

MINI-DATA-BOX

The new small enclosure for
miniaturized electronics integration



CONTROL-KNOBS

Tuning knobs for menu-driven electronics



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DEAR READER

In the current issue of our customer magazine INSIDE, we present the new MINI-DATA-BOX small enclosures series and the new CONTROL-KNOBS series.

The MINI-DATA-BOX is suitable as a desktop and wall-mounted housing for miniaturized electronic applications. On top of that, it delivers an extremely high-quality look with a new lightness thanks to its "designer corners". The CONTROL-KNOBS tuning series, winner of the if product design award 2022, impresses with its ergonomic operation and pleasant feel.

Another focal point of this issue is our FLAT-PACK CASE, which is celebrating its 50th anniversary this year.

In addition, we report, among other things, on a current application example: plastic housings that are used in the preclinical emergency department.

We hope you enjoy reading our magazine.



Dipl.-Ing.
Christoph Schneider



Dipl.-Betriebswirtin (BA)
Yvonne Ellwanger

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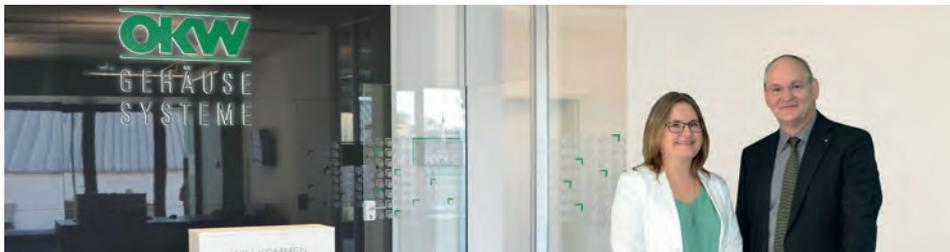
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These new enclosures impress with their compact miniature sizes, diverse designs, robust housing construction and high-quality optics with designer corners.



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The new CONTROL-KNOBS extends the tuning knob series, a long-time winning product. This new potentiometer



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MINI-DATA-BOX

OKW's new small enclosure series MINI-DATA-BOX is ideally suited for the integration of miniaturised electronic components, sensors and wireless technology. As their name suggests, these standard housings impress with their compact, wide range of permutations, robust construction and high-quality aesthetics.

Author: Kay Hirmer, Strategic Product Management at OKW Gehäuseysteme

The Internet of Things (IoT) links analogue products and physical objects to the virtual world. The central interface is the network through which the intelligent devices and machines communicate with each other; data is recorded locally, analysed and brought together centrally for further use.



A large number of different data communication devices are required for this as sensors, actuators, internet-enabled devices or gateways (depending on the task). Each device in the application creates different requirements for its particular electronics enclosure. As described in the introduction, new MINI-DATA-BOX can be used to host small electronic components optimally and with a high-quality look.

SQUARE AND RECTANGULAR SHAPES

MINI-DATA-BOX wall mount and table-top enclosures are available in two different versions: S (Square) with 40 x 40 mm and 50 x 50 mm (S40/S50) and E (Edge),



NEW PRODUCT

AVAILABLE FROM
NOVEMBER



40 x 60 mm and 50 x 70 mm (E40/E50). All variants are available in two heights (15 and 20 mm). The selection option is also expanded by two different base versions: with/without integrated wall mounting flanges that enable quick installation/removal of the enclosure using externally accessible screws. The enclosures can be attached to pipes, rails and cable trays with cable ties – or to steel surfaces with two magnets which can be mounted in the housing's flanges. This offers a high level of flexibility when the location of the measuring systems or data loggers is changed frequently.

SOPHISTICATED TECHNOLOGY

MINI-DATA-BOX's combination of versions, plan sizes and heights creates 32 standard permutations – all available from stock. They are moulded from flame-resistant and UV-stable ASA+PC-FR (UL 94 V-0), providing protection even in harsh environments. The standard colours are traffic white (RAL 9016) and anthracite grey (RAL 7016) – and further colours are already being planned. Custom colours are also available (minimum order quantity 200 pieces). MINI-DATA-BOX is assembled with 2 (S40) or 4 (S50, E40, E50) tamper-proof Torx stainless steel screws which are concealed. This, together with the bevelled corners on the lid and any customer branding, enhances the aesthetics. ▶



Flat surfaces around the housing enable the integration of interfaces. This simplifies the machining and offers user-friendly connection options. There are mounting points in the base and lid for installing PCBs.

WIDE RANGE OF APPLICATIONS

MINI-DATA-BOX's versatility and high-quality aesthetics suit applications such as wall/ceiling-mounted security and surveillance technology, environmental monitoring, IoT/IIoT, measurement and control, smart logistics and ICT. The enclosures' small size mean they can also be carried in a shirt or trouser pocket. Non-slip feet (accessory) are available for desktop use.

