

VAiOS™



VAiOS V15

CARD READER



Readers, known as card readers or card readers, for access control and time and attendance are by far the most common at present. They have already proven themselves and are increasingly displacing previous methods of locking and security.



WELCOME TO THE FUTURE



Their advantage is in several directions:

- ▶ They provide security at a new and better level, as in the access control system, they lock with mechanisms that are many times superior to the security provided by previous locks.
- ▶ They make entry easier as we no longer have to aim the lock. One movement and we are in.
- ▶ Lighten the pocket - no longer do we need to carry a large heavy bundle of keys, all it takes is one proximity key (chip, card or silicone bracelet) to be your key to all locations.
- ▶ But their main advantage is the additional possibilities, including them in automation systems and smart houses.

They not only secure access...

Advances in technology have taken access control and time and attendance systems along with readers to a new level. In addition to the readers that have replaced the locks on our homes, readers are also an important element in communicating with automated systems in the home: through check-in is one way to control the systems of a home or office, business or other automation.



VAIOS offer a wide variety of readers combining the ability for multiple configurations with an attractive and discreet design at a reasonable price.





Sustainable design in certified plastic with a choice of colours

VAIOS V15 readers use 125 kHz frequency in communication. They are a great solution both indoors and outdoors. The readers' housing is made of hard-to-destroy plastic with quality certification, and its shape gives it strength and high vandal resistance. The design and the reliable encapsulation make the V15 resistant to adverse climatic influences: dust and moisture proof (IP55). The standard colours available are black, white and beige. As a manufacturer of plastic mouldings, we have the capability to produce readers in bespoke colours to suit the customer's interior solution. The lack of a minimum order requirement for bespoke readers makes VAiOS the preferred brand for bespoke Smart Home systems.

VAiOS V16. Embedded reader



Quite a few of the reader mounting solutions require them to be integrated into part of the interior. Here we offer the "little brother" of the VAiOS V15 - the VAiOS V16. With its 32mm diameter and real visible surface, the VAiOS V16 easily becomes part of the interior.

When building various bespoke systems, we have integrated the reader into different designs and shapes.





For one of our innovative projects, the first all-smart gym in Bulgaria, it was accompanied by challenges for the design of the readers, not only in terms of shape, but also in terms of different performance requirements such as IP-parameters for the robustness of the devices.



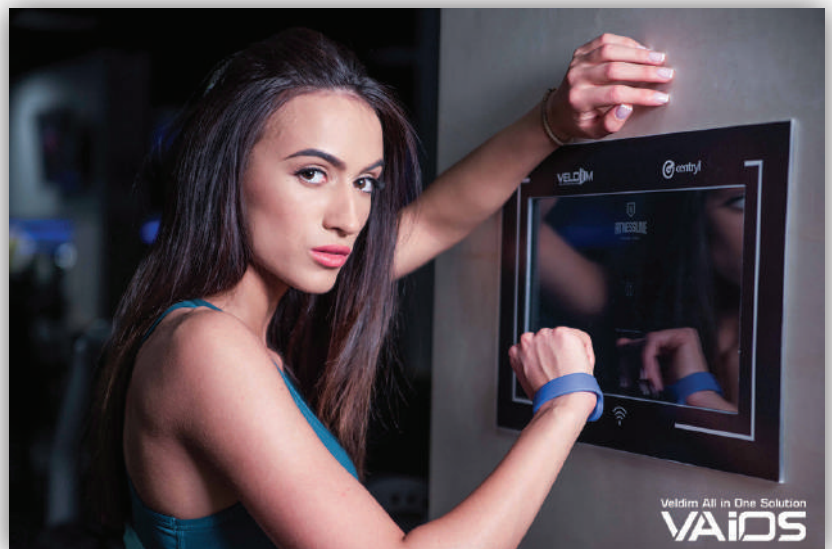
Custom embedding in atypical surfaces

The first problem we found a solution to was to embed a design reader in a mirror. The different casing with the desired logo blended in with the rest of the interior very well without breaking the harmony.

The first reader on the market, built-in touchscreen monitor

When building the first smart gym in Bulgaria, we were presented with a challenge that no one had dealt with before. We had to integrate a reader into a touchscreen monitor, with the monitors located in designated areas of the premises.

