HIGHLIGHT OF THIS ISSUE

BODY-CASE.
THE NEW ENCLOSURE FOR WEARABLE TECHNOLOGIES.
INTERNET OF THINGS
The „Internet of Things“, or IoT, stands for the increasingly popular trend of letting computers disappear and replacing them with „intelligent devices“, not only with portable devices like smartphones and tablet computers but also with everyday objects which are equipped with embedded processors, sensors and network technology. The objective of IoT is to support users in their everyday work without distracting them and without being obtrusive. For example so-called wearables with various sensors are integrated on or in articles of clothing and worn close to the body. The application areas range from mobile data recording and safety engineering through bio-feedback sensors in the medical sector to emergency call and notification systems.

We have developed the new BODY-CASE enclosure range to meet these requirements. Thanks to its small, compact format, it is perfect for wearing on the body: on your arm, around your neck, in shirt and trouser pockets or loose in an article of clothing. The enclosure fulfils its function in the simplest way, without restricting the user in his or her activities and without being conspicuous.

Dipl.-Vw. Martin Knörzer
Managing Director
BODY-CASE – easy operation with the help of pushbuttons or touchscreens, at the press of a button and with the help of voice commands or gestures.
“BODY-CASE.
SMALL ENCLOSURE
WITH FLAIR –
COMFORTABLE TO
WEAR ON THE BODY.”

LISA BINNINGER,
MARKETING/PR

THE BODY-CASE SERIES

Everyone is talking about „wearables“, but what does that actually mean? The definition says: Wearable computers are high quality systems that are attached to the body of the user or are worn during the application. Man-computer interaction plays an important role here, since the computer systems support the user directly in his everyday work and should not interfere. OKW has now developed a new enclosure range exactly for these portable applications, with the suitable name BODY-CASE.

Comfortable to wear on the body
These portable micro-computers have to perform many different tasks and must be ready for use at all times and in all places. For these „wearable devices“, OKW’s objective was to develop a suitable enclosure that would optimally support the subsequent functions and offer enough room for operating elements. The design and the size of the BODY-CASEs were specially geared to utilisation on the body. The „wearable enclosure“ thus fulfils its function in the simplest way, without restricting the user in his or her activities and without being obtrusive.

The BODY-CASE has a three-part design and consists of a top part and a bottom part as well as a sealing ring. The enclosure shells are highly polished and are made of high-quality ASA (UL 94 HB) in the colour traffic white (RAL 9016). The top parts are available with/without a recessed surface for membrane keypads. The bottom parts have two openings in which the carrying devices (separate accessories) can be mounted. The matt TPE sealing ring is available as standard in the colours vermilion (RAL 2002) as well as lava (similar to anthracite) and allows protection classes IP65 and IP67. The dimensions of the enclosure are 54 x 45 x 17.5 mm (L x W x D). Two levels are available in the bottom part for the
installation of 1 mm thick PCBs. The complete assembly is effected from below using four metric stainless steel TORX screws. The assembly kit with the above-mentioned screws and two spring bars is located in the enclosure so that it cannot be lost.

Long-term readiness for use
Portable technology makes high demands on the power supply: ideally, this must be small, thin, self-charging and durable. In principle there are several ways to achieve this: with a conventional button cell, a rechargeable button cell or by means of a lithium polymer rechargeable battery. To change the battery, the enclosure can be opened quickly and easily. The use of threaded bushes with suitable screws makes frequent assembly and dismantling possible without any signs of wear. For reasons of the safety of equipment from accidental damage, or in applications in which frequent battery changes do not appear practical, the device can be charged with an external charging transformer (USB connection) or a “wireless charger pad”. For this, a receiver coil must be taken into account when designing the electronics. Of course, the use of modules with little or no energy requirements also appears sensible.

Practical accessories
Separate accessories that support mobile use on the body are available for the BODY-CASE: an eyelet for a shoulder strap, end caps, a belt / pocket clip and a silicone wrist strap. The user can thus choose how he would like to use the enclosure. With the
eyelet, the BODY-CASE can be worn comfortably around the neck with a lanyard, and is within immediate reach. A belt/pocket clip allows the enclosure to be attached to the belt or pockets. For applications in which the body case is to be worn on the wrist like a wristwatch, a matching silicone wrist strap (black, 18 mm wide) is available.

Many different application options
Wearables, that is, small devices that are worn on the body and are thus readily accessible, are being used in many fields even today. The possible applications of BODY-CASEs are thus highly varied, for example tracking and monitoring equipment, emergency call and notification systems as well as bio-feedback sensors in the fields of health care, medical technology, in therapeutic and social fields, leisure and sports, as well as industry, for example in digital communications technology, stock and sales logging, safety engineering, personnel tracking, measuring and control technology/automation, as well as in jobs where safety and permanent localisation are required.