CUSTOMISATION AND FINISHING

In addition to **CNC machining** (milling, drilling, punching, countersinking), OKW's in-house customisation services also include:

- **EMC shielding**
The inside of the enclosure can be coated with

aluminium to protect the electronics from interference.

- **Screen, tampo and digital printing**
Enclosures can be individually printed or labelled with logos and legends to highlight the device functions.
- **Laser marking**
Laser marking is ideal for permanent and abrasion-resistant inscription and identification. This is ideal for very small machine-readable markings such as QR codes, barcodes and consecutive numbering of individual parts.
- **Installation/Assembly**
Assembly of modules and enclosure accessories such as belt/pocket clips, tilt foot bars, wall mountings, hinges and more.
- **Lacquering**
Enclosures can be lacquered in any colour to suit your application or company branding. OKW's wide range of solutions include soft-touch lacquer, antibacterial lacquer or metallic effects.

DESIGNER STATEMENT ON THE NEW MINI DATA BOX:

"a little something, hardly visible but present wherever it is needed, possibly the key building block in a system that would not work without this little something. The compact enclosure is, on the one hand, the elegant protection for your components, whose design takes away the angularity of the object thanks to its slightly sloping corners, and on the other hand a securely mounted, robust enclosure, whose faceted top underlines the technical quality and function of your product in its play of light, like the cut of a diamond."

Martin Nußberger, polyform Industrie Design in Munich

Product advantages summary:

- modern housing with elegant design corners
 - *Square Shape – S (Square)*
Dimensions 40 x 40 mm (S40) and 50 x 50 mm (S50)
 - *Rectangular Shape – E (Edge)*
Dimensions 60 x 40 mm (E40) and 50 x 70 mm (E50)
 - 32 standard housing
- base version with/without flange for fast wall/ceiling mounting or for fastening to rails, tube profiles or to masts
- Flat or high upper part for individual installation configurations and user needs
- Flat surfaces for interfaces - easy and user-friendly to connect
- Stability thanks to robust construction
- high degree of protection IP 65 (seal as an accessory)
- flame-resistant material ASA+PC-FR in the standard colours traffic white and anthracite grey
- Fixing base for circuit boards and built-in parts in the upper and lower part; alternatively potting of electronic assemblies possible
- Housing screw connection with stainless steel screws and Torx drive



Square shape



Rectangular shape



Enclosure available in special colours on request



Access authorization of transponders
(application example)



CONTROL-KNOBS

OKW has expanded its tuning knob range with the brand-new and award-winning CONTROL-KNOBS for menu-driven electronics.

CONTROL-KNOBS have won an iF Design Award 2022. This is one of the oldest and best-known independent accolades given to premium industrial products.

Whether in measurement and control, medical devices, building technology or many other applications, stable and accurate operating elements are required for precise and reliable control and regulation. This is where smart, modern CONTROL-KNOBS come into play. Their ergonomic shape enables them to be held and operated comfortably. Each knob has a soft-touch, anti-slip surface.

CONTROL-KNOBS are designed as rotary controls. With the appropriate rotary encoder, they can also

be used as a rotary touch/click function for menu-driven user interfaces in large-volume devices. This enables users to operate multiple functions with just one button. And the tried-and-tested collet system ensures each knob remains securely fixed to the potentiometer spindle.

INNOVATIVE, THOUGHTFUL DESIGN

All OKW tuning knobs are designed for rotary potentiometers or encoders with round shaft ends according to DIN 41591. CONTROL-KNOBS impress with their innovative two-part design that comprises a hard inner knob body made from robust

Author: Kerstin Riedling, Marketing at OKW Gehäusesysteme



polycarbonate and a soft-touch TPE outer shell with functional grooved appearance.

CONTROL-KNOBS are available in:

- two standard TPE colours – nero black and volcano grey
- two diameters – 36 mm and 46 mm
- 16 different versions of each size.

Both sizes are also available with a side pointer line for fine scaling.

OPTIONAL ILLUMINATION

CONTROL-KNOBS' high-quality appearance can be additionally enhanced with optional illumination. With this variant, the main inner core is made from translucent polycarbonate, enabling several illumination options. (The LED illumination kit is available as an accessory.)

The illumination uses modern, energy-saving SMD LED technology (5 V). RGB LEDs allow individual illumination and colours.



Choose from two options:

CONTROL-KNOBS are available in:

- illuminated ring on the top surface
- illuminated ring on the top surface plus side pointer line.

For illumination, you will need a base which is available in the accessories range, along with the LED kit. 





