

# EFFICIENT CASH MANAGEMENT PRODUCTS & SERVICES

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# RATIOTEC GET CONNECTED

“The secret of success is to get the other person’s point of view.”

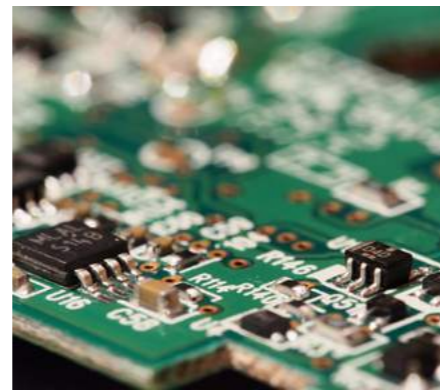
Henry Ford

In Essen, in the heart of the Ruhr area, we have dedicated ourselves since 2003 to developing customized cash-handling solutions – design and engineering made in Germany, always thinking in innovative and future-oriented ways. Besides digital and cashless methods of payment, cash will fulfill an important role for a long time to come. However, we are convinced of the advantages digitalization can bring to our and your business – which is why we developed products that help digitalize your cashing up process fast and easily: our Cash Box and compatible product variants. Not least, our focus finds its expression in our new claim: “get connected”.

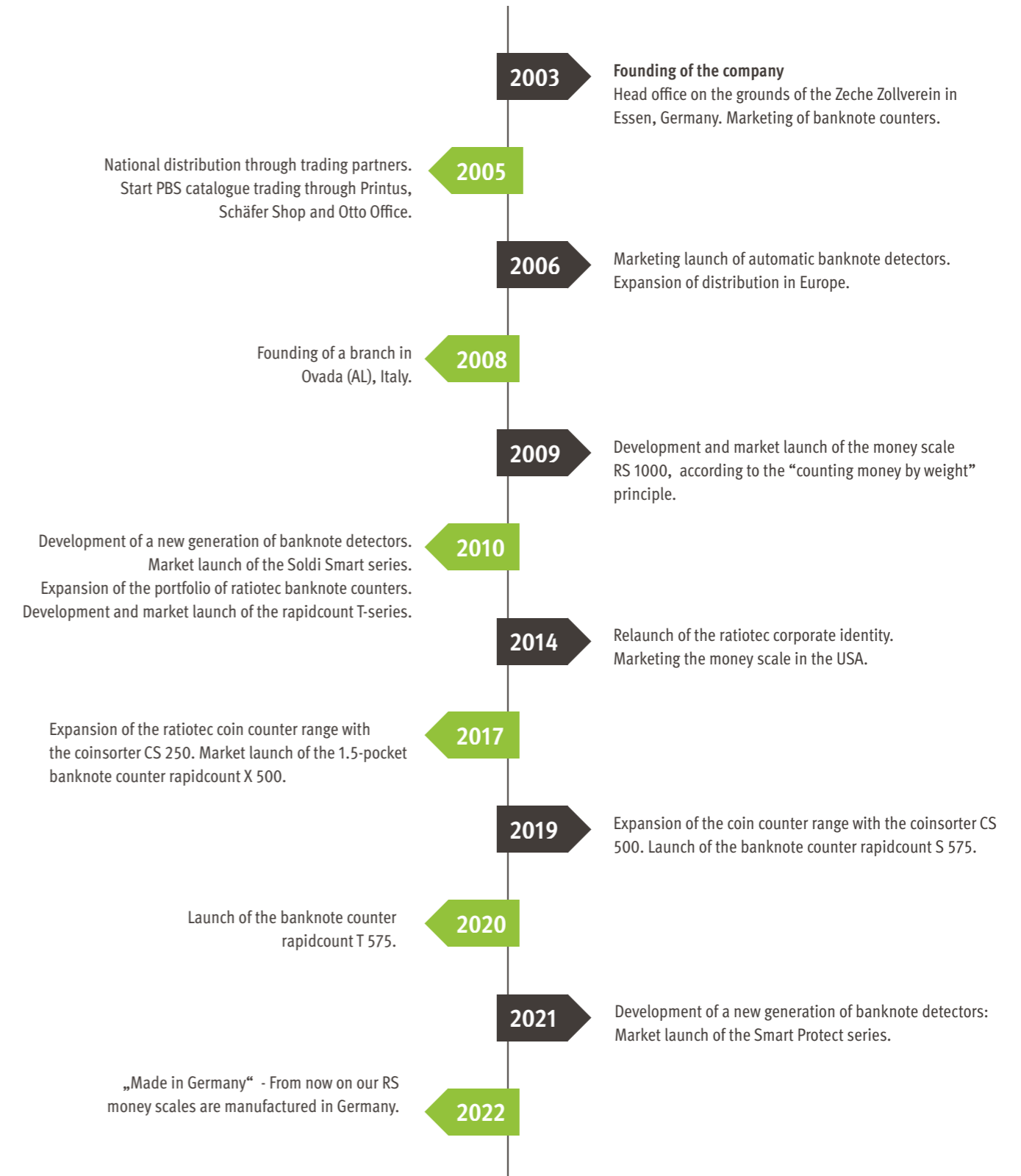
Our philosophy: high quality, functional design, expert advice and sustainable service. Whether a single or multiple retailer, bank or casino: with us you can find the best products for your individual needs.

Choose ratiotec – we are looking forward to you!

Your ratiotec Team



# HISTORY & DEVELOPMENT





# YOUR COMPANY OUR SERVICE



**In the best hands with ratiotec.**

Our customers appreciate the competent and fast service, which we offer with our engineers, technicians and sales support team in Essen for all of Germany and thanks to our strong distribution partners also in Europe and the USA. Our principle is simple: we support our local distributors in the best possible way – for example with spare parts, technical trainings and skype calls – so that they can support our

customers as fast and competently as possible. Contact us in order to find out which of our distributors can provide service in your local country and region!

**Free trials**

Unsure whether the product is the right one for you? Before you buy it, you want to find out with your employees how the money scale or

banknote counter performs in everyday life? No problem! Contact us or your local ratiotec distribution partner in order to organize a free, not binding 14-day trial. Of course, we will gladly assist you and answer all questions that may come up during the trial. If you should decide against buying the product tested, you simply send it back to us or your distributor.

# CHOOSE RATIOTEC SERVICES



\* Except CS 50, RP 50 and UV lamp Soldi 120.

# RATIOTEC UPDATE MANAGER

## ALWAYS UP TO DATE

Install once, use continuously – a single software for all updates.

We have developed our own software in order to keep your device always up to date – the ratiotec Update Manager. After you have installed the software on your PC, it will inform you automatically as soon as a new update for your device is available. This applies in particular to security or currency updates. The Update Manager guides you step by step through the update process in just a few minutes.