In order to meet individual customer requirements, the BODY-CASE can be given modifications and special finishes by OKW. The options offered are highly varied: special colouring through injection moulding, mechanical processing, printing, EMC aluminium coating, installation work, production of membrane keypads and decor foils, as well as the clarification and provision of the necessary power supply. In the last two service processes, OKW cooperates with well-known partners in the industry:

- Hoffmann+Krippner, www.tastatur.de
- Ansmann, www.ansmann.de

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You can find more OKW enclosure ranges for „Wearable Technologies“ on the following pages 10-11.
MINITEC enclosures convince the user with their mini-dimensions and maximum-benefits. Choose between the technical "MINITEC EDGE" design, or the more organic "MINITEC DROP" shape.
A convex design to match the curves of the body is the characteristic feature of the ERGO-CASE range of cases. The innovative design not only makes it easier to operate but also easier to read off.
"RADIO TRANSMITTER FOR EMERGENCY CALL SYSTEM FOR PATIENTS."

MINITEC E – The mobile enclosures convince the user with their mini-dimensions and maximum-benefits – easy to wear and always within easy reach, e.g. round your neck or round your wrist, on your key ring or on a belt.

The Touchsafe Pro tag is a practical device for all users who want to remain as mobile as possible. The transmitter is worn comfortably around the neck with a lanyard, thus making it possible to make an emergency or help call directly to the main call system from anywhere in the transmitter zone.

The operation of the device is extremely simple: depending on how it is programmed, pressing a large central pushbutton immediately alarms a nurse or sends an emergency or help call. As soon as the pushbutton has been pressed, a red light flashes to indicate to the user that his alarm signal has been sent. With the second button, the call can be cancelled again at any time, for example if the button was pressed unintentionally.

The transmitter is equipped with a standard battery. If this becomes too weak, the main system automatically points out that the power supply has to be renewed. In this way, the battery can be replaced in good time, thus guaranteeing continuous operation of the system.

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Wide variety of applications, e.g. mobile data recording, measurement and control engineering, medical/laboratory technology as well as environmental technology and outdoor applications.
NEW PRODUCTS/ENHANCEMENTS

The new 300 series of carry cases has a modern design and offers reliable protection for your valuable equipment and accessories. The carry cases are available in four different sizes and thanks to modular components allow individual partitioning of the interior according to your own requirements.

Your advantages:

- The carry cases consist of coated thermoformed shells for a high-quality look and feel.
- Robust and durable yet light in weight, they offer easy and comfortable handling.
- They can be flexibly adapted: pockets in a modular assembly system, movable and upholstered partitions, standardised foam inserts with a grid for individual customisation.

- The carry cases can be fitted with logos or nameplates for your company branding (business card compartment, logo window, zipper).
- Optional shoulder strap (accessory types 330 and 340); D-ring attachment points can be removed (2 blanking caps supplied with case)

„THE NEW CARRY CASES – FOR TRANSPORTATION, PROTECTION AND PRESENTATION.‟
With the AEO certificate, OKW has laid the foundations for an even faster and more efficient delivery service for all customers.
„WE ARE AN AUTHORISED ECONOMIC OPERATOR ACCORDING TO AEO F.“

In order to secure the international supply chain between the manufacturers and the recipients of goods, the status of AEO (Authorized Economic Operator) has been created in the European Union. Companies which are subject to customs obligations and which have their registered offices in the European Union can apply for the status of Authorised Economic Operator (AEO) and obtain this in an elaborate certification procedure. Among other things, compliance with provisions, safety standards and financial solvency are subjected to a comprehensive examination.

An Authorised Economic Operator is entitled to take advantage of customs simplifications (e.g. faster declarations and local clearance procedures, authorised consignees and authorised consignors etc.) and of the fact that less data has to be transmitted in the course of electronic customs processing. For you as an OKW customer, this means: no delays in shipment, compliance with safety standards as well as an optimum logistics process.

We are pleased to have officially received the AEO certificate „Customs Simplifications/Security and Safety” (Z 0520 AEO/B - B1302 - DE AEOF 121264) as an „Authorised Economic Operator" from Karlsruhe Main Customs Office on 20.11.2015.
Where could you learn English better than in England?! The original country where English is spoken?
Hello, my name is Kim Bischofberger, I am 18 years old and am training to become an industrial business management assistant with OKW Gehäusesysteme in Buchen. I was able to take part in a three-week training course in England with enormous support from my company. I should like to tell you about my impressions and experiences on the following pages.

On Friday, 26 February 2016, the moment finally came: 16 vocational school students from the Frankenlandschule in Walldürn, from the fields of office, industry and computer science, as well as one student from the central vocational school in Buchen set out for Guildford, England, to attend a three-week practical training course in local companies and institutions as well as a language course at Guildford College. The practical training course and the language course were supplemented by planned trips to London and Brighton, one of the best-known seaside resorts in England. The visit was subsidised by the „Erasmus + Vocational Training“ programme of the European Union, with the EU bearing about two thirds of the costs of the visit and the programme.

On five Saturday mornings in the weeks leading up to the visit, we, the participants in the ILWEA project, prepared ourselves for the three-week stay in England, studying not only the language but also English culture and customs.

