



**Gastro 4.0**  
Fully automatic corporate cafeteria

# The intelligent cafeteria

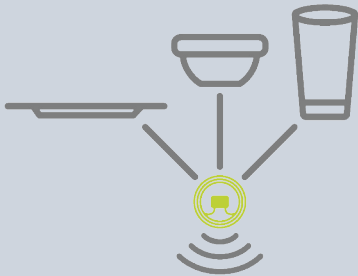
**smart and easy. quick. reliable.**

**avus smart-cap** breathes life into your tableware. The intelligent RFID solution enables your tableware to communicate with your checkouts. **avus smart-cap** communicates the dishes on your tray lightning fast to the checkout and displays the respective prices on the terminal. Dishes can be captured accurately and automatically right down to the last gram. **avus smart-cap** is compatible with almost every checkout system.

Ten years of canteen experience have been incorporated in the clever technology. With **avus smart-cap**, your corporate cafeteria facility will contribute to an innovative and trustworthy company culture.

Companies like BASF SE, FOND OF GmbH, Infineon Technologies Austria AG and Robert Bosch GmbH together with the “Akademische Förderungswerk AKAFÖ Bochum” and ZDF are leading the way – they rely on the Industry 4.0 solution and are perfecting their processes. In staff restaurants, this means the sale of meals and drinks is fully automatic, checkout queues are reduced, erroneous entries are impossible – making everything very easy for the guest.

# How avus smart-cap functions

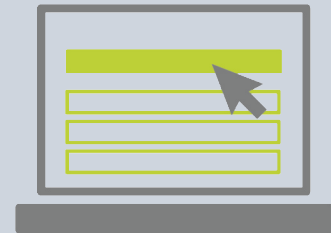


## Precisely equipped

The tableware items are all equipped with a RFID transponder. Each item is given a unique, unmistakable ID number and can therefore be used in the wireless system. To recognise them at the self-service counter, the canteen furniture is equipped with RFID hardware (scanners and antennas).

## Meal planning updated daily

The head chef can do the meal planning using a configurator on a web-based user interface. The latest meal plan is allocated daily to the individual **avus smart-cap** elements in the company cafeteria. It means the various dishes can be offered flexibly daily at the self-service counters.



## Prepared behind the scenes



There is the kitchen station in the kitchen. It is either a kitchen trolley (mobile) or a designated table (fixed) in the kitchen area and is equipped with RFID hardware and a digital device (usually a tablet PC). Kitchen staff can preload the tableware items at the stations, for example with desserts, salads of the day, smoothie glasses etc. They are placed in the glass showcases and can be simply taken out by the guests so therefore is no need for RFID hardware.

## Serving food as always

Guests take their food as usual in the corporate cafeteria at the manned serving station or can serve themselves at a self-service counter. RFID hardware that transfers information about the plate load to the tableware is integrated in the manned serving station. At the self-service counters, the tableware items already have the appropriate standard loading or are assigned the article number.



## Beverage counter

Beverages can be poured in the normal way at the postmix dispenser. RFID antennas function with almost every conventional dispenser. As soon as the beverage has been poured long enough, the antenna assigns the glass to the right price group.

## Weighed dishes



Every dish can be easily priced according to its weight using **avus smart-cap**. Either when combined with diverse other serving methods – both served or self-served – with a variety of dishes on a tableware item or also as a stand-alone solution (with cashiers). RFID antenna can be installed within every electronic scales and is compatible with almost every checkout system. Requirement: the scales and checkout combination is authorised for use in the catering industry.

## Payment process

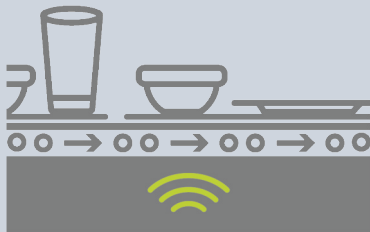
After choosing the dishes, the tableware items are scanned fully automatically on the tray at the checkout. Trouble-free also using the existing checkout system: **avus smart-cap** is compatible with almost every system. **avus smart-cap** triggers the listing of the individual dishes with the appropriate prices at the checkout terminal and the display of the sum to be paid. For cash-free payments, the sum is debited from the guest's means of payment (LuCa\*, employee ID, pay card, bank debit card).