#### Where can I find the Update Manager?

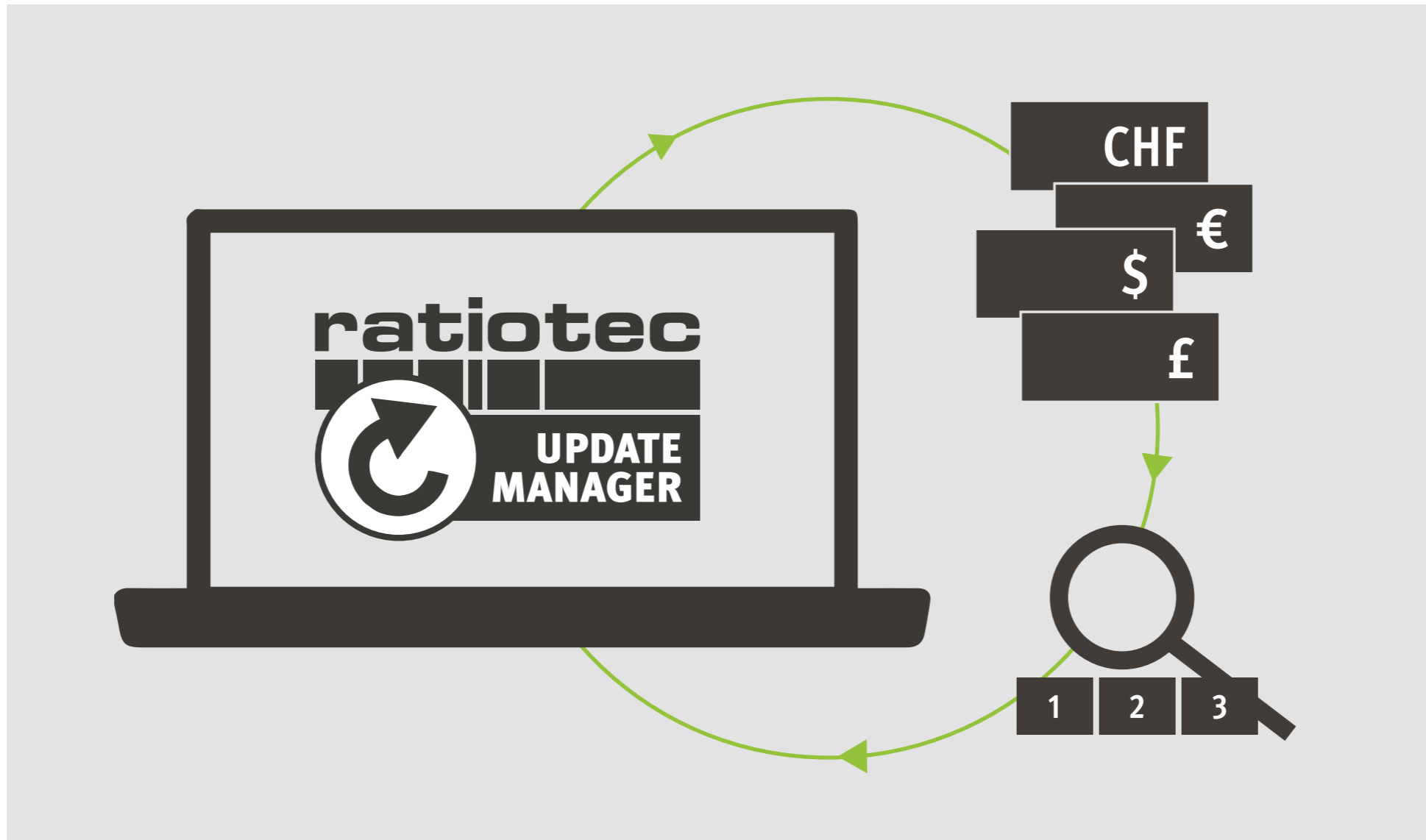
The Update Manager is available for download on our website for free: [www.ratio-tec.com](http://www.ratio-tec.com)

#### This is how it works:

1. Install the software once on your Windows PC.
2. The Update Manager informs you automatically as soon as a new update for your device is available.
3. Open the software, connect the device, start the update and it's done!

#### NEW:

You don't need a license anymore to use our Update Manager.



#### Do you need an analog update?

If you don't have the possibility to download the Update Manager, we offer you an analog method for most of our devices. Our Update Set includes – depending on the device – a SD card (Smart Protect series, T 225, T 575) or an USB Stick (S 575, X 500). Contact us! We will help you!

#### Easy access to your individual currency combination for your money scale

With the Update Manager you can quickly and easily install your desired currency combination on your ratiotec money scale. A currency combination always consists of a total of three currencies. By default your scale will count EUR, GBP and CHF. The currency selection is easily changed by „drag and drop“. A license number is not required!



# RATIOTEC CASH BOX

## DIGITAL CASH SETTLEMENT



Document No.: 1

Do 5. Apr 12:02:36 CEST 2018

Cash draw result		EUR
Denom	Volume	Value
0.01	32	0.32
0.02	23	0.48
0.05	19	0.95
0.10	18	1.80
0.20	13	2.60
0.50	9	4.50
1	10	10.00
2	9	18.00
<b>Coins Total:</b>		<b>38.65</b>
5	14	70.00
10	12	120.00
20	11	220.00
50	10	500.00
100	9	900.00
200	9	1,800.00
500	3	1,500.00
<b>Notes Total:</b>		<b>5,110.00</b>
Float:	0.00 EUR	
Subtotal:	5,148.65 EUR	
<b>Total:</b>	<b>5148.65 EUR</b>	
Name/	Signature: _____	

Consecutive document number

Timestamp, tamper-resistant via RF signal

Billing data with single and total sum.

Manually recording and transferring your cash receipts carries a high potential for errors. Mistakes can easily creep in, both when the cash holdings are first recorded, which tends to be repetitive work, and when transferring them back to your POS/back office system; mistakes which can later lead to a lot of confusion and in the worst case even to costly additional payments.

With our ratiotec Cash Box these worries belong to the past. With just one push of a button on your compatible ratiotec counting device, you can digitise your cash settlements with consecutive settlement numbering and a tamper-proof date and time stamp. This makes it impossible to miscount! Manual entry of figures by hand, which is so prone to errors, is no longer necessary.

Many POS businesses have already integrated our Cash Box successfully. Thanks to the modern REST API, it can be integrated without very little effort. We provide the corresponding developer documentation free of charge.



As well as transferring the figures to your POS system, our Cash Box allows you to print out a complete receipt wirelessly, using the new RTP 700 thermal receipt printer (see page 36).