Practical training course and language course
During the three weeks I worked in England, I was able to attend a language course in Guildford College every Monday. Guildford College is one of the largest and most famous schools in and around Guildford. It is also an international college with about 10,000 full-time and part-time students. Guildford College is situated in the county of Surrey and is about
30 minutes south-west of London. In addition, Guildford College offers various language courses, like the one we attended.

In the three days that we attended our language course, we learned a lot about different cultures, in particular English culture. Further topics were marketing, meetings, their organisation and sequence of events. We also had the opportunity to deliver presentations and to talk plenty of English.

I was able to spend the remaining four working days of the week in two different offices of the University of Surrey. The University of Surrey is one of the top ten universities in Great Britain. There are about 14,000 students there, with a total of 120 different nationalities. The students lived in and around Guildford, in dedicated halls of residence as well as with host families.

On Tuesdays and Thursdays I had the opportunity to work in Manor Park, a small campus for students. My job here was to receive all parcels and letters ordered by the students, to allocate them, then to enter them in various Excel tables and to put them into storage. As soon as all of the courier services had been to our office, emails were sent to the students who had received a parcel or a letter. The students then came by in the course of the day to pick up their things. This gave me plenty of opportunity to chat to the students.

On the two remaining working days, I was able to work in the Accommodation Centre of the University of Surrey. From this office, the various students’ lodgings and classrooms were organised, administered and allocated. Here I was able to carry out plenty of evaluations of different forms and tables. I helped at the reception by answering people’s questions and also handing out bus tickets and parking permits for the students,
lecturers and visitors. Checking the condition and equipment of the classrooms was also one of my tasks during this time. Furthermore, I was able to attend a meeting dealing with the optimisation of various processes in the departments.

In the Accommodation Centre of the University of Surrey I also had the opportunity to get in touch with students and lecturers and to get to know them, and at the same time to experience everyday work in the office and in the University.

Excursions
During our stay in England, we went on a total of five different excursions:

Guildford:
On our first weekend in England, we went on a small sightseeing tour through Guildford, in the course of which our teacher showed us the town and its attractions. We visited Guildford Castle (4), a ruin from which you have a fantastic view over the whole of Guildford. Next to this, there is a lovely garden with the statue of „Alice through the Looking Glass“, since Guildford is the „birthplace“ of this story. We also visited the Town Hall with its distinctive Town Hall clock.

Die „Alice through the looking Glass“ Statue.

(Alice in Wonderland is a 1865 first published children’s book by British writer Lewis Carroll).
In addition, we walked to Guildford College and to the University of Surrey so that we would all find the way to our school, and for some of us to our place of work.

We also visited Guildford Cathedral, since it is right next to the campus. Towards the end of our first day, we were also shown the shopping centre and the bus station, and were able to spend some time there. During our stay in England, our meeting point for discussing organisational matters or to exchange information was Wetherspoon Pub in the town centre.

**London:**
We took the train from Guildford to London a total of three times in order to see some of the best-known sights, for example the London Eye, from where we had a breathtaking view of the town centre thanks to the good weather (3/6/9). We also visited Tower Bridge Museum, in the towers of which we found out more about the impressive history, the construction and the facts of the bridge (8). In London (9), which is right beside Tower Bridge, we had the opportunity to gaze in wonder at the crowns, sceptres and other precious items of the former kings and queens. Westminster Abbey, England’s coronation church, where, among other things, the wedding of Prince William and his wife Kate took place, is also highly impressive. Of course our programme also had to include Kensington Palace, the residence of some members of the Royal Family. We were able to visit a total of four wings of the building, where various dresses of diverse English queens and princesses were exhibited. The Houses of Parliament were just
as impressive, and we often passed the Queen Elizabeth Tower (Big Ben), and took fantastic photos, so that we were able to take home plenty of happy memories.

**Brighton:**

Our program included another interesting excursion, this time to Brighton, a town located in the south of England. Thanks to the fantastic weather, we were able to spend a wonderful day by the seaside. Before this, however, we visited the Royal Pavilion (⑩), a breathtaking building constructed in the 18th century by the famous architect John Nash. Immediately after lunch we walked to Brighton Pier under clear blue skies (⑪); this is a long pier where there is a small amusement park and a large slot machine arcade. Here we were able to enjoy the sun and the fresh sea air (⑫), and had the opportunity to go to “Sealife”, which is also situated on the beach. In the late afternoon we then took the train back to Guildford.

**Review/Summary**

During my three weeks in England, I was able to gain much new experience and obtain new impressions, not only for me personally but also in terms of the working life there. I was also able to improve my English and get to know English culture better. I had lots of fun and learned very much, for example about how great the differences are between different countries, not only in terms of everyday work but also outside working life, in the private area. In addition, my command of the language will naturally be of great benefit, not only in some departments at OKW but also at school here in Germany.

I am grateful that I was given this chance and support by my company, OKW.

It was a fantastic and unforgettable time in England, and I would take the opportunity again any time!