



sartorius

Checkweigher ECONUS®
600 g | 1200 g | 3000 g | 6000 g



turning science into solutions

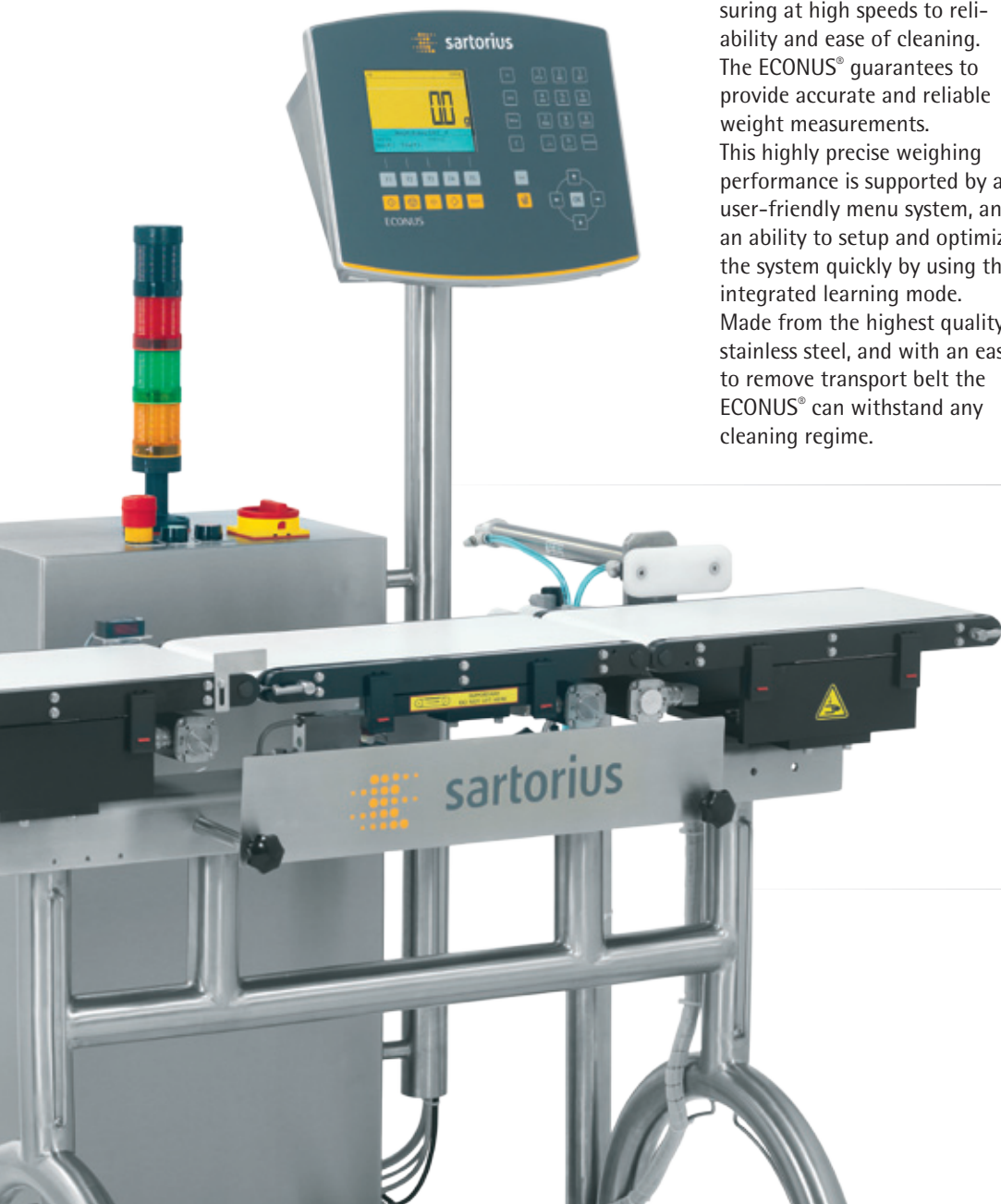
Checkweigher ECONUS®

State of the art technology for your weighing processes

ECONUS® is the newest and youngest member of the Sartorius checkweigher family. Designed especially for applications such as completeness checks or control of filling systems. Reliability, user friendliness and high accuracy makes the ECONUS® the perfect choice for a wide range of industries.