The second part of the task was easy to accomplish. We can also proudly state that we have one of the most motivated teams in our production department. We completed the tireless work with the

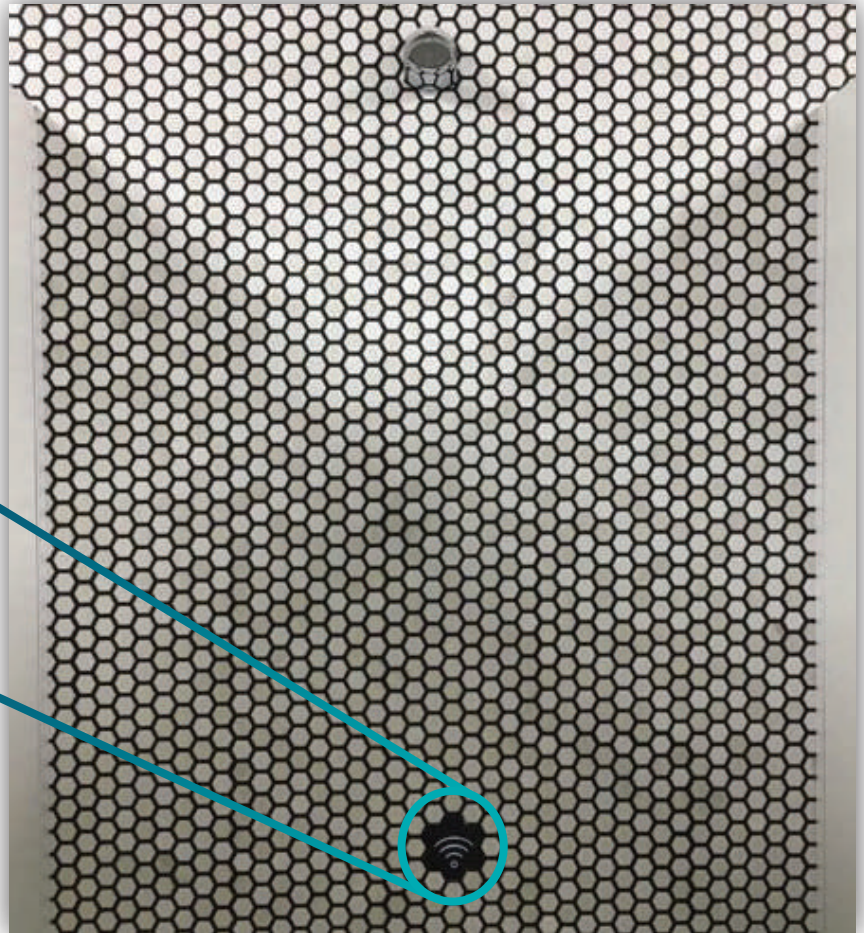
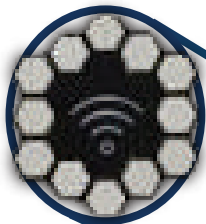


challenge of integrating a working reader behind a touchscreen monitor on time and were as happy with what we achieved as the customer was with what they received.

And so far the development is unique for the reader market.



IP68 waterproof reader with custom shape



The conditions of rooms such as bathrooms, saunas and other SPA rooms, under which smart technology and in particular the readers have to operate, are a challenge for any manufacturer due to the high humidity combined with the temperatures and

intensity of operation to which the customers of the sports or SPA facility will be subjected.

We also encountered such a problem during the construction of the automated shower system in the smart gym built in Varna. This made it necessary to turn the encapsulated technology we were using in the direction of making it even more resistant to moisture and making the readers waterproof (IP68).

The specific shape, repeating the tiles in the bathrooms, posed a second challenge, which we also managed to tackle and showed once again the advantages of VAIOS custom manufacturing.

Finally, we built the system of automated showers (part of the overall bundled smart fitness system) that, according to the person who is checking in, the water flows at the pre-varied desired temperature. At the same time, the system allows the amount of water used to be controlled, with each check-in controlled by automated v-ic-tors that determine when the water should automatically stop.

Thus, the overall system provides convenience both for the gym clients, who will not pay more than desired, and for the owners, who will be able to monitor and optimize the services used in the premises.



