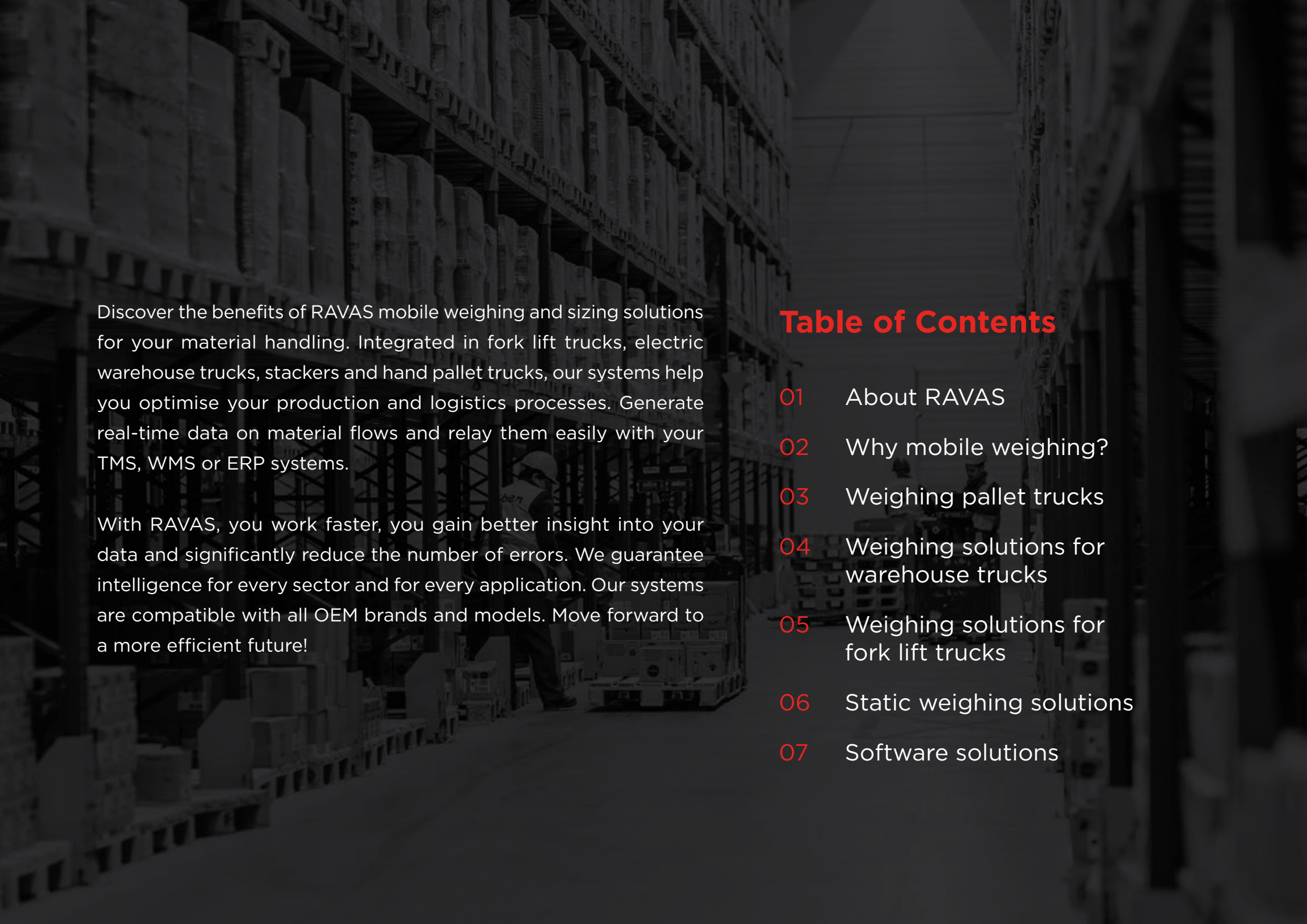


RAVAS

MOBILE WEIGHING SOLUTIONS



www.ravas.com

A worker in a warehouse, wearing a hard hat and safety vest, is using a pallet truck to move a load of boxes. The warehouse is filled with high stacks of boxes on pallet racks, creating a sense of depth and scale. The lighting is industrial, and the overall atmosphere is one of a busy, organized logistics environment.

Discover the benefits of RAVAS mobile weighing and sizing solutions for your material handling. Integrated in fork lift trucks, electric warehouse trucks, stackers and hand pallet trucks, our systems help you optimise your production and logistics processes. Generate real-time data on material flows and relay them easily with your TMS, WMS or ERP systems.

With RAVAS, you work faster, you gain better insight into your data and significantly reduce the number of errors. We guarantee intelligence for every sector and for every application. Our systems are compatible with all OEM brands and models. Move forward to a more efficient future!

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With a global sales and service network, including 9 sales offices and collaborations with dealers worldwide, RAVAS offers you support like you've never seen before. With offices and production facilities in both Europe and the United States, RAVAS is reinforcing its position as a market leader.

RAVAS technology is compatible with all OEM brands, providing the required flexibility to meet your needs. RAVAS delivers no less than 40,000 systems annually, underlining its commitment to quality and innovation. Discover the options RAVAS has to offer and start optimising your processes today!



Watch the video

Market leader in mobile weighing systems

Global sales and service network

40,000 mobile weighing systems per year

**Technology that is compatible
with all OEM brands**

**Global sales and service coverage &
production facilities in Europe and the US**

Achieve greater efficiency

With RAVAS mobile weighing systems, you can transport and weigh at the same time. You immediately know the weight of each pallet that is being lifted. No more need to move each pallet or container back and forth to a fixed floor scale. This will save you time and manpower, while improving your internal logistics efficiency.

Lift, record, scan and share in less than a minute

A traditional industrial weighing process involves several steps, taking up precious time of forklift and pallet truck operators. With RAVAS mobile weighing solutions, operators can lift the weight of a load, record it, scan the shipment for logistics information and share the data through a wireless connection - all in under a minute.

When every second counts

Let's say, for example, that you weigh 4 pallets per hour on average. If you use a truck you're already using to move those pallets, you can save 1.5 minutes per pallet. This leads to daily savings of 48 minutes or 200 staff hours per year. **At a cost of EUR 50 per hour per operator, your annual savings can be up to EUR 10,000!**

OIML certification possible (Legal for Trade)

When a product is sold by weight, an OIML-certified RAVAS mobile weighing system (Legal for Trade) is indispensable. Perfect for logistics and warehouse environments, such as material processing, food services, waste management and pharmaceutical industries.