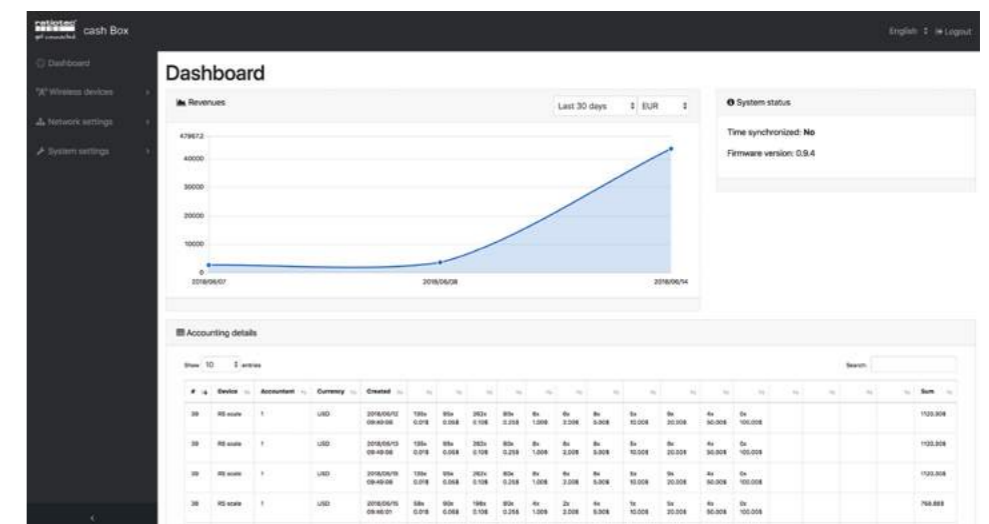
Alternatively, our specially designed web interface offers a convenient way of viewing your counting results and download them as excel or csv-file from wherever you are by entering a password. Setting up and pairing our ratiotec counting devices with the Cash Box is also quick and easy via our web interface. Your figures are transmitted from your compatible counting device completely wirelessly via Bluetooth. This Bluetooth transmission meets the highest security requirements (Diffie-Hellman key exchange and additional 256-bit AES encryption) and the ratiotec Cash Box does not permit any outbound Bluetooth connections. Unauthorized retrieval of data is therefore impossible.



All figures are stored for 11 years on the ratiotec Cash Box if requested and can be copied from there onto a USB stick or a microSD card.



You can find our product video here:  
<https://ratio-tec.com/cash-box.html>



# COUNTERFEIT DETECTION EXPLANATION & FEATURES

In addition to our manual and automatic detectors, the majority of our banknote counters also subject banknotes to counterfeit detection. To make counterfeiting difficult, real banknotes are equipped with various security features. By testing these features suspicious banknotes can be detected.

You can see here which abbreviation stands for which feature of counterfeit detection, as you will encounter these again and again in this catalogue:



Similar to the image

Symbol	Feature	Counterfeit detection	
1.	WL	White light	Visualisation of the watermark of a banknote
2.	UV	Ultra violet	Visualisation of UV colour (UV lamp) of a banknote. Reflection of UV light (banknote counters) of a banknote
3.	IR	Infrared	Visualisation/identification of the infrared reflection pattern of a banknote
4.	MG	Magnetism	Identification of the magnetic features of a banknote
5.	MT	Magnetic thread	Identification of the security thread of a banknote
6.	SD	Format	Recognition of the length, width and thickness of a banknote
7.	CI	Color	Recognition of the color spectrum of a banknote
8.	CIS	Contact Image Sensor	Full image recognition of the banknote (scanner) at a resolution of at least 100 dpi
9.	TD	Thickness Detection	Detection of the thickness of a banknote
10.	WM	Watermark	Watermark detection

# PICTOGRAMS LEGENDS

On the following pages you will find various pictograms in addition to our banknote counters, coin counters, money scales and detectors. These serve as a guide and give you a first overview of the devices performance.

<p>small volumes</p>	<p>The banknote counter is suitable for a small counting volume</p>	<p>small volumes</p>	<p>The coin counter is suitable for a small counting volume</p>	<p>Simple counterfeit detection</p>
<p>medium volumes</p>	<p>The banknote counter is suitable for a medium counting volume</p>	<p>medium volumes</p>	<p>The coin counter is suitable for a medium counting volume</p>	<p>Combined counterfeit detection of several features</p>
<p>high volumes</p>	<p>The banknote counter is suitable for a high counting volume</p>	<p>high volumes</p>	<p>The coin counter is suitable for a high counting volume</p>	<p>Very reliable, extensive counterfeit detection</p>
<p>sorted</p>	<p>Counting of sorted banknotes</p>	<p>sorted</p>	<p>Counting of sorted coins</p>	<p>Highest testing level. Even recognises highly professional counterfeits. Successfully tested.</p>
<p>mixed</p>	<p>Counting of mixed banknotes</p>	<p>mixed</p>	<p>Counting of mixed coins</p>	

# BANKNOTE DETECTORS

## OVERVIEW

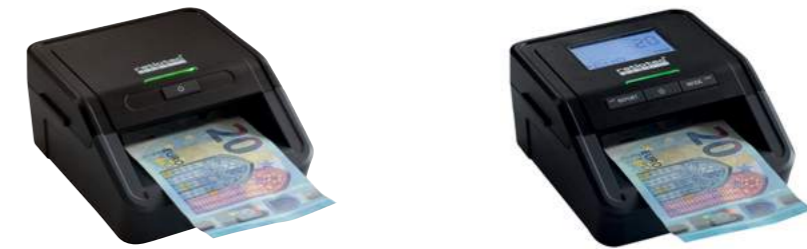
### Manual & automatic banknote detectors

The counterfeiting industry has become more and more professional over the past few years. Counterfeits are hardly recognisable as such at first sight. Protect yourself from accepting counterfeit money – with the help of ratiotec banknote detectors. You have the choice between a simple, manual check i.e. you examine the

banknote yourself for certain features, or you can choose for an automatic detector from our new Smart Protect series. These deliver a 100% reliable, clear result in less than a second.



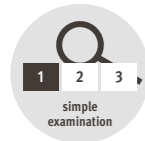
Technical data	RP 50	Soldi 120 UV-LED	Soldi 185
Currencies	All except polymeric (plastic coated) banknotes	All	All
Counterfeit detection	Chemical composition of a banknote	UV	UV   WL   MG   MT
Application	Banknotes	Banknotes   Travel documents   Official documents with UV features	Banknotes   Travel documents   Official documents with UV features
Power capacity	–	3 watt UV-LED	9 watt UV   durable 0.3 watt WL-LED
Dimensions (L x W x H in mm)	135 x 16 x 16	180 x 80 x 80	185 x 95 x 110
Weight (in kg)	0.009	0.28	0.5
Detailed information	Page 15	Page 15	Page 15



Technical data	Smart Protect	Smart Protect Plus
Currency	EUR   GBP   CHF	EUR   GBP   CHF
Counting function	–	✓
Report function	–	✓
Acoustic signal	✓	✓ (ON   OFF)
Counterfeit detection	IR   MG   MT   SD   WM   TD   CL	IR   MG   MT   SD   WM   TD   CL
Standby mode	–	✓
Banknote ejection	Front   suspicious banknote at the back	Front or back   suspect banknote separately
Display	LED-bar	LED-bar/LCD
Possible to open	✓	✓
Speed per banknote	< 0.5 seconds	< 0.5 seconds
Update	Update Manager   microSD card	Update Manager   microSD card
Optional accessories	Rechargeable battery   Cleaning set	Rechargeable battery   Cleaning set
Scope of delivery	Power cable   User manual	Power cable   User manual
Dimensions (L x W x H in mm)	137 x 117 x 62	137 x 117 x 62
Weight (in kg)	0.5	0.5
Detailed information	Page 16	Page 17