Today's demands on a checkweigher are high and diverse. They reach from precise measuring at high speeds to reliability and ease of cleaning. The ECONUS® guarantees to provide accurate and reliable weight measurements. This highly precise weighing performance is supported by a user-friendly menu system, and an ability to setup and optimize the system quickly by using the integrated learning mode. Made from the highest quality stainless steel, and with an easy to remove transport belt the ECONUS® can withstand any cleaning regime.

The major benefits offered by the ECONUS® are rounded off by a brilliant and easy to read LCD colour and graphic display, and an impressive range of features, such as a trend controller, completeness checks with a moving average and a program-controlled belt speed with optimization for each product. Taking into account the high reliability and impressive weighing performance, the ECONUS® offers an excellent price-performance ratio. For almost any industry application requiring precision and robustness the ECONUS® is the best choice.



Reliability

The ECONUS® convinces the customers by using high quality materials and latest technology features as well as by its attractive price. It is the ideal entry-level solution for many process lines.

Configurable

The ECONUS® can be configured to any of your individual requirements. It offers include a wide range of weight capacities and a variety of different mechanised and electrical options.

Cleanability

The construction of the weighing and transportation system allows easy maintenance and cleaning. The quick release belt device allows belt changes to be made incredibly fast, helping to minimize downtime. A protection class of IP54 (IP65 optional) allows for optimal cleaning

Filling Process Optimisation

All weight deviations are reported by both visual and audible alarms. This functionality makes sure that operators can take corrective measures immediately. Additionally, detailed statistics in relation to the production process are automatically generated throughout the process. The ECONUS® is also equipped with trend control, a special feature to automatically optimise the filling process.

Connectivity

The ECONUS® is fully equipped with extensive data interface functionalities, including remote control via Ethernet.



Design of Checkweigher

The Checkweigher series ECONUS® includes the following sub-units:

- Weigher frame
- Control cabinet with electronic control system
- Load cell
- Transport system
- Rejection device or sorting output (Option)

Control cabinet

Stainless steel control cabinet with electronic control system, housing with IP 54 protection (Optional IP65). Inside are the power supply and motor control. For processes requiring optical control a signal can be installed as an optional accessory.

Protective cover

Protective covers provide security for operators whilst also greatly reducing the effects of external influences on the weighing results.