Mobile weighing
vs
static weighing
Watch the video



Weighing pallet trucks



03 WEIGHING PALLET TRUCKS

Which model fits your needs?

Due to the wide variety of applications, unique specifications and requirements, it sometimes proves to be quite a challenge to determine the best weighing hand pallet truck for your operations. RAVAS always has a solution that is a perfect match for your specific situation.

Already know the weights and transport distance you want to use the pallet truck for?

A manual weighing hand pallet truck is an excellent means of transporting goods on pallets horizontally over a short distance. But do you regularly handle products weighing more than 750 kilos, or move goods on pallets over long distances? If yes, then an electric weighing pallet truck, our Ergo Truck, would be a better solution for you.

Do you use the weighing pallet truck for tasks that demand high accuracy?

At RAVAS, we offer you the ProLine range of hand pallet trucks. We developed several models and weighing functionalities for companies that require a high-accuracy solution for their mobile weighing tasks. Perfect for fine mixing, dosing and dispensing applications.

Do you work in a special environment?

RAVAS offers a range of ATEX-certified models that can be used in environments with explosion hazards. For operations in the food and pharmaceutical industries, we offer a range of weighing hand pallet trucks made from 100% stainless steel, for minimum maintenance and maximum hygiene.

Do you use an ERP or Warehouse Management System?

The solutions of RAVAS provide valuable data on material flows and make this data available to software platforms, through data communication with the trucks connected to it. Depending on your data processing and data management needs, several options are available.

Do you charge your customers by weight?

If you want to charge your customer by weight, you must use an OIML-certified 'Legal for Trade' system. For many of our mobile weighing systems, that system is available.

Weighing pallet trucks overview

RAVAS 1100



**RAVAS IPT
Essential**



RAVAS 2100



RAVAS 3200



RAVAS 5200



**RAVAS
ProLine 5200**



**RAVAS
ProLine 6200**



**RAVAS
ProLine Touch**



**RAVAS
Touch GMP**



**RAVAS Ergo
Scissor Lift**



RAVAS 1100

User-friendly, robust hand pallet truck for generating mobile weighing data. It is suited for weight checks at the arrival of goods or completing transport documentation. Equipped with basic weighing functionalities.



RAVAS iPT Essential

Equipped with a display on the handle, the design of this ergonomic hand pallet truck is centred around ease of use, reliability, ergonomics, up-time and innovation.



RAVAS 2100

The RAVAS 2100 is a state-of-the-art hand pallet truck, designed for reliable weighing in warehouses and production environments. It is always calibrated when it is delivered to you (OIML-certified).



RAVAS 1100 - RAVAS iPT Essential - RAVAS 2100

TECHNICAL SPECIFICATIONS	RAVAS 1100	RAVAS iPT Essential	RAVAS 2100
Capacity	2,000 kg	2,000 kg	2,000 kg
Graduation	1 kg	0.5 - 1 kg	1 kg at 2,000 kg capacity
System tolerance	0.1% of the carried load	0.1% of the carried load	0.1% of the carried load
Display	LCD, 18 mm digit size, backlight	EPD	LCD, 18 mm digit size
Power supply	4 x 1.5V AA batteries	- RedBox: 3.7Vdc/5.2Ah Li-ion battery pack, charger and cable included - display 2 x 1.5V AA penlite batteries	12 Vdc/1.2 Ah, replaceable
Battery life	1 year, if used 5 times a day	6 months autonomous	35 hours, notification of low battery voltage on display
Protection class	Load cells IP67, indicator IP65	System IP65	Load cells IP67, indicator IP65
OIML	-	-	Default
Data transfer	-	RedBox technology	

Please contact us for a full list of options.

RAVAS 3200

Modern hand pallet truck, equipped with extensive weighing functionality and a Li-ion battery pack as a default. Available with Legal for Trade approval for commercial weighing as an option.



RAVAS 5200

High-performance weighing hand pallet truck equipped with advanced weighing functionality and connectivity. Powered by a rechargeable Li-ion battery pack. Suitable for piece counting.



RAVAS 3200 - RAVAS 5200

TECHNICAL SPECIFICATIONS

	RAVAS 3200	RAVAS 5200
Capacity	2,000 kg (options: 2,500 kg or 3,000 kg)	2,000 kg (options 2,500 kg or 3,000 kg)
Graduation	multirange: 0 - 200 kg: graduation 0.2 kg 200 - 500 kg: graduation 0.5 kg 500 - 2,000 kg: graduation 1 kg	multirange: 0 - 200 kg: graduation 0.2 kg 200 - 500 kg: graduation 0.5 kg 500 - 2,000 kg: graduation 1 kg
System tolerance	0.1% of the carried load	0.1% of the lifted load
Display	LCD two-colour, 20 mm digit size, backlight	LCD full-colour 5" touch display with 25 mm digit size
Battery	14.8Vdc/5Ah, replaceable; includes Li-ion battery charger	Li-ion battery pack 14.8V / 5Ah, incl. charger
Battery life	75 hours, notification of low battery voltage on display	25 hours at continuous use (50 hours in sleep mode)
Protection class	load cells IP67, indicator IP65	load cells IP67, indicator IP65
OIML	optional	optional
Data transfer	optional	optional

Please contact us for a full list of options.

RAVAS ProLine 5200

The RAVAS ProLine 5200 with Li-ion rechargeable battery pack allows you to weigh at 100-gram intervals.

That makes this hand pallet truck one of the best solutions for fine dosing, warehouse and batching applications.



RAVAS ProLine 6200

The ProLine 6200 is a hand pallet truck weighing system with an alphanumeric keypad and adjustable scale functions.

It is suitable for counting parts, recipe-based mixing and dosing, as well as data transfer to a PC or wireless network.



RAVAS ProLine Touch

The RAVAS ProLine Touch comes with a touch screen indicator. It weighs loads in 100-gram intervals.

Perfect for use in the food, pharmaceutical and chemical industries and for the supply chains of parts.



RAVAS Touch GMP

The RAVAS Touch GMP is a stainless steel hand pallet truck weighing system, designed exclusively for use in the food and pharmaceutical industries. This highly accurate, all-stainless steel hand pallet truck weighing system is built according to GMP standards.