APPLICATION AREAS

CONTROL-KNOBS suit a wide range of applications: measuring, control and testing, medical and laboratory technology, HVAC and Smart Factory. These advanced and user-friendly tuning knobs represent the central element of menu-driven interfaces.

CONTROL-KNOBS: CUSTOMISATION OPTIONS

CONTROL-KNOBS can be specified fully customised. Services include CNC machining, printing, laser marking (on the lid) and installation/assembly. On request, CONTROL-KNOBS can also be supplied with the accessories assembled – ready for installation.

DESIGNER STATEMENT

"Perfect all round – modern tuning knobs which are pleasant to the touch, with which processes can be reliably regulated or controlled. When it comes down to it, these tuning knobs can ensure easy operation of your products even in awkward places and under adverse conditions. You will find CONTROL-KNOBS easy to use, robust in appearance and precise in their function. The illuminated lines indicate the location, status and position of the function you are looking for. With or without gloves, the haptic structure and the pleasant material of the grip surface enable the reliable application of the necessary torque in any situation."

Martin Nußberger, polyform Industrie Design





Product advantages summary:

- high flexibility with anti-slip effect
- innovative knob design with two plastic components:
 - *hard body made of high-quality PC (UL 94 HB)*
 - *soft sheath made of TPE with functional grooved look*
- available in 36 mm and 46 mm diameter
- in 2 TPE standard colours (nero black and volcano grey)
- without/with lateral pointer line for fine scaling
- without/with optional LED illumination
- illumination Options:
 - *translucent optic ring on the top surface*
 - *translucent optic ring on the top surface with a pointer line on the side*
- illumination with SMD LED technology (5 V)
- RGB LEDs allow individual illumination and colours
- control element with rotary function, also suitable for rotary touch/click functions
- collet fixture system for a secure fit on the spindle
- max. torque: installation = 1.5 Nm, function = 1.2 Nm.





OKW'S FLAT-PACK CASE: A CLASSIC ELECTRONIC ENCLOSURE TURNS 50



OKW's FLAT-PACK CASE: The world's first standard enclosure for electrical and electronic installations is this year celebrating the 50th anniversary of its launch. Over the last half century, this model has become the enclosure for thousands of device designs – and it's still available in stock in a variety of versions and sizes.

Author: Egon Weinlein, former Head of Development and Construction at OKW Gehäusesysteme

THE IDEA ...

At the end of the 1960s, the son of the company founder and then CEO Dieter Schneider teamed up with OKW's toolmaking, production and sales manager Erich Ettinger from Munich. Their goal was to develop, manufacture and sell a 'standard' plastic housing. It had to be suitable for a wide range of applications for electronics OEMs – ready to use, without complex technical specifications and without development costs. It had to be available from stock either directly or through distributors. From a technical point of view, the aim at the time was for the enclosure to house as many different circuit boards and components as possible – and to protect the electronics, the user and the environment from each other. This enclosure needed good aesthetics

so it would present each finished device in the best possible way. There were lots of shape requirements but OKW solved this by creating different size variants; this also introduced the principle of the family of housings.

Dr Herbert Schneider GmbH Co & KG Odenwald plastics factory had been founded 24 years earlier in 1948 by Dr Schneider in Buchen, Odenwald. At that time, its successful product range comprised rotary knobs made from pressed plastic for the radio and television industry. These knobs were supplied on a large scale to leading manufacturers throughout the western world. The company had already implemented the principle of the 'standard' in tuning knobs technology with its own product range and direct sales structures. Then, the second generation of



entrepreneurs wanted to expand sales by developing a new market beyond technical parts for the home appliance and computer industries.

THE DEVELOPMENT ...

As usual in the 1970s, development was carried out using 2D pencil sketches and then with handcrafted models for visualisation. Then as now, the requirements for the external design were simple: basic customisation should be possible through printing or colour differentiation. The OKW product should be discreet, understated and should not look like an off-the-shelf housing.

At that time, there was no classic separation of functions between the design and construction phases. The focus was on a production-optimised design for injection moulding technology (with no right angles, but with the necessary drafts hidden). The design of the tongue and groove connection was also clever. This offers – even without a seal – a high level of basic protection against the ingress of water, dust



The VOLTRON PLUS power electronic controller application shows how the enclosure recedes into the background and the customer's function or CI requirements take precedence.

and metal parts. At that time there was no visible shadow gap between the sections. But there was a striking colour separation between the upper and lower parts with different front and side heights. The construction was also ingeniously flexible in terms of its versatility: upper and lower shells of different heights could be combined with one another, resulting in many sizes from as few sections as possible. This allowed customers to switch to a higher version in case of lack of space or to a version with ventilation slots in case of heat problems. The largest version of the FLAT-PACK CASE series could even accommodate the standardised 100 x 160 mm Euro circuit board.