# RP 50 | SOLDI 120 UV-LED | SOLDI 185 BANKNOTE DETECTORS



simple examination



## RP 50 – Banknote detector pen

### The ideal solution if you:

- want to check banknotes discreetly and unobtrusively
- want a quick and easy check of a feature

### Overview:

- For all currencies, except polymeric (plastic coated) banknotes
- Counterfeit detection: Chemical composition
- Simply mark the banknote with the detector pen
- Light discoloration = real banknote
- Dark discoloration = suspicious banknote
- The indicator colour disappears on real banknotes after only a few seconds



real banknote



suspicious banknote



simple examination



## Soldi 120 UV-LED – manual detector for UV features

### The ideal solution if you:

- want to check manually banknotes, travel documents, or official documents with UV features on them

### Overview:

- For all currencies
- Counterfeit detection: UV
- Application: Banknotes | Travel documents | Official documents with UV features
- The UV lamp makes fluorescence features visible

**NEW:** The UV lamp has been replaced by a more powerful LED lamp, making the UV features on the banknotes even more visible - even in daylight. The LED is also more durable and makes regular lamp replacement unnecessary.



With the help of the UV-LED/UV lamp, fluorescence features become visible



combined examination



## Soldi 185 – manual detector for UV, WL, MG and MT features

### The ideal solution if you:

- also want to check manually other features in addition to the UV features

### Overview:

- For all currencies
- Counterfeit detection: UV | WL | MG | MT
- Application: Banknotes | Travel documents | Official documents with UV features
- The UV lamp makes fluorescent features visible, the white light shows the watermark and the magnetic sensor checks for magnetic properties



The watermark becomes recognisable by the white light (Soldi 185 only)

# SMART PROTECT BANKNOTE DETECTOR

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extensive examination

## Smart Protect – Automatic banknote detector

The Smart Protect is part of the new generation of our automatic banknote detectors - in a fresh, modern design and with improved test sensors. With the help of the Smart Protect, banknotes can be verified easily, quickly and reliably directly at the POS. Suspicious banknotes are indicated by the LED-bar and an acoustic warning signal. The detector with automatic currency recognition does not have any additional features and thus cannot be accidentally adjusted.

### The ideal solution if you:

- are looking for a compact solution for POS
- want very reliable, fast counterfeit detection at a low price
- do not need additional functions

### Overview:

- Currencies: EUR | GBP | CHF
- Automatic currency recognition
- 100% reliable detection of counterfeits\* in less than a second
- Counterfeit detection: IR | MG | MT | SD | Colour
- Future-proof thanks to improved test sensors (IR & MG)
- Clear result due to LED-bar, acoustic warning signal and banknote ejection (suspicious banknote at the back)
- Simple and intuitive operation
- Easy to open and easy to clean
- New updates via Update Manager (via USB cable) or microSD-card



Green LED-bar: genuine banknote



Red LED-bar: suspicious banknote



Easy to clean: Open up - free from dust and dirt - close it again - and it's done!



# SMART PROTECT PLUS BANKNOTE DETECTOR



## Smart Protect Plus – Automatic banknote detector

The Smart Protect Plus is the second device of the new generation of our automatic banknote detectors. Suspicious banknotes are indicated by means of the the LED-bar, the LCD and an acoustic warning signal and are ejected separately. The detector with automatic currency recognition also has a counting function and can determine the quantity and total amount of the tested banknotes.

### The ideal solution if you:

- are looking for a compact solution for the POS
- want very reliable, fast counterfeit detection
- want to use additional functions in addition to the test, e.g. counting function

### Overview:

- Currencies: EUR | GBP | CHF
- Automatic currency recognition
- 100% reliable detection of counterfeits\* in less than a second
- Counterfeit detection: IR | MG | MT | SD | WM | TD | Colour
- Future-proof thanks to improved sensors (IR & MG)
- Clear result due to acoustic warning signal, LED-bar, LCD and banknote ejection (suspicious banknotes at the front or back)
- High-quality and clear display
- Simple and intuitive operation
- Easy to open and easy to clean
- Displays the total amount and quantity of the accepted banknotes counted
- New updates via Update Manager (via USB cable) or microSD-card



Green LED-bar: genuine banknote



Red LED-bar: suspicious banknote



Easy to clean: Open up - free from dust and dirt - close it again - and it's done!

# CIS SENSOR EXPLANATION



CIS full frame recognition of rapidcount X 500

## CIS sensor technology – 100% guaranteed reliable counterfeit detection

At ratiotec, we decided some time ago to only put banknote counting machines that have what is known as a CIS (Contact Image Sensor) detection through the European Central Bank certification procedure. We would like to explain to you how this technology works and why it may make sense for you to choose a CIS device when purchasing.

### How does CIS detection work?

The CIS detection is comparable to the technology of a scanner. We only use double CIS sensors in our devices to ensure that both sides of the banknotes can be scanned. An optical, two-sided image comparison is carried out using LED sensor strips which sit opposite each other. The CIS strip scans the front and back

of the banknote and compares the recorded data with the target data. This process enables pixel-perfect inspection of the banknotes (the resolution is at least 100 dpi) and high-quality counterfeit detection.



### Why should you purchase a CIS device?

CIS technology is the only way for banknote counting machines to 100% reliably detect all the counterfeits that are currently in circulation – or will be in the future. Most national banks in Europe share this point of view. Moreover, the quality of counterfeits is increasing, which means that if you purchase a banknote counter which is not CIS-capable, you risk not being able to detect future counterfeits.

**Our advice:** buy a CIS machine and ensure 100% reliable detection – now and in the future.

# BANKNOTE COUNTERS

## OVERVIEW

### rapidcount B-series and S 575

The models of the rapidcount B-series and the S 575 belong to the so-called „backloaders“, i.e. the banknote feeder is located in the upper, rear area of the devices. A smaller quantity (about 100 banknotes) can be easily inserted here. Thanks to the addition function, you can

always refill new notes. These are calculated in the overall result. In addition to the number of pieces the S 575 also determines the value of the counted notes. In combination with a thermal receipt printer a clear print out of the counting results is possible.