\*see penultimate page

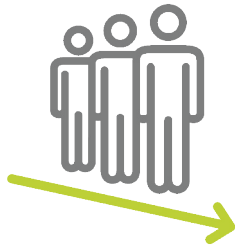


## Tableware return station

**avus smart-cap** technology is also installed in the tableware return station where there is a check to see which tableware items have actually been entered into the checkout. The data can be generated for statistical documentation. The ratio of successfully scanned trays totals more than 99%. Additionally, when passing through the station, the information on the transponders is reset so that the tableware items can start the next lapp once they have been cleaned.



# Expressing appreciation and cost effectiveness



## Shorter queues

With **avus smart-cap**, you will minimise checkout queues. Dishes are scanned in one second as each guest's items are transmitted and displayed at the checkout. All in all, staff breaks will last significantly longer and they will profit from more quality time.



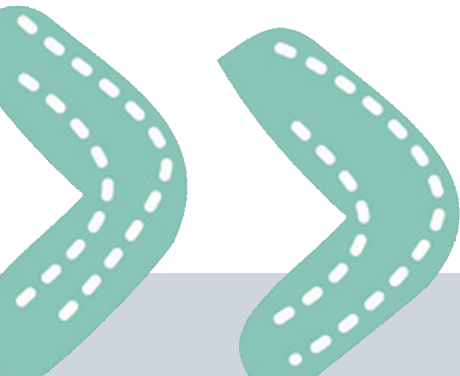
## Innovative image

Become a trendsetter by introducing an Industry 4.0 solution. Every day, your employees and guests will experience first-hand an innovative application with which more than five million meals are paid for annually. With **avus smart-cap**, you will position yourself as a technology-oriented and forward-looking employer.



## Appreciation and trust

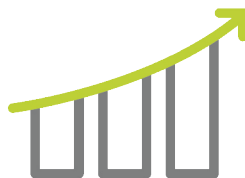
Show your guests just how important they are for you. Not only by introducing self-scan checkouts, you will invest in the trust of your workforce. By introducing **avus smart-cap**, it becomes very obvious that you have recognised the signs of the times and it makes a conscious statement in the changing working world.





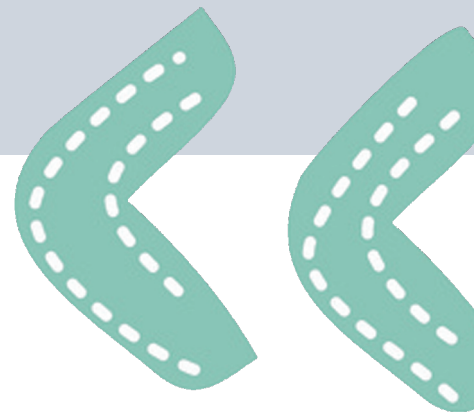
### Cost effectiveness

**avus smart-cap** can be used in free-flow cafeterias and, what's more, it is ideal for the cost neutral implementation of modern line concepts where significantly more checkouts are required due to the theme islands. With **avus smart-cap**, these are not staffed with more personnel but are only equipped with a single piece of RFID hardware. This results in a very short payback time. The freed personnel can be deployed to serving guests.



### Process optimisation

During your opening times, **avus smart-cap** automatically records all the tableware data and documents the path they take through your corporate cafeteria. Fully automatic reading of the data means erroneous entries are immediately a thing of the past. Use the knowledge from the automatic reports to optimise your processes. For example, the inventory function will give you a precise overview of the tableware items to hand.



# Our partners

## Together we are strong

**avus smart-cap** makes tableware intelligent. Catering processes can therefore be optimised – everywhere where tableware plays a role. With Arcoroc, Bauscher, Kahla, Ornamin, Rastal and Seltmann Weiden behind us, avus has experienced partners with whom expectations can be implemented smoothly.



Founded in 1825, Arc is today one of the leading international manufacturers in the table-top market. As a manufacturer of glasses, tableware and other kitchen utensils, their product range is primarily designed for catering operators. Success is bound up with a visionary family that has given the company its ambitions, its values and its stability.



Bauscher is the world's most-used professional porcelain – Made in Germany. The visionary specialist stands out with its highly functional and powerfully designed solutions. They ensure the perfect organisation and staging of modern meal culture – in restaurants, hotels, hospitals or in international communal catering. Wherever **avus smart-cap** is used in combination with Bauscher porcelain, the solution goes by the name of “pabis” (payment by intelligent solution).





For the past 25 years, KAHLA Professional has been offering cafeterias and refectories superbly designed hard porcelain, excellent Made in Germany quality, bespoke solutions expertise, and certified resilience and sustainability. The Magic Grip® patent makes the tableware non-slip and seals the RFID transponder.