RAVAS ProLine 5200 - RAVAS ProLine 6200 - RAVAS ProLine Touch - RAVAS Touch GMP

TECHNICAL SPECIFICATIONS	RAVAS ProLine 5200	RAVAS ProLine 6200	RAVAS ProLine Touch	RAVAS Touch GMP
Capacity	2,000 kg	2,000 kg (options: 2,500 kg or 3,000 kg)	2,000 kg (options: 2,500 kg or 3,000 kg)	2,000 kg
Graduation	0 - 200 kg: 0.1 kg 200 - 400 kg: 0.2 kg 400 - 2,000 kg: 0.5 kg	0 - 200 kg: 0.1 kg 200 - 400 kg: 0.2 kg 400 - 2,000 kg: 0.5 kg	0 - 200 kg: 0.1 kg 200 - 400 kg: 0.2 kg 400 - 2,000 kg: 0.5 kg	0 - 200 kg: 0.1 kg 200 - 400 kg: 0.2 kg 400 - 2,000 kg: 0.5 kg
System tolerance	tolerance 0.08% of the carried load	tolerance 0.08% of the carried load	tolerance 0.08% of the carried load	tolerance 0.08% of the carried load
Display	LCD full-colour 5" touch display with 25 mm digit size	TFT, 5" colour display	18 cm / 7.1 inch, high-resolution touch screen	18 cm / 7.1 inch, high-resolution touch screen
Power supply	Li-ion battery pack 14.8V / 5Ah	14.8Vdc / 5Ah, replaceable; Li-ion battery pack	12V, through 4 replaceable 6V-4.8Ah battery packs	12V, through 4 replaceable 6V-4.8Ah battery packs
Battery life	25 hours, at continuous use (50 hours in sleep mode)	25 hours (depending on working and surrounding conditions)	12 hours, charging time 6 hours	12 hours, charging time 6 hours
Protection class	load cells IP67, indicator IP65	load cells IP67, indicator IP65	load cells IP67, indicator IP65	load cells IP67, indicator IP65
OIML	optional	optional	optional	optional
Data transfer	optional	-	-	optional
Piece counting	default	default	-	optional

Please contact us for a full list of options.

RAVAS Ergo Scissor Lift

Work and weigh at an ergonomic height

The RAVAS Ergo Scissor Lift with built-in scale allows you to work and weigh at an ergonomic height.

Multifunctional

You can use the RAVAS Ergo Scissor Lift as a hand pallet truck, a lift table or a workbench. Guaranteed ergonomic lifting height of 800 mm.

Manual or electric

The RAVAS Ergo Scissor Lift is available with manual or electric operation, which allows you to further improve ergonomics.



TECHNICAL SPECIFICATIONS

Capacity	1,000 kg
Graduation	multirange: 0 - 500 kg: graduation 0.5 kg 500 - 1,000 kg: graduation 1 kg
System tolerance	0.1 % of the carried load
Power supply	electric: via the truck battery manually: via (exchangeable) Li-ion battery pack
Protection class	IP65
OIML	optional
Data transfer	optional
Indicator	available with indicators 3200 and 5200
Piece counting	optional with indicator 5200
Ergonomic lifting height	800 mm

Please contact us for a full list of options.

RAVAS Exi series overview

**RAVAS
2100 Exi**



**RAVAS
2560 Exi**



**RAVAS
2560-w Exi**



**RAVAS ProLine
2100 Exi**



**RAVAS ProLine
2560 Exi**



**RAVAS ProLine
2560-w Exi**



RAVAS 2100 Exi

The RAVAS 2100 Exi is an explosion-proof weighing hand pallet truck. It is ATEX-certified and fitted with stainless steel fork shoes as a default. Suitable for industrial applications, such as filling, mixing and dosing. For use in ATEX- Zone 1/21 and Zone 2/22.



RAVAS 2560 Exi

The RAVAS 2560 Exi is a high-tech, explosion-proof weighing hand pallet truck, equipped as a default with a rotating display, enabling you to read it from all sides. ATEX-certified and equipped with stainless steel fork shoes as a default. Suitable for industrial applications, such as filling, mixing and dosing. For use in ATEX- Zone 1/21 and Zone 2/22.



RAVAS 2560-w Exi

The RAVAS 2560-w Exi has the same specifications as the RAVAS 2560 Exi, but with a default WiFi connection.



RAVAS 2100 Exi - RAVAS 2560 Exi - RAVAS 2560-w Exi

TECHNICAL SPECIFICATIONS	RAVAS 2100 Exi	RAVAS 2560 Exi	RAVAS 2560-w Exi
Capacity	2,000 kg	2,000 kg	2,000 kg
Graduation	0 - 200 kg: 0.2 kg 200 - 500 kg: 0.5 kg 500 - 2,000 kg: 1 kg	0.5 kg	0.5 kg
System tolerance	0.1% of the carried load	0.1% of the carried load	0.1% of the carried load
Display	LCD, 18 mm digit size	LCD, 30 mm digit size, rotatable	LCD, 30 mm digit size, rotatable
Power supply	intrinsically safe, approval number DEKRA 13ATEX 0043, 8Vdc/3.5Ah, rechargeable, exchangeable and maintenance free	intrinsically safe, approval number DEKRA 13ATEX 0043, 18Vdc/8Ah, rechargeable, exchangeable and maintenance free	intrinsically safe, approval number DEKRA 13ATEX 0043, 18Vdc/8Ah, rechargeable, exchangeable and maintenance free
Battery life	100 hours, notification low battery voltage 5 hours before shutdown	70 hours	70 hours
Protection class	load cells IP67, indicator IP65	load cells and terminal IP67, indicator IP65	load cells and terminal IP67, indicator IP65
OIML	optional	optional	optional
100% stainless steel	optional	optional	optional
Data transfer	-	-	WiFi

Please contact us for a full list of options.

RAVAS ProLine 2100 Exi

The RAVAS ProLine 2100 Exi is an explosion-proof weighing hand pallet truck for accurate weighing. It is ATEX-certified and fitted with stainless steel fork shoes as a default. Enjoy excellence in hazardous environments. For use in ATEX-Zone 1/21 and Zone 2/22.



RAVAS ProLine 2560 Exi

The RAVAS ProLine 2560 Exi is a high-tech, explosion-proof weighing hand pallet truck for accurate weighing. It is ATEX-certified and fitted with stainless steel fork shoes as a default. The display is fitted on a rotating head. For use in ATEX-Zone 1/21 and Zone 2/22.



RAVAS ProLine 2560-w Exi

The RAVAS ProLine 2560-w Exi has the same specifications as the RAVAS ProLine 2560 Exi, but with default WiFi connectivity.