Mounting options were provided on the individual sections, enabling the installation of circuit boards with soldered angle connectors or cable access on the front. The required apertures for the interfaces could easily be added later – either by OKW or one of its local sales partners anywhere in the world.

THE TECHNOLOGY ...

OKW had known for two decades how to design injection moulding tooling to create precise dimensions and surface finishes. Polystyrene was chosen as the ideal material – with a high-gloss surface to keep the required draft angle to a minimum. When placing the top and bottom parts next to each other on the front sides; it initially seemed as if the parts could not be assembled because of the opposing angles. Only when the shells were assembled did it become clear that the flexibility of the plastic made it possible to bend the two end faces slightly, and so the parts were centred perfectly at a right angle. Unsurprisingly, in 1975 OKW's FLAT-PACK CASE won two iF Design Awards in Hanover.





The electronic assemblies were installed in the lower section using self-tapping screws (2.9 mm x 6.5 mm) in threaded bushings. The enclosure's two shells were secured from below using M3 slotted screws going into threaded bushings pressed into the upper part. Even then, screwing in from below resulted in no visible screws – a design characteristic which has become an OKW feature to this day. In the 1990s, experiments were carried out using Phillips self-tapping screws – eliminating the need for press-fit threaded bushings, simplifying production and recycling. Before the changeover, extensive tests were carried out to determine the optimum hole diameter. This sustainable design continues to this day; OKW uses self-tapping stainless steel screws for almost all new enclosures, though Torx screws have replaced their Phillips counterparts for several years.

THE SUCCESS ...

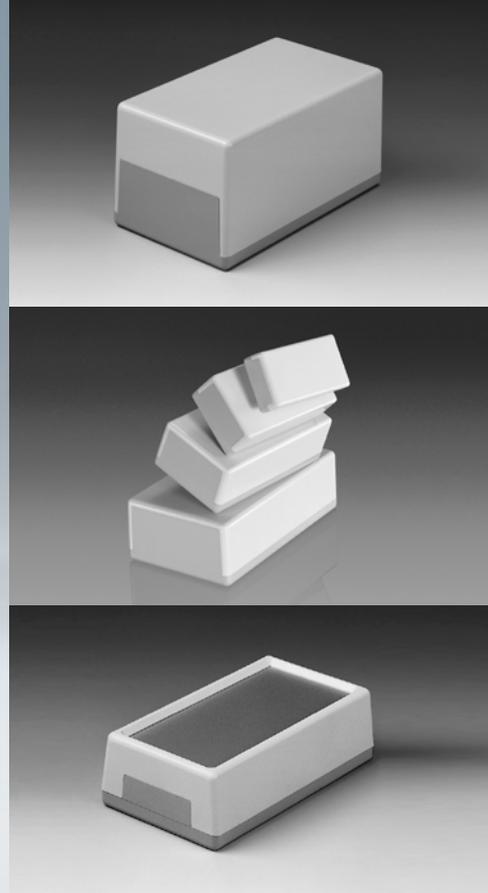
Construction of all the FLAT-PACK CASE tooling took several years. A very high-quality hardened steel tool was used as the starting point for the shapes. It required a major investment to cover all the procurement costs, processing, changes and repairs.

The market launch of the FLAT-PACK CASE came under the responsibility of the standard products sales department. Export manager Clemens Morschhäuser had to build national and international sales networks, identifying, maintaining and expanding them

repeatedly. In the early 1980s, this meant travel, trade fairs, product presentations and distributing catalogues and brochures.

As a result, there were inquiries and orders – along with feedback from customers from a wide variety of industries, all with the most diverse requirements for the new standard enclosures. Step by step, production was expanded to include accessories, new sizes and variants to meet these requirements and make the enclosures accessible to other customers. A handle and mounting brackets enabled the enclosures to be used for laboratory equipment. Accessories also included snap lock fasteners and wall suspension elements. Variants with aluminium panels and plates enabled FLAT-PACK CASE to be specified as an instrument enclosure. Schuko-protected plug and socket parts were added in 1979 to create the PLUG CASES range. The technology then took another step forward with V-0 flammability resistance (for electrical applications) and the spherical pressure test at 125° C. However, the material demanded much more of the tooling surface; good old steel had tolerated the demands very well until now.

While the shape remained unchanged, it was decided to replace the 'wild' 1970s colour combination of brown and beige with something more contemporary: since then, grey-white has become the corporate colour for OKW enclosures. And if the standard colour were not to the customer's liking, they could have the product moulded or lacquered in 200 other



colours. Both these technologies were chosen to give the enclosure special application, material or surface properties. Customisation also included screen and tamper printing, EMC shielding, digital printing and laser marking. These complemented the machining and surface finishing, making each standard enclosure customer-specific and thus unique.