ORNAMIN has been a leading manufacturer of Melamin tableware for private and professional use for over 60 years – made 100 % in Germany. Alongside functional and everyday tableware, ORNAMIN also develops and realises large series production for cafeterias, hotels, hospitals, homes for the elderly, kindergartens and universities – if desired, also in a bespoke design. An example: the tableware series for the University of Bielefeld was given the iF Design Award in 2015.



RASTAL has been a sought-after partner in the national and international beverage, business, catering and retailing since 1919. A family-run business with all the resulting positive attributes, RASTAL offers internationally recognised know-how in all aspects of glass design, production and refinement.



Founded in 1910 as the “Porzellanfabrik Christian Seltmann”, today Seltmann Weiden is one of the most renowned porcelain manufactures in Germany. The exquisite porcelain fulfils highest international standards in terms of design, functionality, durability and exclusivity and is made for the home, hotel and social catering sectors – all backed by the Made in Germany seal of quality.

# Catering made easy

## RFID makes a lot more possible – forward thinking with LuCa

Catering for your guests has become simple with the introduction of the avus Lunch Card, in short **LuCa**. The system is self-sustainable and therefore totally independent of your checkout system. **LuCa** thus functions both without **avus smart-cap** or as the ideal supplement to the clever cafeteria technology. Reusable RFID debit cards are therefore encoded with one's details and can be used as the means of payment at the checkout.



## Goodbye paper chaos – how to do it

The cards are encoded in advance via the guest catering portal or the configurator. Instead of, as in the past, the information being written down by hand on a business expenses invoice, the data is now recorded digitally and stored on the debit card by means of a RFID reader. Guest lunch cards can be encoded for example at an information point, but it can also conceivably be done at every other workplace. Afterwards, every guest is issued with their personal **LuCa** enabling them to pay on their own in the canteen. You, as the host, no longer have to wait at the checkout for your visitor. It makes life much easier, particularly for large groups. As soon as your guest no longer needs the lunch card, it is re-encoded and can once again be used in your cafeteria.

### **LuCa can:**

- differentiate between cost centres, order numbers and project numbers
- define types of entertainment (e.g. business partner, business lunch etc.)
- set a maximum entertainment sum
- be used any number of times
- be deployed self sustainably
- function independently from the checkout system

Invitations to eat in your cafeteria are easier with **LuCa**. No extra information is required. Checkout procedures are quicker and each guest is individually recognised and billed.



**LuCa** is in use at BASF SE and Robert Bosch GmbH. Not only in **avus smart-cap** restaurants but also ones in which food continues to be served traditionally and without avus technology.

You are searching for a concept whereby tableware and RFID technology play a role? Just get in touch and we, together with yourselves, will find the right solution for you.

# Pricing model avus smart-cap

**avus smart-cap** is a monthly rental service.  
There are no hidden or additional costs.

Minimum term: **36 months**  
The monthly rental fee is then reduced afterwards.

**95% of our  
customers achieve  
their ROI right away  
in the first year.**

## Rental services

- smart-cap license during the contract periods
- Support for the connection to the cash register system
- Hardware leasing
- Installation & assembly
- Training
- Support (hardware/software)

## plus one-time costs

- Travel expenses
- RFID tableware
- Server provision
- Interface of the cash register provider
- Possible conversion measures

**from 280€\*  
per month**

\*In the minimum version with one cash register – feasibility depends on your canteen output concept

# Plug & Play version

## The smart box for your restaurant

- PC with pre-installed **avus smart-cap** software
- System pre-configured for checkout
- WLAN access point is integrated
- Prerequisite: power connection at the respective module positions
- RFID tableware required or RFID transponder for retrofitting
- Remote Support

## Possible modules in the Plug & Play version:

cash station PnP, counter station PnP and kitchen station PnP



## Your advantages

- Easy integration in a few steps
- No extensive planning and conversion measures necessary
- Contactless payment to protect employees and guests
- Accelerates payment processes and reduces queuing
- No internal customer IT necessary
- Arbitrarily scalable

**Upgrade your restaurant: simply connect and start**



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avus Gastro GmbH was founded in 2018 as a subsidiary of the avus Services GmbH and focusses exclusively on solutions and implementations for gastronomic concepts. As a specialised IT systems house, avus Services GmbH has been realising RFID solutions for optimised and automated processes since 2005 – also in combination with real time localisation. avus' expertise is reflected in a whole range of bespoke solutions for a wide variety of industries. Renowned clients rely on avus technologies.