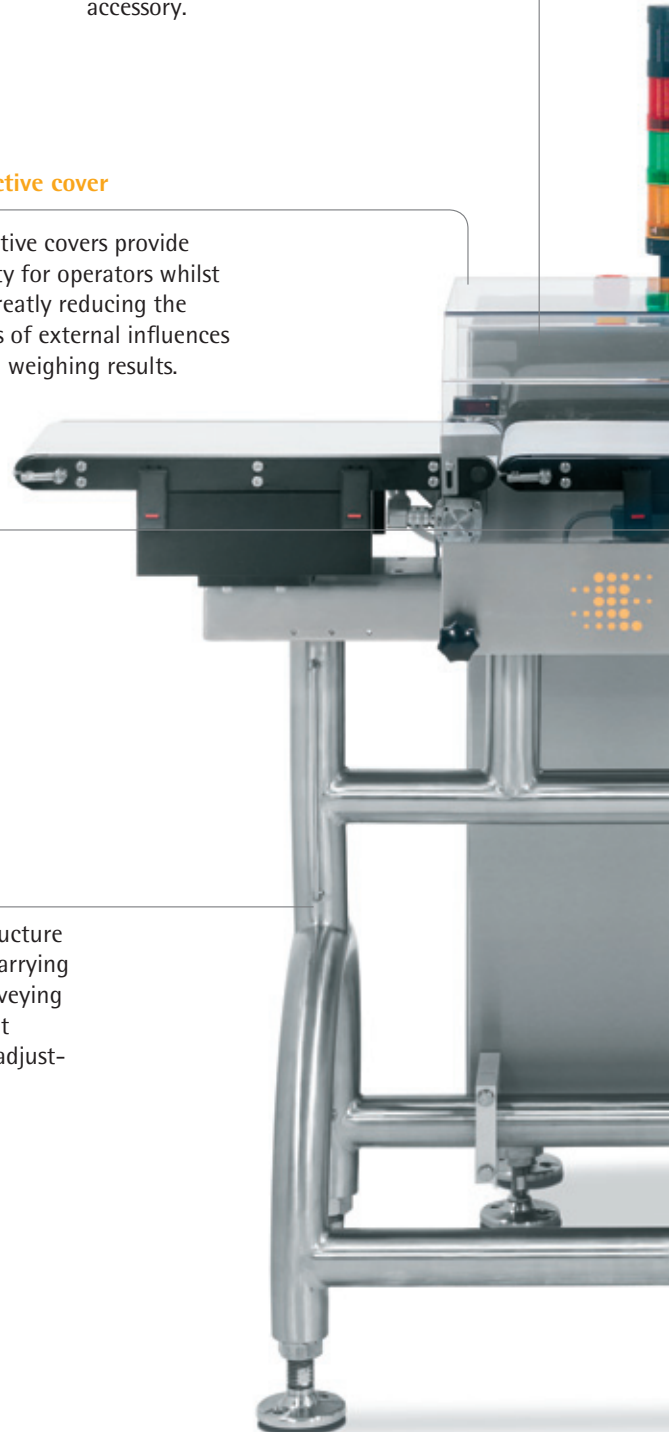
Load cell

High-precision
Sartorius load cell

- High stability
- Stainless steel
- IP 67 protection

Weigher frame

Easy to clean open structure stainless steel frame carrying the weighing and conveying system. Adjustable feet allows precise height adjustment.





Electronic control system

The master switch, control and display elements are installed for good accessibility. The high-contrast, easily legible colour graphics display shows all the vital production data without interruption.

Self-explanatory display dialogues, five context-dependent function keys (soft keys) and an alphanumeric keypad with "ABC" input enable quick and easy operation. A user-programmable hot key (joker key) makes it possible to directly

access user-defined functions. Automatic zeroing takes place during production intervals. The product distance can be continuously monitored in the background (option).

All weighing parameters can get optimised for each product with an easy to use Learn Mode to get the best weighing results possible for all products.

Reject and sorting devices (Option)

Either an air blower or pusher can be mounted on the out-feed | discharge belt to reject products with a weight outside the control limits. The choice of reject | sorting mechanism is dependent upon the type of product, throughput-rate and the particular application.

Transport system

The conveyor consists of anodised aluminium sections with a quick-release belt de-tensioning mechanism. Belt pulleys and drive rollers are made of hard coated aluminium, \varnothing 30 mm.

The quick-release belt mechanism and removable transport systems makes it easy to replace belts and | or the whole transport system. The infeed, weighing and outfeed belts are driven by maintenance-free and precisely balanced 24V EC geared motors, propelled by driving belts.