RAVAS ProLine 2100 Exi - RAVAS ProLine 2560 Exi - RAVAS ProLine 2560-w Exi

TECHNICAL SPECIFICATIONS	RAVAS ProLine 2100 Exi	RAVAS ProLine 2560	RAVAS ProLine 2560-w
Capacity	2,000 kg	2,000 kg	2,000 kg
Graduation	0 - 200 kg: 0.1 kg 200 - 400 kg: 0.2 kg 400 - 2,000 kg: 0.5 kg	0 - 200 kg: 0.1 kg 200 - 400 kg: 0.2 kg 400 - 2,000 kg: 0.5 kg	0 - 200 kg: 0.1 kg 200 - 400 kg: 0.2 kg 400 - 2,000 kg: 0.5 kg
System tolerance	0.08% of the carried load	0.08% of the carried load	0.08% of the carried load
Display	rotatable, LCD, 18 mm digit size	LCD, 30 mm digit size, rotatable	LCD, 30 mm digit size, rotatable
Power supply	intrinsically safe, approval number DEKRA 13ATEX 0043, 8 Vdc / 3.5 Ah, rechargeable, exchangeable and maintenance free	intrinsically safe, approval number DEKRA 13ATEX 0043, 18 Vdc / 8 Ah, rechargeable, exchangeable and maintenance free	intrinsically safe, approval number DEKRA 13ATEX 0043, 18 Vdc / 8 Ah, rechargeable, exchangeable and maintenance free
Battery life	100 hours, notification low battery voltage 5 hours before shutdown	70 hours	70 hours
Protection class	load cells IP67, indicator IP65	load cells and terminal IP67, indicator IP65	load cells and terminal IP67, indicator IP65
OIML	optional	optional	optional
100% stainless steel	optional	optional	optional
Data transfer	optional	-	WiFi

Please contact us for a full list of options.



Weighing solutions for warehouse trucks

A warehouse worker in a red jacket and white gloves is operating a pallet jack. The pallet jack has a dual-display weighing scale mounted on it. The scale has two digital displays: the left one shows '0.1' and the right one shows '140'. Above each display is a barcode. The worker is in a warehouse aisle with high shelves in the background. The text '04 WEIGHING SOLUTIONS FOR WAREHOUSE TRUCKS' is overlaid on the bottom right of the image.

04 WEIGHING SOLUTIONS FOR WAREHOUSE TRUCKS

Customer narrative: Raben Group Poland



Order picking with double scales

Raben Group in Poland is a company dedicated to a broad range of logistics services within Europe. To offer its customers an even better service, the company has implemented the RAVAS Pick by Weight solution. This resulted in a reduction of the number of picking errors at the company, which in turn led to a reduction in complaint related costs, and an optimisation of its stock control, reducing its inventory time.

"Now, our pickers no longer have to count the goods, which they did before the implementation. This saves us time and improves efficiency in our order picking process. As a result, we have been able to eliminate the final inspection of our process. We are extremely satisfied with the quality of the mobile weighing systems, as well as the RAVAS Pick by Weight solution as a whole."

Łukasz Elminowski-Wenda, Logistics Manager of the Raben Logistics Polska Region



**Read the story
& watch the video**

Overview of RAVAS weighing solutions for warehouse trucks

RAVAS Ergo Truck-2

Weighing electric pallet truck

The RAVAS Ergo Truck-2 is the perfect choice for moving and weighing heavy pallets on short distances.

This affordable, electrically powered pallet truck combines ergonomics with the functionality of a weighing hand pallet truck, only with extra power and comfort.



RAVAS RPW EL

Weighing order picker trucks

The RAVAS RPW EL mobile weighing system can be fitted to all brands and models of warehouse and order picker trucks. Whether you are planning to purchase one or more new trucks or you already own a fleet of trucks, our mobile weighing solutions are compatible with both used and new trucks.



RAVAS RPW ST

Weighing stackers

Thanks to the RAVAS RPW ST, logistics and industrial companies aiming for more efficiency can also equip their stackers with a mobile weighing system. A major advantage of this solution is that all stackers - both used and new - can be equipped with a mobile weighing system.



RAVAS Ergo Truck-2

Work ergonomically and start weighing with the RAVAS Ergo Truck-2

Work smarter, not harder. The Ergo Truck-2 is an electric pallet truck with a scale, designed to move, weigh and lift loads of up to 1,500 kg. The Ergo Truck-2 combines RAVAS' innovative and efficient scales with a lithium ion battery and wireless communication technology, offering operators the most efficient electric pallet truck today's market has to offer. Its electric drive and lift make it the perfect choice for any warehouse, and as a replacement of your hand pallet truck or floor scale.



Watch the video



Advantages

- ▶ **Increased efficiency:**
Faster and easier lifting and moving of goods.
- ▶ **Reliability:**
Wireless data exchange and built-in scale enable accurate registration and reporting.
- ▶ **Cost savings:**
Long lasting battery and less risk of damage to loads due to its ergonomic design.
- ▶ **Improved safety:**
Ergonomic operation reduces the risk of injury to users.

Features

- ▶ **Lifting up to 1,500 kg:**
Ideal for heavy loads, suitable for various industrial applications.
- ▶ **Capturing weight and sharing it wirelessly:**
Efficiency in data management, reduces risk of errors.
- ▶ **Built-in scale with WiFi operated on board indicator:**
Instant access to information without the need for additional equipment.

RAVAS Ergo Truck-2

Default truck specifications

- ▶ 24V/20Ah Li-ion battery, including external charger
- ▶ Battery autonomy: works up to 5.5 hours on a single charge
- ▶ Battery exchange system enables extended autonomy
- ▶ Drive wheels: PU wheels 210 x 70 mm
- ▶ Load wheels: double PU wheels 80 x 60 mm
- ▶ Driving motor 0.75 kW
- ▶ Lifting motor 0.70 kW
- ▶ Lifting speed (loading/unloading) 0.017-0.02 m/s
- ▶ Travel speed (loading/unloading) 4.5-5 km/h



TECHNICAL SPECIFICATIONS

Capacity	1,500 kg
Graduation	multirange 0.5 kg up to 500 kg 1 kg to 1,500 kg
System tolerance	0.1 % of the carried load
Display	LCD 2-colour, 20 mm digit size, backlight
Protection class	IP65
Power consumption	12V - 34mA
Power supply	via truck battery, incl. converter/regulator
Indicator dimensions	60 x 77 x 182 mm
OIML	optional
Data transfer	optional
Options	rotating indicator head, printer, additional battery pack for extended autonomy

Please contact us for a full list of options.

A perfect weighing system for electric pallet trucks and order pickers

Work precisely and efficiently with RPW EL. Our weighing solution - which are always customisable - ensures error prevention and an optimal order picking process. If you aim to invoice by weight, then select the Legal for Trade version. Do you need a system that is suited for EX zones or food handling environments? The RPW EL comprises explosion proof and stainless steel versions.