Technical data	rapidcount B 20	rapidcount B 40	rapidcount S 575
Currency	EUR	EUR	EUR
Type	Piece counter	Piece counter	Piece and value counter
Banknotes	sorted banknotes	sorted banknotes	sorted and unsorted banknotes
Counterfeit detection	UV   IR	UV   IR   MG   SD	UV   IR   MG   MT   SD   Colour
Speed	1,000 banknotes per minute	1,000 banknotes per minute	1,200 banknotes per minute
Operational performance	200,000 banknotes per year	200,000 banknotes per year	400,000 banknotes per year
Capacity of feeder   stacker	100   200	100   200	100   130
Addition   Batch function	✓   ✓	✓   ✓	✓   ✓
Report function	-	-	✓
Print function	-	-	✓
Start-Stop-Automatic	✓	✓	✓
Connections	Power plug   External display	Power plug   External display   Update connection	Power plug   Update connection
Update	Not required	Update Manager	Update Manager
Scope of delivery	Power cable   User manual   External display	Power cable   User manual   Update cable   External display	Power cable   User manual
Optional accessories	Dust protection cover   Cleaning set	Dust protection cover   Cleaning set	Dust protection cover   Cleaning set   Receipt printer
Dimensions (L x W x H in mm)	289 x 260 x 174	289 x 260 x 174	310 x 280 x 165
Weight (in kg)	5.1	5.1	6.5
Detailed information	Page 21	Page 21	Page 22

### rapidcount T & X-series

The banknote counters of the rapidcount T series and the X 500 belong to the so-called „frontloaders“. In contrast to the „backloaders“, the banknote feeder is located in the front, upper area of the machine. The bills can simply be placed here as a whole stack. The adjustable rails support optimal alignment.

Due to the high infeed, the counting machines can also process large stacks of banknotes without any problems. The T 575 and X 500 also impress with their modern design and high-quality TFT color display. Thanks to the CIS bar, both banknote counters enable a 100% reliable counterfeit detection..



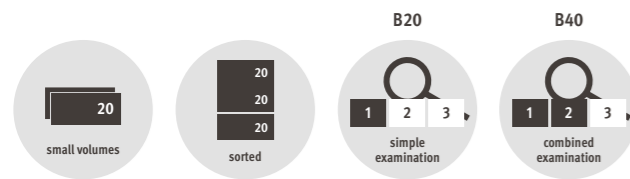
Technical data	rapidcount T 225	rapidcount T 575	rapidcount X 500
Currency	EUR   GBP	EUR   USD   GBP   CHF   others optional	EUR   GBP   USD   RON   CHF   PLN   SCO   others optional
Type	Piece and value counter	Piece and value counter	Piece and value counter
Banknotes	sorted and unsorted banknotes	sorted & unsorted banknotes	sorted & unsorted banknotes
Counterfeit detection	UV   SD	UV   IR   MG   MT   SD   CIS	UV   IR   MG   MT   SD   CIS
Speed	1,000 banknotes per minute	1,200 banknotes per minute	1,000 banknotes per minute
Operational performance	800,000 banknotes per year	800.000 banknotes per year	1,4 million banknotes per year
Capacity of feeder   stacker	300   220	300   220	500   200 (Reject tray: 100 banknotes)
Addition   Batch function	✓   ✓	✓   ✓	✓   ✓
Report function	✓	✓	✓
Print function	✓	✓	✓
Start-Stop-Automatic	✓	✓	✓
Connections	Power plug   Display   Printer   Update connection	Power plug   Display   Printer   Update connection	Power plug   Printer   USB
Update	microSD   Update Manager	SD   Update Manager	USB stick   Update Manager
Scope of delivery	Power cable   User manual   Calibration cards	Power cable   User manual   Calibration cards	Power cable   User manual   Calibration card
Optional accessories	Receipt printer   Dust protection cover   Cleaning set	Receipt printer   Dust protection cover   Cleaning set & cards	Receipt printer   Dust protection cover   Cleaning set
Dimensions (L x W x H in mm)	260 x 280 x 260	263 x 268 x 255	340 x 335 x 335
Weight (in kg)	7.0	6.4	9.4
Detailed information	Page 23	Page 24	Page 25



# RAPIDCOUNT B 20 | B 40 | S 575

## BANKNOTE COUNTERS

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### rapidcount B 20 | B 40 – Piece counter

Our solid entry level models for small counting volumes. Both the B 20 and the B 40 reliably and quickly determine the quantity of your presorted notes.

#### The ideal solution if you:

- have presorted banknotes
- only want to determine the number of notes
- have a small counting volume (about 200,000 banknotes/year)
- are looking for a low priced entry level model

#### Overview:

- Piece counter
- Currency: EUR
- Ideal for small counting volumes
- Counterfeit detection:  
B20: UV | IR  
B 40: UV | IR | MG | SD
- Batch function (counting stop according to specified number of notes)
- unbeatable value for money



### rapidcount S 575 – Piece and value counters

Our banknote counting machine for small counting volumes with combined counterfeit detection - rapidcount S 575. This model determines not only the number of pieces but also the exact value of the banknotes.

#### The ideal solution if you:

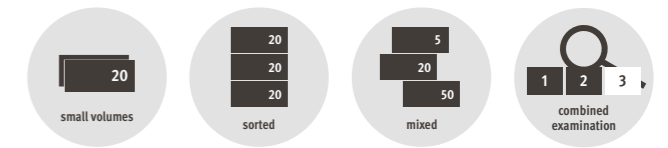
- in addition to the number of pieces also want to determine the value of the counted notes
- have a small counting volume (about 400,000 banknotes/year)
- attach importance to a clear display and intuitive operation
- are looking for a low priced entry level model

#### Overview:

- Piece and value counter
- Currency: EUR
- Ideal for small counting volumes
- Counterfeit detection: UV | IR | MG | MT | SD | Colour
- Display of total amount and quantities per type of banknote
- Batch function (counting stop according to specified number of notes)
- Print function for a clear printout of the counting results
- High quality display



The practical handle makes it easier to transport the device.

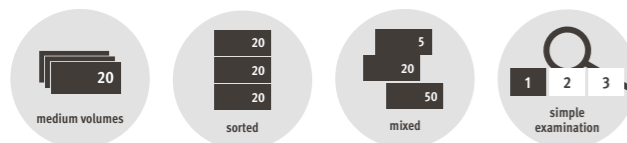




# RAPIDCOUNT T 225 | T 575

## BANKNOTE COUNTERS

**ratiotec®**  
get connected



### rapidcount T 225 – Piece and value counters

The T-series piece and value counters with a simple and extensive counterfeit detection reliably count sorted and unsorted banknotes.

#### The ideal solution if you:

- in addition to the number of pieces also want to determine the value of the notes counted
- have a medium counting volume (about 800,000 banknotes/year)

#### Overview:

- Piece and value counter
- Ideal for medium counting volumes
- Currencies: T 225: EUR | GBP | others optional
- Counterfeit detection: T 225: UV | SD
- Display of total amount and quantities per type of note
- Batch function (counting stop according to specified number of notes)
- Print function for a clear printout of the counting results
- Counts even heavily worn and dirty banknotes without any problem
- Self-explanatory operating concept



The rapidcount T-series can handle even high banknote stacks without any problems.

### rapidcount T 575 – Piece and value counter

Sovereign and powerful – the piece and value counter with 100% counterfeit detection counts sorted and unsorted banknotes reliably.