ECONUS®

standard functions and options

Standard Functions

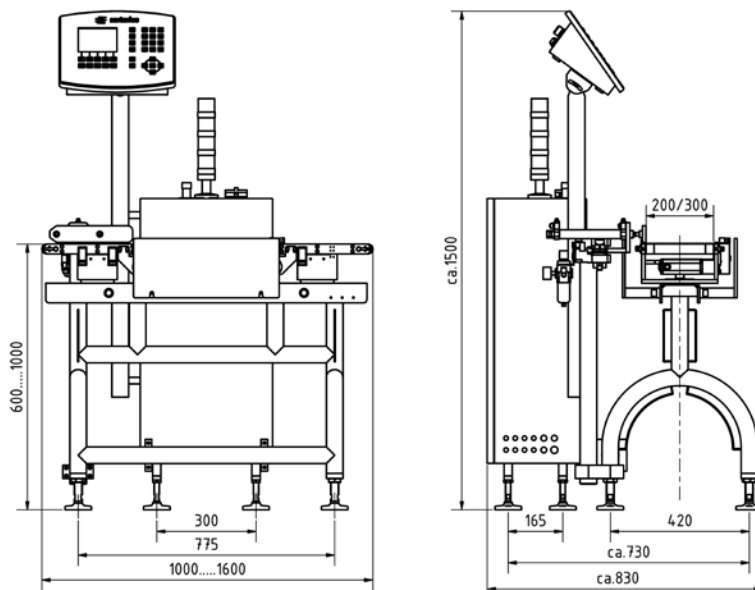
- Stainless steel housing, IP54 protection
- Colour-graphic LCD display with 320 × 240 pixels to display weight value, status, bar graph and dialogue | menu texts including detailed statistical analyses.
- User-selected choice of languages for program dialogs: English, German, French, Italian and Spanish. Other languages on request.
- Five context-dependent function keys (soft keys), control keys for starting, stopping and zeroing and alphanumeric keypad with "ABC" input.
- Product memory for 50 products
- Program-controlled belt speed to optimize the handling of each product.
- Password protection (2 level + 1 Service)
- Automatic zero-setting
- Learn Mode for easy and reliable setting and optimizing of the weighing parameters
- Inputs: Light barrier (internal function)
- Outputs: Checkweigher Ready, Belt running, Fault (galvanically isolated with a relay contact).
- Operating mode: classifying weigher | 3-way sorting or 4 user-definable available class delimiters | 3-way or 5-way sorting
- Operational displays: Product code, name, nominal weight, date | time, single last weighed value, classification (3/5 classes) and distribution into classes (numbers and graph), mean value, min. weight, max. weight, sum weight, accumulated number of (high, ok, low) products, standard deviation, number of ejected products
- Auxiliary functions: dialogs for diagnostics and service, error reports

Options

- Check of completeness with floating average
- Trend controller with digital outputs to optimise the accuracy of the filling station
- IP65 protection
- Protective cover in two sizes (for weighing conveyor only or for all conveyors)
- Signal lamp with 2, 3 or 5 segments
- Signal horn, single or in combination with 2 or 3 segments signal lamp
- Reject bin
- Bin full monitoring
- Rejection monitoring
- Air pressure monitoring
- RS 232C serial interfaces for individual-weight transmission for external evaluation or for external printer
- Emergency stop push button on control panel, also available in an external box, together with motor start | stop button
- Package length and distance monitoring
- Inputs: Ignore Checkweigher (external event), external start, external stop
- Outputs: Reject+, Reject ++, Reject-, Reject--, Reject ok, Lamp+, Lamp++, Lamp-, Lamp--, Lamp ok. The electronic control system employs configurable outputs. The functions of the available eight physical outputs can be defined through software menu.
- Remote Control via Ethernet
- Air blower (double jet system) or pusher (attached or stand-alone)
Remark: The choice of rejecting device depends on the product and the throughput
- USB-Print to save production data on USB-Stick (future option)

Technical Data

Weigh system	600 g	1200 g	3000 g	6000 g
Weighing range	0 g ... 600 g	0 g ... 1200 g	0 g ... 3000 g	0 g ... 6000 g
Resolution	From 0.1 g	From 0.2 g	From 0.5 g	From 1 g
Standard deviation	From 0.1 g	From 0.2 g	From 0.5 g	From 1 g (depends on product, throughput and ambient conditions)
Throughput	Max. 120 pcs/min	Max. 100 pcs/min	Max. 80 pcs/min	Max. 80 pcs/min (depends on product, permissible zone of indecision and ambient conditions)
Conveyor sizes (Center-to-center distance × belt width)	300 mm × 200 mm	300 mm × 200 mm 400 mm × 200 mm	500 mm × 300 mm	500 mm × 300 mm
Transport speed	Max. 1.0 m/s (depending on length of package and weighings per unit of time), Speed range: 0.25 – 1.0 m/s			
Transport medium	FDA approved food conveyor belts			
Drives	24V maintenance-free EC geared motors			
Input supply voltage	115/230 VAC (+10% / -15%) selectable; 50/60 Hz (L1, N, PE)			
Power consumption	approx. 350 VA			
Conveying direction	From right to left or from left to right (to be indicated when ordering)			
Transport height	600 ... 1000 mm, feet adjusting range ± 25 mm			
Floor clearance	100 mm ± 25 mm			
Temperature range	0° ... + 40° C			
Protection	IP 54 (IP 65 option)			
Weight	approx. 120 kg			
Dimensions	See dimensional drawings			



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