With increasing experience, a growing customer base and deeper market knowledge, OKW developed more enclosure models to handle different applications. Over the years, specific product families have emerged for tabletop, wall-mount or handheld applications, right up to wearables for personal electronics.

The history of the first standard plastic enclosures shows how long an idea can work sustainably, how long a life cycle can last and the importance of foresight, entrepreneurial courage, the highest quality standards and timeless designs. So far, customers in more than 60 countries have specified FLAT-PACK CASE to visually represent more than 8,000 different device designs and protect the electronics inside.

The history of the first standard housing made of plastic shows how long an idea work sustainably, a life cycle can last and how important foresight, courageous entrepreneurial action, the highest quality standards and a timeless design orientation are. An estimated more than 8000 different device designs from customers from over 60 countries has given the

FLAT-PACK CASE a creative and individual face to this day and, moreover, has been professionally, modern and functionally protected and represented the electronics inside.

For 'the turtle company' and its mission "To each his own housing", FLAT-PACK CASE was the starting point for a global success story that now includes 50 product ranges, many design awards and an enormous variety of technologies.





RECORD RESULTS DUE TO SOLID PARTNERSHIP



OKW Gehäusesysteme GmbH Sales and Marketing Manager Sean Bailey outlines how supporting customers through testing times has brought triumph in the face of global adversity.

Author: Sean Bailey, Sales and Marketing Manager at OKW Gehäusesysteme

OKW CEO Christoph Schneider's message was simple but effective: "Business as usual."

For the team here at OKW, this short but steady statement translated into supporting customers more than ever, being there for them when they needed us most.

Record financial results are good in any year. But after the last 12 months they are a resounding affirmation – proof positive that we have helped our customers by providing continuing stability at a critical time for the world.

OKW's policy has always been to put customers first and this principle has resulted in turnover of €17.9 million for the financial year ended 30 June 2022. That is an impressive rise on the previous 12 months – and a significant uplift on the three years before that.

Over the last two years, we have worked hard to help our customers cope with the difficulties posed by

Covid19 – and the economic and geopolitical challenges that have followed in its wake.

We always do well in global challenging times because our standard and customisable enclosures and tuning knobs provide electronics designers and manufacturers with smart alternatives to the cost of specifying fully bespoke solutions.

But we're only successful if our customers are successful in selling their products. When we have that opportunity to help them, we like to think we're able to support them with good, consistent quality and reliable deliveries. For us, that has meant:

- stocking up heavily with plastics to ensure availability and to reduce the impact of rising inflation.
- working hard to ensure that delivery times are back to pre-pandemic levels



SMART-CONTROL Oxygen Detector Application

- investing in new technology to make customisation faster, easier and more cost-effective – enabling it to be viable in smaller volumes, making it available to more customers.

Exports and modifications have been major growth areas for OKW. Our enclosures and tuning knobs are now sold in 42 countries. Benelux, France, Singapore and the USA have been particularly successful markets over the last year.

There has been a substantial increase in revenue gained from customisation as OEMs capitalised on the benefits offered by modifying standard housings. Customisation is a labour-intensive process but the work continued despite the logistical limitations of the pandemic.

There was extra emphasis on:

- keeping employees safe
- safeguarding security of supply for the benefit of customers
- prioritising initiatives that would help manufacturers of medical devices, social distancing electronics to support pandemic containment.

At OKW, we make services such as CNC machining, lacquering, digital printing, laser marking and EMC shielding more attractive and practical in two ways:

- By offering a huge range of standard enclosures and knobs that don't look 'standard'. Many are designed for highly specialised applications (and yet remain versatile) – so they don't need much customisation

- By providing a single-source solution, we can carry out all the customisation work in-house. As a specialized manufacturer, we are responsible for quality and consistency from start to finish. This guarantees a high standard, speeds up delivery and reduces administration.

Ultimately, every standard enclosure needs customisation of some form – typically apertures (for controls and interfaces), along with branding and legends. Our clever design solutions ensure that very little modification is required to transform an off-the-shelf enclosure into one that is truly unique for each customer's specific requirements.

Classic models such as DATEC-TERMINAL, SHELL-CASE, SMART-CASE and ROBUST-BOX, have continued to be very popular – as has the soft-contoured SOFT-CASE. They have all sold strongly as demand continues to build for newer models such as the wristwatch-style BODY-CASE.

These proven enclosures are a key foundation in the strong business model that has enabled us to help our customers through recent global events. And that strength will continue, enabling customers to face the coming years with greater confidence – knowing that they have a strong ally at their side.