#### The ideal solution if you:

- in addition to the number of pieces also want to determine the value of the notes counted
- have a medium counting volume (about 800,000 banknotes/year)
- want a 100% reliable counterfeit detection
- like to have a convenient cleaning

#### Overview:

- Piece and value counter
- Ideal for medium counting volumes
- Currency: EUR | USD | GBP | CHF | many more (unsorted banknotes)
- 100% reliable counterfeit detection
- Counterfeit detection: UV | IR | MG | MT | SD | CIS
- CIS full frame recognition (double CIS bar)
- Display of total amount and quantities per type of banknote
- Date and time can be checked on the high quality TFT display
- Batch function (Counting stop according to specified number of notes)
- Simultaneous counting of different currencies possible
- Printing function for a clear print out of the counting results
- Counts even heavily worn and dirty banknotes without any problems
- Self-explanatory operating concept



Large feeder for high banknote stacks. Counts even heavily worn and dirty banknotes without any problems.





# RAPIDCOUNT X 500 BANKNOTE COUNTERS



100 % reliable counterfeit detection



## rapidcount X 500 – Piece and value counter

The 1.5-pocket professional with 100% reliable counterfeit detection. Thanks to the additional reject compartment, the value and piece counter can process up to 1,000 banknotes per minute without interruptions.

### The ideal solution if you:

- have a high counting volume (about 1,4 million banknotes/year)
- want very reliable, extensive counterfeit detection
- need to count even heavily worn and dirty banknotes
- want to count many unsorted banknotes at the same time

### Overview:

- Piece and value counter
- Currencies: EUR | GBP | USD | RON | CHF | PLN | SCO
- Counterfeit detection: UV | IR | MG | MT | SD | CIS
- Ideal for high counting volumes
- Simultaneous counting of different currencies possible
- Large feeder for high banknote stacks
- High quality TFT colour display with touch screen
- Suspicious, heavily soiled or damaged banknotes are sorted into the additional reject compartment without any interruption of the counting process
- Display of total amount and quantities per type of note
- Batch function (counting stop according to specified value or specified number of notes)
- Print function for a clear printout of the counting results
- Sorting of banknotes by type and orientation possible
- Serial numbers are recognised and can be printed if required
- Easy to open transport units allow the removal of stuck or jammed notes and the comfortable cleaning of the device

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The easy opening of the transport unit allows the removal of stuck or jammed banknotes as well as a smooth processing in cleaning



Currency selection via high-quality TFT-colour display with touchscreen surface. It is possible to count mixed banknotes of different currencies.



The additional reject compartment allows a fluent counting process without interruption.

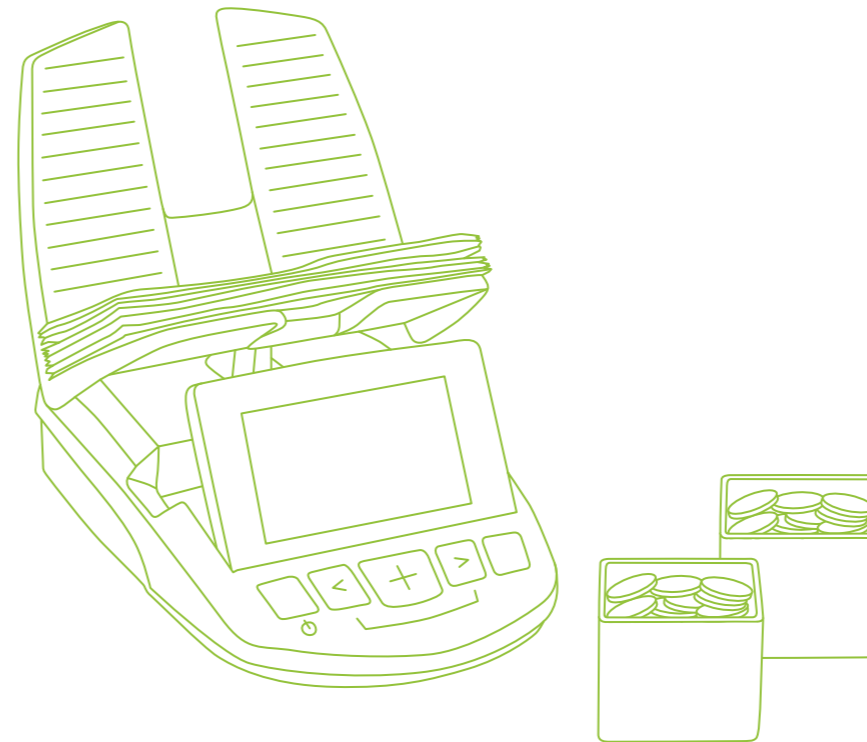
# RS 1000 | 1200 | RS 2000

## MONEY SCALES

### Money scales and till cups

Counting money by weighing – the entire cash accounting in under 2 minutes with our money scales. Easily count sorted coins and banknotes with just one device. Due to the enormous time savings in the area of cash accounting our

money scale pays for itself within the shortest time. With the help of coin containers (till cups), which are available for all common cash drawer models, the duration is further reduced.



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We are pleased to assist you so that the implementation of money scales in your company will be a complete success.

Our service for the perfect start:

- On site training
- Assistance with the connection of the money scale to your ERP system.
- easy to understand introductory videos
- a practical installation guide

Technical data	RS 1000	RS 1200	RS 2000
Currency	EUR   GBP   CHF   others optional	EUR   GBP   CHF   others optional	EUR   GBP   CHF   others optional
Counting of banknote bundles   Coin rolls	-	-   ✓	✓   ✓
Dynamic weighing function	-	-	✓
Auto-Save-Function (Shows the last counting result)	-	-	✓
Change function	-	✓	✓
Auto-Add-Function	✓	✓	✓
Auto-Continue-Function	✓	✓	✓
Standby mode	-	-	✓
Operation	Battery   Power cable	Battery   Power cable	Battery   Power cable
Connections	Power plug   Printer   USB	Power plug   Printer   USB	Power plug   Printer   USB
Update	Update Manager	Update Manager	Not required
Scope of delivery	Power cable   Weighing hod   Coin bowl   Calibration weight   User manual	Power cable   Weighing hod   Coin bowl   Calibration weight   User manual	Power cable   XL weighing hod   Coin bowl   Calibration weight   User manual
Optional accessories	XL weighing hod   Receipt printer   RS accounting software   Till cups	XL weighing hod   Receipt printer   RS accounting software   Till cups	Receipt printer   RS accounting software   Till cups
Dimensions (L x W x H in mm)	190 x 130 x 50	190 x 130 x 50	190 x 130 x 148
Weight (in kg)	0.44	0.44	0.44
Detailed information	Page 29	Page 29	Page 30

### ratiotec till cups – for even faster, more comfortable counting of coins

Save even more time with your cash accounting through the use of till cups! For each of our dynamic money scales, you can tare up to eight differently sized till cups. We offer you a selection of till cups for different cash drawers from various manufacturers.

Our Sales support team will be pleased to advise and help you to find the right till cup for your cash drawer: Just call us at +49 (0) 201/361 49 - 0 (Monday to Friday from 8am to 5pm)!