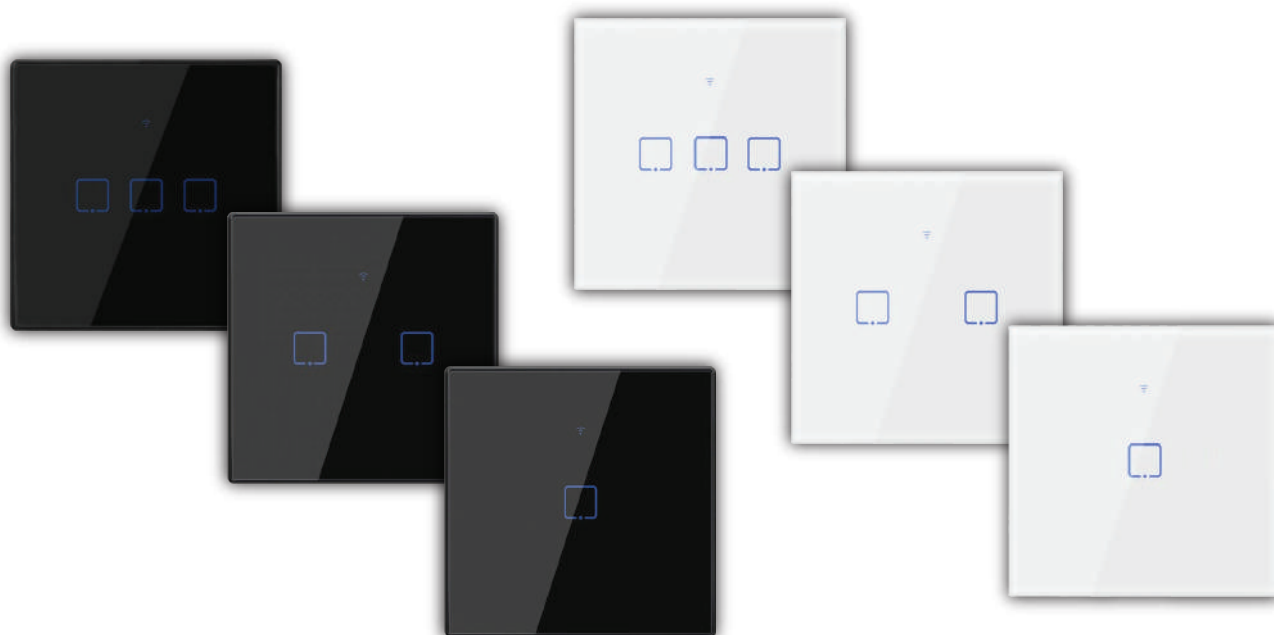
Reader, built-in console

As part of the bespoke development of the VAiDS automation readers, we have also developed a series of models that can be embedded into electrical key consoles.



According to the customer's preference, the readers embedded in the keys can be in a color of choice and also with a selected image for the reader sign. This key also has the ability to put an image of the family crest or other symbolism that is chosen.

Combined with the design of the smart light control keys, this type of reader forms an overall look for the interior of the home or office.





Reader with individual design and branding



An advantage of VAiOS's V15 bespoke readers is that they can be of a design chosen by the customer without affecting the minimum order quantity required. This flexibility has gained us a number of advantages and we are the partner of choice for bespoke systems.

One such project was the new security system being built for the Saudi Arabian Ministry of Foreign Affairs in Nigeria, where the client expressed a desire to have the logo reflected on each reader, along with a distinctive indication of the illuminated LEDs (*the proposal that the client finally settled on can be seen in the photo*).

On the same model, the characteristic production cycle, on the basis of which we work, gives us the possibility to incorporate any logo, according to preference, as well as a specific diode indication.

Unique product - combination of reader and keyboard

Along with this custom reader for our site in Nigeria, we manufactured and supplied a special series reader with an integrated keypad with a circular arrangement around the reader.

The development of this unique product in terms of performance and design has given us another direction in the development of readers with integrated keypads that can be used for both access control and zoned security for individual systems.





Model V15-22 - reader and keyboard together

In fulfilling the brief from a property company, VAiOS had to develop and test, then manufacture the required quantities and commission an access control system operated in parallel with a keypad and reader.

In developing the product, we drew on the principles and experience we had already gained over 10 years. This helped us to find the optimal solution and create our first combined keypad and reader V15-22.

Like all VAiOS products, the V15-22 card reader keyboard can be branded according to the vision and preferences of the user.