Visit the OKW website for more information about electronic enclosures and tuning knobs:

www.okw.com



TRAINING SYSTEMS FOR PRE-CLINICAL EMERGENCY MEDICINE

What has been practice for pilots for decades is also becoming more often a part of everyday work in the medical industry: practical training and simulations help to precisely train your own hand movements and treatment methods in a team and to intuitively anchor processes through constant repetition.

Author: Kay Hirmer, Strategic Product Management at OKW Gehäusesysteme

SKILLQUBE GMBH - THE CUSTOMER

SKILLQUBE GmbH was founded in 2013 and is one of the world's leading providers of simulation technologies and user courses. At the company location in Wiesloch, Baden-Württemberg, new components are constantly being developed and made ready for series production. The company's core competencies include the development of simulation software for displaying patient monitors or defibrillators from the emergency services and clinical environments. The simulation devices help with realistic and safe training. Trainers from all over the world use this German-made technology to improve the knowledge and skill of medical professionals. This ensures they are best prepared for emergencies – enabling them to provide high-quality emergency care, even under adverse conditions.

CUSTOMISED ENCLOSURES FOR MEDICAL SIMULATORS

When searching for a suitable enclosure to accommodate its electronic components and touch displays, SKILLQUBE became aware of Odenwälder Kunststoffwerke Gehäusesysteme GmbH. OKW offers a wide range of housings available from stock and in small quantities, a wide range of customisation services, and the opportunity to work together with a

reliable and locally based partner. This was the basis for the first series of devices in a new simulation system – qube3.

New qube3's technical features include: a fully functioning ECG monitor with integrated AED function, CPR feedback and dynamic 12-lead ECG, a wireless control unit for instructors and an external skill trainer for auscultation, blood sugar and temperature measurement on the patient.

OKW's handheld enclosure CARRYTEC – size M in the standard grey-white (RAL 9002) – was used for the qube3. CARRYTEC offers plenty of space for components. It measures 270 x 247 x 91 mm with a large, flat surface for displays (up to 10.4"/26 cm). Despite its size, CARRYTEC can be carried and operated ergonomically, thanks to its robust integrated handle with soft TPE insert. Two recessed areas on the sides protect any interfaces. SKILLQUBE uses special side pockets (accessory) to store cables and connection lines. OKW custom machined the necessary apertures for the iPad and cable connectors.

Over time, SKILLQUBE has expanded its product portfolio to include a wide range of variants e.g. with standard surfaces from well-known manufacturers of defibrillators and ventilators. As a result, the requirements for the enclosures have increased accordingly:

- greater volume to integrate larger displays
- high-quality UV-resistant material so training can also be delivered outdoors.

For newer device series such as the qubeZERO (*1), SKILLqube specified the larger CARRYTEC version L (348 x 303 x 177 mm, display diagonal 13.3"/33.8 cm) moulded from high-quality ASA-PC-FR (UL 94 V-0) in the standard colour lava (similar to anthracite grey). Customisation included CNC machining plus the manufacture and installation of strips, covers and a mounting plate for an iPad. For future device series, SKILLqube would like to use the soft TPE grip pad (currently in the OKW standard colour orange) in the company colour red according to its own CI specifications. This special production is available on request, based on a minimum quantity.

Thanks to the professional advice of OKW, the existing standard products of the CARRYTEC housing series can be adapted to the individual needs of SKILLqube and developed further. In this way, OKW also contributes to the qualitative training of medical professionals all over the world.

Both companies have maintained a partnership that has lasted for years. New projects and ideas are regularly added and implemented together.

(*1) *The qubeZERO is the latest simulation system from the qubeSERIES. It includes everything necessary for a realistic exercise. The device integrates perfectly with the controller, assessment and cloud – providing a detailed and successful simulation. With various integrated views, there are hardly any limits to practical training. In addition to a 12-lead ECG with pacer and integrated real-time CPR feedback, the qubeZERO also has an AED and manual defibrillator. In addition to the extensive portfolio of ECG monitor systems and training courses, SKILLqube also offers ventilation training devices, simulation manikins, airway trainers and AV debriefing systems.*



qubeZERO in the standard colour lava



Side pockets for storing cables



Skillqube with soft TPE grip pad



qubeZERO in a simulated application situation



PRODUCT SUPPLEMENTS

EASYTEC

The Industrial Internet of Things (IIoT) enables manufacturers to optimise processes by collecting huge amounts of data. This makes it necessary to install many sensors – sometimes in places that are difficult to access.

EASYTEC flanged enclosures are perfect for this application. They enable devices to be mounted quickly on walls, pipes or other round profiles. A curved recess on the underside of the enclosure makes this easy.

The enclosures were originally available in two sizes and heights: EASYTEC 80 (101 x 50 x 22/26 mm) and EASYTEC 100 (121 x 62 x 26/31 mm). Now the range has now been expanded to include **two additional extended sizes:** EASYTEC 125 (147 x 78 x 30/37 mm) and EASYTEC 150 (172 x 93 x 36/46 mm).