# RS 1000 | 1200 | 2000

## MONEY SCALES

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The coin cup included in the scope of delivery allows the counting of coins.



Euro coin tubes can also be counted without problems (RS 1200 only).



Optionally available till cups allow even faster counting of coins.

### RS 1000 | 1200 – our basic models with static weighing function

Counting money can be this easy! With our affordable entry level models RS 1000 and 1200, you can easily count coins and banknotes. The self-explanatory menu guidance accompanies you automatically through the complete cash accounting.

#### The ideal solution if you:

- have sorted banknotes and sorted coins
- only want to use one device for the complete cash accounting
- want to save time and space

#### Overview:

- RS 1000: counts banknotes and coins
- RS 1200: counts banknotes, coins and coin rolls
- Currency: EUR | GBP | CHF | Other optional  
Desired currency combinations can simply be put together via Update Manager by means of "Drag & Drop"
- Static weighing function (count EUR1 and EUR2 separately, meaning that banknotes must be sorted according to old and new EUR series)
- Reference weighing function (for prescriptions, vouchers and various sales slips)
- Available optionally: XL weighing hod (allows intermittent feeding and counting of up to 400 banknotes)
- Operation via battery or mains cable

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●●● IN  
●●● GERMANY

### RS 2000 – our allrounder with dynamic weighing function

Your cash accounting in less than 2 minutes. The RS 2000 is the ideal solution for your complete cash management.

#### The ideal solution if you:

- have sorted banknotes and sorted coins
- want to save time and space
- only want to use one device for the complete cash accounting
- count mixed old and new notes and do not want to make any additional updates

#### Overview:

- Counts banknotes, banknote batches, coins and coin rolls
- Currencies: EUR | GBP | CHF | others optional
- Desired currency combinations can simply be compiled via Update Manager by means of "Drag & Drop"; you can choose out of over 20 currencies (e.g. USD, CAD, PLN, HUF, BGN, NOK)
- Dynamic weighing function: After a short training period, you can place and count up to 30 banknotes at the same time
- XL weighing hod enables up to 400 banknotes to be placed and counted in batches
- Reference weighing function (for prescriptions, vouchers and various sales slips)
- Transfer of results (e.g. to a POS system) now even faster
- No update necessary
- Operating via rechargeable battery or power supply

**NEW:** Now even faster! The new weighing sensors not only noticeably shorten the counting process, but also the transmission of the results, e.g. to a (POS) PC. This saves you even more time at the checkout!

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The coin cup included in the scope of delivery allows the counting of coins.



Euro coin rolls can also be counted without problems.



Optionally available till cups allow even faster counting of coins.



# COIN COUNTERS AND SORTERS OVERVIEW

## All coin counters

The manual counting of coins is extremely laborious, costs valuable time and can not be accomplished beyond a certain amount. Make more meaningful use of your time and leave the work to our coin counters! We offer the right device for different coin volumes. The same

principle applies to all: Simply pour the coins into the feeder and receive a detailed result at the end of the count. Our coin counters from the CS-series not only count your coins, they also sort them.



Technical data	CS 50	CS 250*	CS 500
Counts coins   sorts coins	✓   ✓	✓   ✓	✓   ✓
Currency	EUR	EUR	EUR
Display	LED display	LED display	LCD display
Speed	200 coins per minute	550 coins per minute	600 coins per minute
Operational performance	200,000 coins per year	400,000 coins per year	600,000 coins per year
Capacity of feeder	250-400 coins	500-600 coins	1.000 coins
Display of total amount   amounts	✓   ✓	✓   ✓	✓   ✓
Batch function (adjustable quantity stops)	✓	✓	✓
Print function	✓	✓	✓
Connections	Power plug   Printer	Power plug   Printer	Power plug   Printer
Optional accessories	Tubular output set   Coin wrappers	Receipt printer	Receipt printer RTP 300
Dimensions (L x W x H in mm)	335 x 350 x 270	290 x 300 x 245	394 x 370 x 376
Weight (in kg)	5,0	4,8	6,85
Detailed information	Page 32	Page 33	Page 34

### \* Also available in the variant "CS 250 special"

In contrast to the standard model, the CS 250 special has only 5 coin containers (10 cents | 20 cents | 50 cents | 1 Euro | 2 Euro) and is therefore suitable for companies that do not accept 1, 2 or 5 cent pieces, e.g. for casinos or gaming salons.

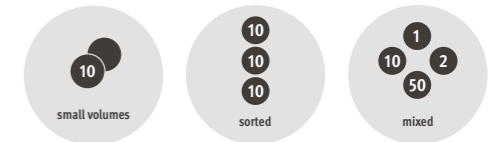


CS 250 special

CS 250

# COINSORTER CS 50 COIN COUNTERS AND SORTERS

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## coinsorter CS 50 – Coin counter and sorter

Our entry level model CS 50 for smaller counting volumes counts your Euro coins fast and reliably.

### The ideal solution if you:

- want to count and sort mixed coins
- have a small coin volume (about 200,000 coins/year)
- want to be able to fill coins in coin tubes comfortably (see optional accessories)

### Overview:

- Counts and sorts Euro coins
- Display of total amount and quantities per type of coin
- Batch function allows the storing of counting stops per type
- The optionally available tubular output set enables the wrapping of the coins
- Printing function for a clear print out of the counting results



The optionally available tubular output set allows you to wrap the coins in a simple and fast way.





# COINSORTER CS 250 | 500

## COIN COUNTERS AND SORTERS

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### coinsorter CS 250 – Coin counter and sorter

Minimum wear and reliable counting results – the robust CS 250 for medium counting volumes.

#### The ideal solution if you:

- want to count and sort mixed coins
- have a small coin volume (about 400,000 coins/year)
- attach importance to easy cleaning and maintenance

#### Overview:

- Counts and sorts Euro coins
- Display of total amount and quantities per coin type at a glance
- Batch function allows the storing of counting stops per type
- Print function for a clear printout of the counting results
- Minimum wear due to robust metal plate inside the device
- Removable coin feeder allows the removal of foreign matter from the coin feeder and easy cleaning of the machine
- Foam inserts in the coin cups reduce the noise volume during the counting process



Thanks to the easy to open transport unit, foreign objects can be removed from the coin feeder and the internal sensors can be cleaned.

### coinsorter CS 500 – Coin counter and sorter

Ideal for a medium counting volumes – our CS 500 counts your Euro coins with a speed of 600 coins per minute quickly and reliably.