Watch the video of the RPW EL in action at Van Rooijen Logistics



Advantages

► Optimal performance:

The minimal elevation of the forks ensures the trucks to maintain their functionality without compromising efficiency.

► Enhanced tracking and management:

Optional data transfer enables real-time monitoring and prevents supply chain errors.

► Order picking accuracy:

Weight control allows you to always select the right loads, which results in a lower error rate and improved customer satisfaction.

► Increased productivity:

More efficient processes and fewer errors save time and costs.

Features

► Compatible with all trucks

Universal compatibility for easier integration

► Only 5 mm increase in fork level:

Minimises adjustments and maintains load stability.

► Data transfer:

Seamless integration with existing business software for more efficient inventory management.

RAVAS RPW EL

Truck adjustment

Most electric pallet trucks and order pickers are compatible with the RPW EL scale. The truck's fork structure is mechanically adjusted so that the scale components can be mounted with - in most cases - only 5 mm increased fork level. A scale indicator of your choice shows the weight on the forks and can communicate directly with a truck terminal or warehouse management system, if you require.



TECHNICAL SPECIFICATIONS

Capacity	identical to lifting capacity of the truck
Graduation	multirange 0.5/1 kg up to 500/Q-max
System tolerance	0.1% of the lifted load
Power supply	via truck battery
Protection class	load cells IP67, indicator IP65
Indicator functions	functions of 3200, 5200, 2100 (Exi) or the Touch weight indicator
OIML	Optional
Data transfer	Optional
ATEX certified	Optional
Stainless steel	Optional

Please contact us for a full list of options.

Increase efficiency by equipping your stacker truck with a weighing system

The RAVAS RPW ST weighing system is compatible with all brands of stacker trucks. Perfect for quality control during filling of barrels, for mixing ingredients from containers, or for simple weight control in the warehouse or during production.



Advantages

- ▶ **Increased efficiency:**
Due to the minimal elevation of the forks, loads can be transported quickly and safely.
- ▶ **Better data transparency:**
Weight transfer and data integration lead to a better understanding of the logistics process.
- ▶ **Dosing and counting accuracy**
Helps prevent errors and improves overall operational efficiency.
- ▶ **Flexibility and mobility:**
The wireless function offers its users the freedom to move around freely.

Features

- ▶ **Simple and efficient weight transfer to truck terminal:**
Weight transfer for better tracking and reporting.
- ▶ **Only 5 mm increase in fork level:**
Minimises load disruption and maintains stability while lifting.
- ▶ **Data transfer:**
Seamless integration with inventory and management systems for an optimised workflow.

Adjustment of the truck

To allow the stacker to weigh, the fork construction of the truck is mechanically modified, which means that in most cases the weighing components can be mounted with only 5 mm extra fork height. Due to the minimal difference in height, your operators will not experience any practical disadvantages from the newly installed weighing fork construction.

A weighing indicator connected to the forks, offers you the real-time weight of each load on the indicator display, while communicating it to a truck terminal or warehouse management system if required.

TECHNICAL SPECIFICATION

Capacity	identical to the truck's lift capacity
Graduation	multirange 0.5/1 kg up to 500/Q-max
System tolerance	0.1% of the carried load
Power supply	via truck battery
Protection class	load cells IP67, indicator IP65
Indicator functions	functions of 3200, 5200, 2100 (Exi) or the Touch weight indicator
OIML	Optional
Data transfer	Optional
ATEX certified	Optional
Stainless steel	Optional

Please contact us for a full list of options.



Weighing solutions for fork lift trucks



05 WEIGHING SOLUTIONS FOR FORK LIFT TRUCKS

RAVAS iCP - Intelligent weighing carriage plate

Turn your logistics costs centres into profit generators

With the RAVAS iCP, lifting, weighing, counting, collecting data and transporting goods are all carried out as one efficient operation. This streamlines workflows by eliminating the time consuming task of having to move shipments to external platform scales.

Combine RAVAS iCP with the Weigh in Motion technology for even greater efficiency

Apply the Weigh in Motion technology to speed up the process of moving pallets in your warehouse while streamlining your logistics process. Your forklift drivers can simply pick up and move pallets, while an integrated scale instantly records the weight during that transport. This fully automatic weighing system saves you valuable time, while at the same time prevents user errors.



Advantages

- ▶ **Easy to use:**
Lift, weigh, count, add and transport everything in one operation.
- ▶ **Flexibility:**
Compatible with other attachments, such as clamps and fork positioners.
- ▶ **Durability:**
Highly accurate, splash water and dust resistant.
- ▶ **Saving you time and costs:**
No forklift adjustment required.
- ▶ **Ideal for warehouse logistics:**
Ideally suitable for warehouse logistics environments.

Features

- ▶ **Attachment options:**
Attaches to FEM II, FEM III & FEM IV support frames.
- ▶ **Installation:**
Easy to install.
- ▶ **Technology:**
Wireless technology available.
- ▶ **Robust indicators:**
All indicators are splash water and dust resistant.

RAVAS iCP - Intelligent weighing carriage plate

FLEXURES

RAVAS flexures are made from high quality spring steel. They can be replaced in the field, which reduces maintenance costs and downtime.

REDBOX TECHNOLOGY

The RedBox technology transmits weight and angle measurements to digital indicators, for trading purposes.

TECHNICAL SPECIFICATIONS

	iCP-32	ICP-52	ICP-Weigh in Motion
Capacity	2,500, 5,000 or 7,000	2,500, 5,000 or 7,000 kg	2,500 kg
Gradation	2 kg (0-2,500 kg); 5 kg (0-5,000 and 0-7,000 kg)	2 kg at 2,500 kg; 5 kg at 5,000 kg; 10 kg at 7,000 kg	2 kg (0-500 kg); 5 kg (500-2,500 kg)
System tolerance	0.2% of the carried load	0.2% of the carried load	0.2 - 0.4 % of the carried load
Protection class	IP65 / NEMA 4	IP65 / NEMA 4	IP65 / NEMA 4
Indicator	3200	5200 Full-colour touch screen	3200
Options	OIML certified (Legal for Trade), WiFi data connection to ERP/WMS, indicator connected to the RedBox, either wired or wireless		

LOAD CELL

Robust power sensor provides reliable performance under challenging operational conditions.



Please contact us for a full list of options.

