

# Revento 7000

Reverse Vending Machine



Revento 7000 – the allround solution for easy handling of one-way containers. Using advanced camera technology, Revendo 7000 recognizes bottles and cans accurately and then compacts and collects them internally. The integrated standard interface ensures that data can be exchanged with the existing IT infrastructure or a clearing center. The machine for one-way empties – that’s the Revendo 7000.

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## Reverse Vending Machine

### Recognition

Using advanced, pioneering camera-based recognition technology, this RVM examines the shape and color of single bottles and cans, and weighs them at the same time (full container recognition). Key features for clearing one-way containers are the barcode scanner to perform fully automated comparisons against the empties database, and the optional security mark reader to prevent fraud.

The data that is captured is compared with pattern records in the database, and a fuzzy logic engine assesses whether the container should be accepted or rejected, depending on the defined assortment. As a result, only empties that are actually in the assortment will be accepted and refunded. An almost unlimited number of records can be stored as the machine is based on PC technologies.



Advanced camera recognition plus weighing and barcode scanning – all at one point in the machine.

### Technology

Its integrated compactors are a highlight of the Revendo 7000. Geared precisely to the material characteristics of PET and cans, they reduce the size of empty one-way containers optimally. Wincor Nixdorf's toothed-roller compaction technology achieves the best results. Using a standard roller container, for example, it is possible to dispose up to 800 PET bottles or up to 3,000 cans, depending on the original size of the containers. There are several advantages to this: The effort involved in changing bins is much less than when handling uncompacted one-way containers, valuable storage space is saved, and the empties cannot be fraudulently fed into the RVM a second time.

Variable disposal options are available in line with the size of the store and the volume of empties returned. From PET bottles and cans mixed in a one-europallet roller container up to separation into a two-europallet substructure, the modularity of the Revendo 7000 makes it possible to set up a system that is tailored optimally to the store's specific situation. Of course, the Revendo 7000 can also be used to take back refillable single bottles and, for example, place glass on a table or refillable PET in a bin.

Wincor Nixdorf can also supply the necessary disposal solutions along with the actual RVM, for example roller containers that are geared to the system, with a practical door to change the sacks of empties.

### IT integration and service

The Revendo 7000 has a standard XML-based interface. Consequently it can be easily integrated in point-of-sale and merchandise management systems. The advantage: Transaction receipts prevent tampering, and inventory discrepancies related to empties are reduced on a lasting basis. Clear inventory management is available by simply transferring the daily reverse vending transactions to a POS system. And the open, freely available interface has been optimally prepared for future applications such as central assortment control.

Another advantage lies in the comprehensive online serviceability of the Revendo product family via ISDN or LAN. Most service cases can be resolved online, saving time and expensive visits by technicians.

And if a fault needs to be fixed on site, Wincor Nixdorf's highly flexible service logistics ensures that spare parts are supplied as fast as possible.



The ergonomic user interface supports high volumes of returns.

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## Reverse Vending Machine

### BASIC DATA

- **Version with 1 europallet:**  
L x W x H: 1362 mm x 980 mm x 1793 mm
- **Measurements for version with 2 europallets:**  
L x W x H: 1362 mm x 1962 mm x 1793 mm
- **Empty weight:**  
Approx. 500 kg, variable depending on the specific system and its components
- **Power:**  
230 V, 50 Hz for machine
- **Power consumption:**  
Max. 1.2 kVA full load, 141 W standby
- **Conformity:**  
Machinery directive, EMC, CE
- **Temperature:**  
+15°C to +35°C

### COMPACTOR OPTIONS

- **Without a compactor (uncompacted collection)**
- **PET compactor**
- **Can compactor**
- **PET and can compactor**
- **PET and PET compactor**
- **Can and can compactor**

### DISPOSAL OPTIONS

- **One-europallet chassis:**
  - For a standard europallet with collection boxes (max. 87 cm high)
  - 1 roller container  
120 cm x 80 cm x 87 cm (L x W x H)
  - 2 roller containers  
120 cm x 40 cm x 87 cm (L x W x H)
- **Two-europallet chassis:**
  - For two standard europallets with collection boxes (max. 87cm high)
  - 2 roller containers  
120 cm x 80 cm x 87 cm (L x W x H)

### RECOGNITION DATA

- **Camera-based image processing with a resolution of over 400,000 pixels**

- **Full container recognition (optional)**
- **One-way empties:**  
Up to 27 containers/minute (depending, among other things, on the number of characteristics to be recognized, such as barcode, security mark, ...)
- **Refillable empties:**  
Up to 35 containers/minute (depending, among other things, on the number of characteristics to be recognized, such as barcode, shape, ..)
- **Number of records:**  
Almost unlimited

### OUTPUT DATA

- **Printer:**  
Thermal printer with cutter, 60 mm wide
- **Receipt roll:**  
330 m long
- **Paper:**  
WN security paper, specification available
- **Interfaces:**
  - Standard XML data interface via Ethernet LAN
  - Ethernet LAN connection for online service
  - BUS interface to control Wincor Nixdorf backroom components

### STANDARD CONFIGURATION

- **Door color:**  
Wincor Nixdorf Green metallic
- **Color chassis:**  
RAL 7015
- **Internal sorter**
- **Barcode scanner**
- **Protection against fraud**
- **Full-graphics TFT display, 640 x 480**

### OPTIONS

- **Custom door color (RAL)**
- **ISDN adapter for online service**
- **Additional signals in the field of vision to guide users**

- **Second button for additional functionality (e.g. donation button)**
- **Roller containers for collection and disposal**
- **Security mark reader for one-way container deposits**
- **Acceptance of refillable containers**
- **Standalone or Through-the-wall-installation**
- **System administration software (empties control™)**
- **Call module to report faults by voice messages via telephone**
- **Warning signal system**



Revento 7000 Version with 2 europallets



Empties are collected in variable bins, such as bin trucks, for disposal. Up to 800 PET bottles or up to 3,000 cans can be collected, depending on the original size of the containers.

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