#### The ideal solution if you:

- want to count and sort mixed coins
- have a medium counting volume (about 600,000 coins/year)
- attach importance to easy cleaning and maintenance
- prefer a high counting speed (600 coins/minute)

#### Overview:

- Counts and sorts all Euro coins
- Ideal for medium counting volumes
- Minimal wear thanks to a sorting mechanism made from robust metal inside the machine
- Low noise
- Printing function for a clear print out of the counting results
- Batch function enables to save the counting stops per coin type
- Auto-stop-function prevents overflowing of the coin cups
- High-quality LCD-display
- Maximum speed - 600 coins per minute
- Very high coin feeding (up to 1.000 coins)
- Easy opening of the machine for cleaning and maintenance



# RTP 300 | RTP 700

## THERMAL RECEIPT PRINTER

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### Thermal receipt printer RTP 300

With the mobile thermal receipt printer RTP 300 you can quickly and conveniently print out your counting results. It is perfect for use in the back office as well as at the POS.

- Mobile thermal receipt printer
- Ideal for the POS | Back office
- Clear print out of counting results
- Replace the receipt roll with just one movement
- Processing of different length receipt rolls
- Fast and self-explanatory operation
- Power supply: Desktop power supply | Rechargeable battery (3 Ah)
- Max. diameter per receipt roll: 50 mm
- Scope of delivery: Power cable | User manual | receipt roll (1 pcs) | printing cable
- Optional accessories: Rechargeable battery | Receipt rolls (5 pcs per set)
- Dimensions (L x W x H in mm): 134 x 95 x 66
- Weight (in kg): 0.25
- Charging time is about 100 minutes

### Thermal receipt printer RTP 700

With the RTP 700 you can quickly and conveniently print out your counting results, too. In contrast to RTP 300 it's a Bluetooth thermal receipt printer, so no cable connection between counting device and printer is necessary!

- Mobile Bluetooth thermal receipt printer
- Ideal for the POS | Back office
- Clear print out of counting results
- No cable connection between counting device and printer necessary (data transmission via Bluetooth, operation via battery)
- Replace the receipt roll with just one movement
- Processing of different length receipt rolls
- Fast and self-explanatory operation
- Scope of delivery: receipt roll | battery | power supply | connection cable (RS-232 to serial port) | user manual | printer pocket
- Optional accessories: receipt rolls (5 pcs per set)
- Dimensions (L x W x H in mm): 106.5 x 78 x 47
- Weight (in kg): 0.19
- Charging time is about 120 minutes



### Compatible with these ratiotec devices:

- Banknote counters: S 575, T 225, T 275, T 575, X 400, X 500
- Coin counters and sorters: CS 50, CS 250, CS 250 special, CS 500
- Money scales: RS 1000, RS 1200, RS 2000



### Compatible with all ratiotec Cash Box devices:

Simply connect the printer with your Cash Box via Bluetooth and you can print out the billing results with just the push of a button in addition to the storage on the Cash Box. No cable connection between counting device and printer necessary!

### ratiotec Cash Box devices:

- Banknote counters: S 575, T 225, T 275, T 575, X 400, X 500
- Coin counters and sorters: CS 250, CS 250 special, CS 500
- Money scale: RS 2000



# POS SAFE RT 500 | RT 650 | RT 750

## CASH STORAGE AT THE POS



### POS Safe RT 500

For easy and low priced storage of your banknotes. The ratiotec POS Safe RT 500 comes with two separate keys for its removal from the cash desk and for the opening of the safe. The extended XL-rail allows flexible positioning. Banknotes can be easily and safely skimmed via the mechanical lever.

- Mechanical safe with 2 key system:
  - One key to remove the safe from the cash desk and the other key to open the safe
- Simple installation below the cash desk which is not visible to the customer
- The extended XL-rail allows flexible positioning.
- Steel housing
- Removable steel cashbox for banknotes
- Quick and safe skimming of banknotes by means of the mechanical lever
- Dimensions (L x W x H in mm): 340 x 225 x 100
- Weight (in kg): 2.6



### POS Safe RT 650

Ideal for the secure storage of high banknote volumes at the POS. The ratiotec POS Safe RT 650 with key system allows a quick and direct skimming of banknotes via the banknote insertion slot.

- Safe with key system
- Solid steel housing
- Removable storage made of plastic for banknotes
- Skimming of banknotes by means of the banknote insertion slot
- Simple installation below the cash desk which is not visible to the customer
- Dimensions (L x W x H in mm): 300 x 115 x 280
- Weight (in kg): 7.4



### POS Safe RT 750

Ideal for the secure storage of high banknote volumes at the POS. The ratiotec POS Safe RT 750 allows a quick and direct skimming of banknotes via the banknote insertion slot. The electronic pin-code system with a time delay of up to 4 minutes and 30 seconds offers the highest possible security.

- Electronic pin code system
- Time lock security with delay of up to 4 minutes and 30 seconds
- Solid steel housing
- Removable storage made of plastic for banknotes
- Skimming of banknotes by means of the banknote insertion slot
- Simple installation below the cash desk which is not visible to the customer
- Operation via battery and USB cable
- Dimensions (L x W x H in mm): 300 x 115 x 280
- Weight (in kg): 7.4



Inside view RT 500



Inside view RT 750 (RT 650 similar)





# ACCESSORIES OVERVIEW

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## Purse with coin dispenser



- High quality purse
- Flexible carrying strap | Magnetic closure
- Transparent coin dispenser for 8 coin types (coin capacity approx. 100 Euro)
- 4 banknote compartments

## Wrapping system



- For the quick wrapping of all coin types
- Suitable for coin sorter CS 50
- Scope of delivery: 1 wrapping system, 8 coin cylinders

## XL weighing cradle for money scale RS 1000 | 1200



- Allows the stacking of very high banknote volume
- Stacking volume of up to 400 banknotes
- Suitable for money scales RS 1000 and 1200
- Dimensions (L x W x H in mm): 135 x 141 x 14

## Compressed air spray



- Compressed air spray (400 ml) for the quick cleaning of dust and dirt from banknote counters, coin counters or detectors
- Ideal in combination with ratiotec cleaning sets

## Cleaning sets



- For the practical cleaning of your device
- Variant 1 for banknote counters (3 cleaning films made of microfiber, 3 cleaning cloth sets for the housing surface)
- Variant 2 for banknote detectors and receipt printers (25 ml cleaner for optical sensors, 3 cleaning swabs, 3 cleaning cloth sets for the housing surface)

## Cleaning card set



- For the optimum interior cleaning of your banknote counter
- Contains 6 cleaning cards (3 pcs soaked and 3 pcs dry)
- Just run it through the machine like a banknote and clean the device from dust and dirt on the inside

## Transport Case



- High quality transport case with telescope holder
- Tapered interior made of foam
- Safe transport for T- and X-series as well as all coin counters

## Dust protection covers



- Protects your banknote counter from dust and damage
- Also available for the coin counter and sorter CS 50





Do you have any questions about our products?

Our sales support team will be pleased to advise and help you. Together we will find your individually tailored solutions for your cash management!

Contact us!

You can reach our sales support team from Monday to Friday (8 am to 5 pm)!

Phone: +49 (0) 201/36149 - 0  
E-Mail: [info@ratio-tec.de](mailto:info@ratio-tec.de)

Looking forward hearing from you!

Detailed information on [www.ratio-tec.com](http://www.ratio-tec.com)

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