RAVAS iCP-32 2500 versus RAVAS iCP WiM-2500

RAVAS iCP-32 2500

- ▶ Static weighing (NAWI)
- ▶ Weighing only at standstill
- ▶ 2,500, 5,000 & 7,000 kg versions available
- ▶ Graduation: default 2 kg - other options possible
- ▶ Tolerance: 0.2% of the load lifted
- ▶ OIML Class III
- ▶ Additional options, e.g. printer(s), scale, gradation
- ▶ Cabled & wireless version
- ▶ WiFi optional
- ▶ Lower initial investment, higher operating costs

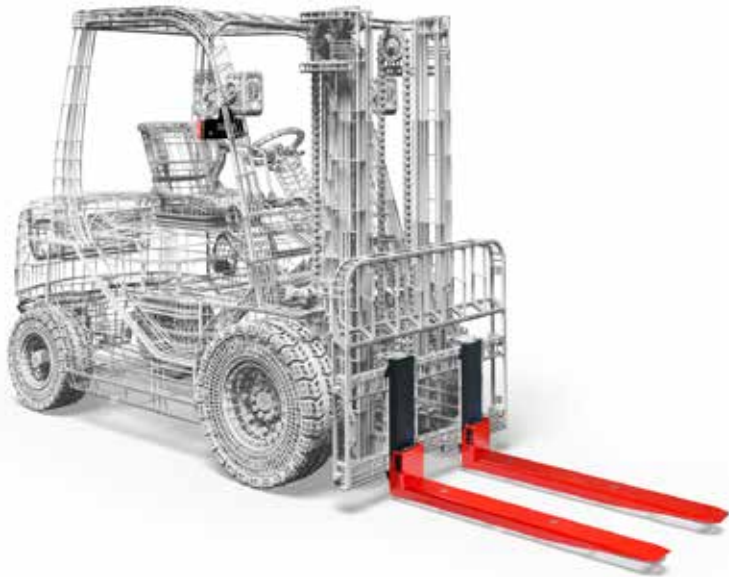
RAVAS iCP WiM 2500

- ▶ Fully automatic weighing (AWI)
- ▶ Weighing while driving, no need to stop
- ▶ 2,500 kg version available
- ▶ Graduation: 2 kg (0-500 kg), 5 kg (500-2500 kg)
- ▶ Tolerance: 0.2 - 0.4% of the entered load
- ▶ OIML Class Y(b)
- ▶ No options that require manual interaction
- ▶ Cabled version
- ▶ WiFi default
- ▶ Higher initial investment, lower operating costs
- ▶ Based on RedBox technology, developed in-house

iForks - Intelligent forks

Increase warehouse productivity by using intelligent forks

Want to make your fork lift trucks even more versatile than they already are? This can be done very easily with a wide range of RAVAS iForks. Installation on any fork lift truck is quick and easy, while ensuring that the efficiency of your logistics processes is unlimited.



Advantages

- ▶ **Efficiency:**
Reduce your internal logistics processes by 30%.
- ▶ **Reduction of errors:**
Reduce errors in your logistics process.
- ▶ **Data analysis:**
Use the RAVAS Indicator App to collect data.
- ▶ **Quick installation:**
Installation in only 5-10 minutes.

Features

- ▶ **Integration:**
Simple integration with your WMS/ERP business system.
- ▶ **Durability:**
Tested at 125% capacity, during 1 million cycles.
- ▶ **Reinforced heel:**
Reinforced heel that improves durability.
- ▶ **Compatibility:**
Compatible with any brand of OEM fork lift trucks.



RAVAS iForks-32

With a fork height of only 58mm and no further external components on the weighing forks, the RAVAS iForks-32 is comparable to default fork lift forks. Easily fitted for fork adjusters. Also available with extra thin forks.



RAVAS iForks-52

The RAVAS iForks-52 offers the intuitive 5200 touch screen indicator, combined with all the functionalities and advantages of the RAVAS iForks-32, with the addition of a piece counting feature, as well as a mast tilt view in the display for the most accurate weighing.



RAVAS RWV-C

RAVAS RWV-C wired iForks require fixed mounting on the forklift. The wiring is laid between the forks and the cabin indicator. The power supply is via the battery of the truck.



RAVAS iForks-32 - RAVAS iForks-52 - RAVAS RWV-C

TECHNICAL SPECIFICATIONS	RAVAS iForks-32	RAVAS iForks-52	RAVAS RWV-C
Capacity	FEM2: 2,500 kg FEM3: 3,000 kg FEM3: 5,000 kg	FEM2: 2,500 kg FEM3: 3,000 kg FEM3: 5,000 kg	FEM2: 2,500 kg FEM3: 3,000 kg FEM3: 5,000 kg
Graduation	1-2 kg at 2,500 kg 1-2 kg at 3,000 kg 2-5 kg at 5,000 kg	1-2 kg at 2,500 kg 1-2 kg at 3,000 kg 2-5 kg at 5,000 kg	1-2 kg at 2,500 kg 1-2 kg at 3,000 kg 2-5 kg at 5,000 kg
System tolerance	0.1% of the carried load	0.1% of the carried load	0.1% of the carried load
Display	indicator 3200 2-colour, (green/red), 5 digits, 20 mm digit size with backlight	indicator 5200 full-colour 5-inch touch screen with a 25 mm digit size	indicator 3200 or 5200
Signal transmission	wireless	wireless (WiFi optional)	depending on the indicator
Protection class	IP65	IP65	IP65
OIML	optional	optional	optional
Data integration	optional	optional	optional

Please contact us for a full list of options.



"By using RAVAS weighing forks and carriage plates, we are improving our efficiency, increasing our revenue and serving our customers in a better way."

*Reiner Brehmer -
Operations manager at Swissport Cargo Services*

Swissport uses RAVAS iForks and RAVAS iCP to improve efficiency

Swissport was facing delays and inefficiencies in the invoicing of their freight. They implemented both RAVAS RWV-C iForks and RAVAS iCP, both state-of-the-art solutions that integrate weighing directly into their fork lift operations.

These forks and carriage plates enabled Swissport to record the weight of the cargo in real-time as part of the loading and unloading process, eliminating the need for separate manual weighing stations.

With these solutions, freight weights can be recorded automatically while the fork lifts are processing shipments, providing immediate and accurate data that are vital for invoicing purposes. The seamless integration not only saves valuable time, but also ensures precision in capturing weight data, reducing the risk of errors that occur with manual entry.

Read the whole story



Hydraulic weighing systems

RAVAS RCS

The RAVAS RCS is a hydraulic weighing system or hydraulic load indication system, suited for simple weight checks not requiring a high level of accuracy.

- ▶ Simple weight checks
- ▶ Prevention of overloading
- ▶ Accuracy maximum 2% of the forklift's lifting capacity



RAVAS RCS Plus

The RAVAS RCS-PLUS is an accurate and user-friendly hydraulic weighing system, fitted with modern technology for WiFi communication, among many other things.