PRODUCT SUPPLEMENTS

RAILTEC SUPPORT

Versatile RAILTEC C SUPPORT EXTRUDED is designed to fit TH35 and G32 DIN rails. This modular system is available in two sizes, 72 mm and 107 mm – so you can adapt the width to suit your requirements.

Printed circuit boards can be inserted in the profile simply and efficiently. End pieces provide a secure capping.

Specify feet (accessory) to fit RAILTEC C SUPPORT EXTRUDED to EN 60715 TH35 and G32 DIN rails – or mount it on a wall using a bracket (accessory).

The material PA6 FR and the colour grey, similar to light grey, are new. The geometry of the parts has not changed.



PRODUCT SUPPLEMENTS

EVOTEC

OKW has expanded the EVOTEC range of designer table-top enclosures by adding EVOTEC 125.

EVOTEC is available in the standard color grey-white (RAL 9002) with a flat top. Choose from the following sizes:

- 80 (80 x 50 x 22/26 mm)
- 100 (100 x 62 x 26/31 mm)
- 150 (150 x 93 x 35/45 mm)
- 200 (200 x 124 x 45 mm)
- 250 (250 x 155 x 54 mm).

The three biggest plan sizes – 150, 200 and 250 – are also available with a 12° sloping top for ergonomic viewing and operation.

Two new flat versions are available in the following dimensions:

- 125 x 78 x 30 mm (flat top, for compact installations)
- 125 x 78 x 37 mm (high top, offers more space).

PRODUCT SUPPLEMENTS

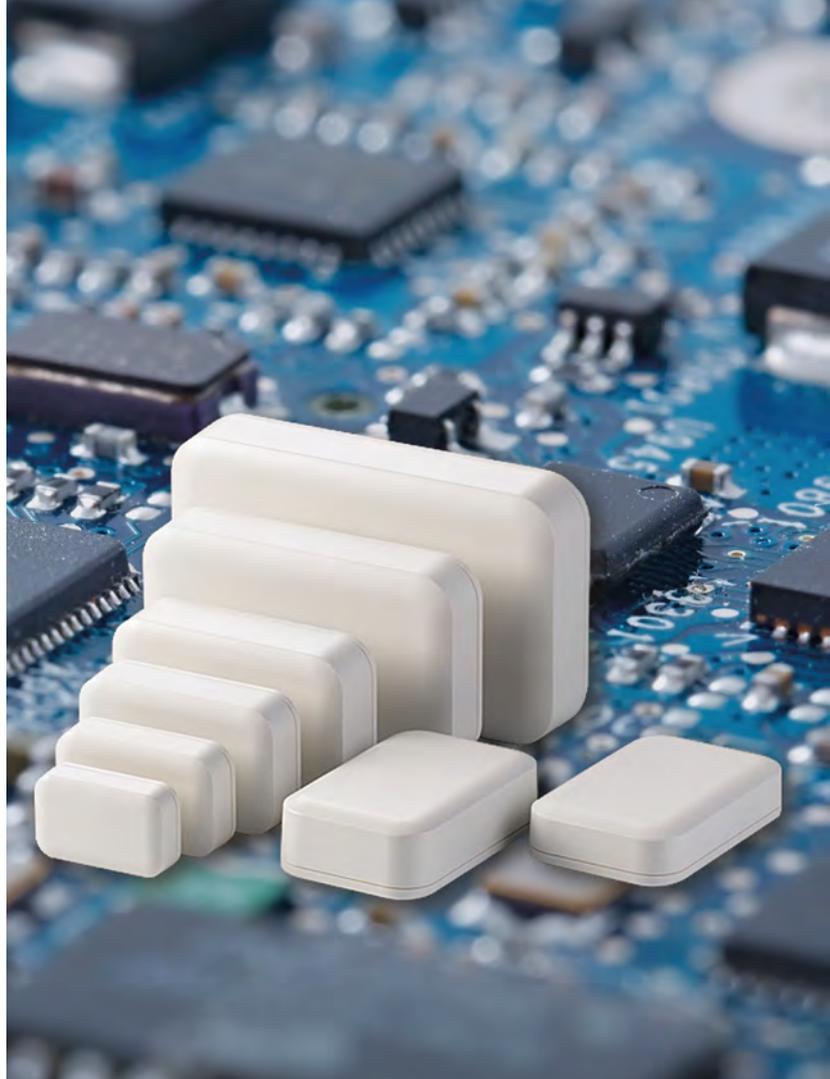
SMART TERMINAL

The VESA standard is used in many systems for the easy and secure attachment of devices.