- ▶ Weighing capacity of 2kg, 5kg or 10kg
- ▶ Maximum deviation of 0.2% of the carried weighing load
- ▶ With oil pressure sensor



RAVAS RCS Hy-Q-52

The RAVAS RCS Hy-Q-52 is RAVAS' latest hydraulic weighing system, with a 5200 touch screen indicator. Highly intuitive and equipped with wireless communication as a default.

- ▶ Overload indication on display
- ▶ Most accurate hydraulic weighing system
- ▶ Deviating load centres barely affect its accuracy



RAVAS RCS - Hydraulic weighing system

Easy to use and cost-efficient

Our weighing systems can be fitted on all fork lift trucks, regardless of brand or model. The RAVAS RCS is highly recommended, since it is a universal weighing system. You can use it to check incoming goods or to avoid overloading. The system is also suitable for use in combination with rotators and/or clamps. But most importantly, it is a simple, cost-effective and robust solution.

- ▶ Modestly priced measuring system for fork lift trucks
- ▶ Easy installation via T-joint
- ▶ Indicator with 4 AA batteries
- ▶ Suitable for 'raw' applications
- ▶ For weighing shipping weights and avoiding overloads



TECHNICAL SPECIFICATIONS

Capacity	depending on system (2,500, 5,000 or 10,000 kg)
Graduation	10 kg at 2,500 kg capacity 20 kg at 5,000 kg capacity 50 kg at 10,000 kg capacity higher capacity of up to 50 tonnes on request
System tolerance	2% of capacity
Protection class	IP65
Power supply	6Vdc via 4 AA batteries
Autonomy	6 months, with average use
Options	12V power supply from truck battery, inverter 24/36/48/80Vdc - 12Vdc, thermal or matrix printer in separate housing (only for 12V version, print weights above 200 kg).

Please contact us for a full list of options.

RAVAS RCS Plus - Hydraulic weighing system

Combining convenience and accuracy

The RAVAS RCS Plus offers all the advantages of the RCS, combined with added accuracy by measuring the pressure in the forklift's hydraulic lift system through an oil pressure sensor on the valve block. The heavier the load, the higher the oil temperature and pressure. The software converts both measurements into an accurate weight indication of the load on the forks.

Precise weight determination

The RAVAS RCS Plus provides accurate weighing with a 2kg, 5kg or 10kg graduation, depending its on maximum capacity. The weighing system has a maximum deviation of 0.2% from the weighing capacity.



TECHNICAL SPECIFICATIONS

Capacity	2,500, 5,000 or 10,000 kg
Graduation	2 kg at 2,500 kg capacity 5 kg at 5,000 kg capacity 10 kg at 10,000 kg capacity
System tolerance	0.2% of weighing capacity
Protection class	IP65 / NEMA 4
Power supply	12Vdc, through the forklift's battery
Options	capacities between 10,000 kg and 30,000 kg; graduation 20 kg, thermal or matrix printer in separate housing, wireless data transfer to devices with Bluetooth® technology or via WLAN.

Please contact us for a full list of options.

RAVAS RCS Hy-Q-52 - Hydraulic weighing system

Highly accurate

Looking for a robust, simple and cost-effective solution to increase efficiency in your warehouse? RAVAS hydraulic weighing systems are a perfect fit when it comes to simple weight checks of pallets and goods. At the same time, they also prevent your trucks, warehouse racking and the forklift itself from being overloaded.

- ▶ Highly accurate hydraulic scale
- ▶ Easy calibration due to the optimal calibration menu
- ▶ Overload indication on display
- ▶ No distribution block: simple and cost-efficient installation
- ▶ Can be used in combination with rotators and/or clamps
- ▶ Less sensitive to shifts in the charge centre
- ▶ Suitable for 'raw' applications



TECHNICAL SPECIFICATIONS

Capacity	up to 50,000 kg
Graduation	2 kg at 2,500 kg 5 kg at 5,000 kg 10 kg at 10,000 kg 20 kg at 25,000 kg 50 kg at 50,000 kg 100 kg at 99,000 kg
System tolerance	+/- 0.2% of weighing capacity
Protection class	IP65
Power supply	9Vdc - 100Vdc input, on board regulator / converter board
Indicator dimensions	L x W x H = 85 x 165 x 115 mm
Options	Printer, 2 additional COM ports for RS232, WiFi and/or connection to devices using Bluetooth® technology, 1D USB barcode scanner, data-integration software

Please contact us for a full list of options.



NedTrain prevents overloading because of its RAVAS RCS Plus weighing system

NedTrain stores parts in the Dutch city of Tilburg, which are subsequently transported to its customers by truck. Previously, the weight of this cargo was only estimated, which often led to trucks being overloaded. The result: steep fines!

To solve this overloading problem, NedTrain decided to purchase three RAVAS RCS Plus systems: one for each truck used in its logistics processes. Because of these innovative systems, it is ensured that each part is accurately weighed before being loaded onto the truck.

The RAVAS RCS Plus system also ensures that the weights of boxes and parcels are correctly recorded on the waybill, which is an important step in optimising their transport processes.

"I am extremely happy with the RCS PLUS systems. Previously, we had to estimate the weights of loads, which was often inaccurate and carried with it a lot of risk. Today, there is no more need to do that. Moreover, this system is very easy to work with."

Patrick Marijnissen, Warehouse employee at NedTrain

RAVAS SafeCheck - Safety signalling for fork lift trucks

Top quality for safe use

The RAVAS SafeCheck is a safety signalling system with an alarm signal that goes off when the load on the forks exceeds a previously set limit value. It helps forklift drivers to avoid dangerous overloading.

Built-in safety system

Fork lift trucks are indispensable in the logistics sector, as they can turn over, transport, store and collect large volumes of goods within a short period of time. Especially in this environment, it is important to ensure the safety of your employees. With that purpose in mind, RAVAS devised an equally effective and affordable safety signalling system: the RAVAS SafeCheck.

- ▶ Easy to install
- ▶ Buzzer alarm will go off in case of overload
- ▶ Can be fitted onto any forklift (retrofit)



TECHNICAL SPECIFICATIONS

Capacity	equal to the truck's capacity
System tolerance	+/- 0.2% of weighing capacity
Key panel	3 function keys, on/off key
Power supply	12Vdc, through the forklift's battery
Indicator	LCD, 18 mm digit size
Buzzer alarm	at least 80 db at 30 cm distance
Options	Inverter 24 - 100Vdc - > 12 Vdc, RAM mounting holder for indicator

**Contact us for
a full list of options.**



RAVAS SafeLoad - Safety signalling for fork lift trucks

Top quality for safe use

The RAVAS SafeLoad is a weighing and stability indication system with an LED bar in the display, indicating the stability. It issues warnings to the forklift driver if the forklift is in danger of tilting forward or if it is overloaded, thus preventing possible injury and damage.



Stability indicator

An LED bar below the weight display goes from green (safe), via yellow to red (unsafe) to indicate a potential risk of tipping over to. If the truck is overloaded, the display will also turn red, while a buzzer alarm sounds.



Safe lifting situation



Overload situation: load too heavy

TECHNICAL SPECIFICATIONS

Capacity	equal to the truck's capacity
System tolerance	on roads: 2% of system capacity +/- 5% tax audit
Display	LCD, 2-colour backlight, digit size 18 mm
Power supply	12Vdc, via truck battery
Buzzer alarm	at least 80 db at 30 cm distance
Options	Inverter 24 - 100Vdc - > 12 Vdc, RAM mounting holder for indicator
Important!	• suitable for max. 2 mast sections • installation by experienced engineer • available through selected RAVAS stores, in a limited number of countries

Please contact us for a full list of options.

- Can be fitted on any forklift (retrofit)



Static weighing solutions

A large industrial weighing platform is shown in a warehouse setting. The platform is made of dark metal plates and is surrounded by purple lifting straps. In the background, there is a yellow and black striped safety bollard, a red vertical support, and a blue pallet with two black kegs. A yellow control unit is visible on the left side of the platform.

06 STATIC WEIGHING SOLUTIONS

U-shaped weighing beam

RAVAS RWB ND

The RAVAS RWB ND is a U-shaped static weighing beam with a 2,000 kg weighing capacity and a high accuracy of 0.1% max. tolerance. Extremely solid, available in all sizes, easy to operate and practically maintenance free. Moreover, the RAVAS RWB ND is lightweight.



Two separate weighing beams

RAVAS RWB DE

The RAVAS RWB DE consists of two separate, lightweight weighing beams. With a weighing capacity of 2,000 kg and a high accuracy of 0.1% maximum tolerance, these weighing beams offer exceptional precision. Available in various sizes, extremely solid and practically maintenance free, ensuring easy operation and long-term reliability.



Platform scale

RAVAS RWB PL

The RAVAS RWB PL platform scale is a mobile weighing platform, ideal for highly accurate static weighing. This scale is virtually indestructible and practically maintenance free. The RAVAS RWB PL has a high accuracy and an extremely solid construction, and is available in various sizes and capacities.



RAVAS RWB ND - RAVAS RWB DE - RAVAS RWB PL

TECHNICAL SPECIFICATIONS	RAVAS RWB ND	RAVAS RWB DE	RAVAS RWB PL
Capacity	2,000 kg	2,000 kg	500 to 10,000 kg
Graduation	0.2 / 0.5 / 1 kg	0.2 / 0.5 / 1 kg	0.2 - 5 kg (depending on capacity)
System tolerance	0.1% of the weighed weight	0.1% of the weighed weight	0.1% of the weighed weight
Own weight	35 kg	35 kg	depending on size
Dimensions	1200 x 810 x 70 mm (LxWxH) profile width 100 mm	1200 x 100 x 70 mm (LxWxH) per weighing beam	depending on selected capacity
Protection class of cables and load cells	IP67	IP67	IP67
Protection class indicator	IP65	IP65	IP65
OIML	optional	optional	optional
Data transfer	optional	optional	optional
ATEX	zone I	zone I	zone I

Please contact us for a full list of options.



Software solutions



**07 SOFTWARE
SOLUTIONS**

Improve your operational efficiency with its integrated weighing data

RAVAS provides material handling solutions to optimise the supply chain in logistics and production across all sectors. So what is the next step? Making this valuable data accessible by integrating it into your WMS, TMS or ERP systems.

By linking the RAVAS indicator to one of our advanced software solutions, you can seamlessly integrate weighing data into your internal processes. Combining weighing and transport into a single operation saves time, improves efficiency and reduces costs.

Experience the advantages yourself

Contact us for a free demo and find out how you can apply our solutions to streamline your processes.



Get the most out of your weighing data

RAVAS Indicator App (RIA)



The RAVAS Indicator App was specifically designed for efficient data collection from RAVAS weighing systems. Whether it is used as a stand alone solution or integrated with RAVAS RDC software, the app offers flexible integration to suit your operational needs. By streamlining weighing and labelling processes, it helps you save time and reduce errors, increasing overall productivity.

RAVAS Data Collector (RDC)



RAVAS RDC is a software application that enables efficient, one-way data transfer from the RAVAS Indicator 3200/5200 - including WiFi - to your RDC PC/server. This solution simplifies data management and integrates seamlessly with your current TMS, WMS or ERP systems, always offering you the most up-to-date information for ensure optimal operations.

RAVAS Integration Software (RIS)



RAVAS RIS is an advanced software application that enables seamless, two-way data transfer between the RAVAS Indicator 3200/5200 - including WiFi - and your RIS server. Designed to be integrated effortlessly into your existing systems, RIS optimises your business processes, reduces the number of errors and increases data accuracy for improved efficiency and cost savings.

Standard version:

► Mobile data collection

Capture and save all weighing data directly on your mobile device, offering you easy management on the go.

► Comprehensive data logging

Record all weighing data, including date and time, for accurate tracking and reporting.

► Seamless data transfer

Send data to a PC fast via e-mail, using wireless connectivity for efficient communication.

Full version:

► Real-time QR code display

Display weighing data as a QR code for instant access and easy sharing.

► Custom label printing

Print custom labels with additional sections and text for extensive labelling options.



► Unilateral data transfer

Transfer data efficiently from the RAVAS indicator to your RDC PC/server. (The RIA module is required for indicators with wireless connectivity).

► Automatic data synchronisation

Synchronise saved data automatically when connected to a WLAN area, so your system is always up-to-date with the latest information.

► Data collection and export

All data is collected by the RDC server and exported as a .csv file, offering you easy data management and analysis.

► System compatibility

The .csv file can be integrated into your TMS, WMS or ERP system, ensuring seamless data processing.

► Bilateral data transfer

Easily collect and transmit data to and from your RAVAS Indicator and RIS server. Ideal for tracking weighing data and piece counting.

► Integration with TMS, WMS or ERP

Integrate smoothly with your Transport Management System (TMS), Warehouse Management System (WMS), or Enterprise Resource Planning (ERP) system to streamline work processes.

► RESTful API communication

Use our modern RESTful API technology for fast, reliable and simple data transfer.



www.ravas.com