OKW's SMART-TERMINAL is suitable for **wall mounting according to the VESA standard 100 x 100 mm**.

Installing the adapter is easy: slide it sideways into the grooves on the back of the housing and screw the plastic cover caps (with seals) or the aluminum end plates to the aluminum profile. Then the enclosure can be wall mounted.

SMART-TERMINAL enclosures can also be mounted directly on commercially available swivel arms and wall mounting systems with mounting holes 100 x 100 mm.





SOFT-TOUCH LACQUERING



A haptic highlight

Devices are enhanced by colors and surface effects. That is why we offer a diverse selection of coatings for finishing as an individualization option. There are various reasons for painting plastic enclosures and tuning knobs: They are lacquered to match the respective corporate design, to achieve metallic effects, for protection from electrostatic discharge or to obtain an antibacterial surface.

For haptic enhancement, a soft-touch coating has recently rounded off our range of coatings: This gives the products a velvety-soft surface and thus ensures, for example, comfortable and safe operation of hand-held devices.

By default, this laquer option is available in black and transparent colour. For black option, it can be applied directly to the primer. Since this soft-touch

laquer is also available as a colorless finish, there are no colour limits: the colours can be selected as usual in RAL or from a wide range of Pantone shades; however, the color can also be defined according to the customer's sample.

The imitation leather-like, transparent soft-touch finish is then applied in the last step and thus achieves the unique, fascinating surface effect and in the individually desired colour.



TRADE FAIRS IN 2022

Trade fairs will remain an important platform in 2022

After a year of purely virtual trade fairs and events due to the pandemic, OKW was able to finally retake its in-person fairs and events starting in April with "all about automation" trade fair series at different locations in Germany.

Face-to-face events are simply the best way to present products and services, because they enable personal contact and direct advice, being able to see products 'in the flesh' and interact with them.

The presentations accompanying the trade fair focused on topics such as IIoT (Industrial Internet of Things), embedded solutions, digitisation, robotics and secure automation - sectors in which OKW has extensive know-how in the field of enclosure systems and operating elements. "We are very satisfied with the response of the visitors. On the one hand, we were able to establish new contacts and, on the other hand, have discussions with familiar faces," reports Michael Reimold, Deputy Head of Marketing and Sales at OKW.

As part of the "all about automation" series, OKW was already represented this year in Friedrichshafen (April), Düsseldorf & Heilbronn (May), in Hamburg (June) and in Chemnitz (September). We also exhibited at Embedded World in Nuremberg in June.

The three exhibitions that will take place in November, will conclude the trade fair year: SPS in Nuremberg (November 8th-10th, 2022), COMPAMED in Düsseldorf (November 14th-17th, 2022) and ELECTRONICA in Munich (November 15th-18th, 2022).

For more information on all of our events, visit our website:
<https://www.okw.com/en/News/Exhibitions/International-exhibition-calendar.htm>



SUCCESSFULLY CERTIFIED ACCORDING TO ISO 9001/2015

OKW has successfully passed the surveillance audit according to ISO 9001, 2015 edition.

The auditor from DQS gained a precise overview of the processes at OKW over two-and-a-half days. In his final conclusion, he emphasised our structured key figure management, the processing of customs clearance in the shipping process and the training in the company.

With the successful certification, it was once again confirmed to us that all relevant quality criteria for the development, manufacture, further processing and sale of enclosures and tuning knobs are

observed and that the processes are carried out transparently and in accordance with standards.





TRANSITION IN TECHNICAL MANAGEMENT

Last January, on Friday 21st, 2022, after more than 30 years, our esteemed technical director Egon Weinlein left for the passive phase of semi-retirement.

In the course of his career, Egon Weinlein has significantly shaped the company culture and contributed to the fact that OKW Gehäusesysteme is a successful and future-oriented company nowadays.

Since 1989, more than 40 new enclosures and tuning knob series have been developed under his responsibility, launched on the market and established over the long term. In addition, Egon Weinlein set up the quality management system at OKW independently and has over the years supported it with great commitment. In doing so, he has always promoted the awareness of his colleagues for the high level of quality in order to improve customer satisfaction. He supported necessary changes through permanent training and personal discussions.

We wish Egon Weinlein all the best in his new phase of life.

Since the beginning of the year, Philipp Schell has been responsible as Technical Manager at OKW Gehäusesysteme. After his training as a model making mechanic, he successfully completed the master craftsman's examination in the model making trade. As a designer, he expanded his specialist knowledge in enclosures and tuning knobs technology development at OKW. He also has in-depth knowledge of quality management.

Mr. Schell is very much looking forward to tackle the tasks that his new area of responsibility entails and to many other innovative products from OKW Gehäusesysteme.



NEW MANAGEMENT IN PURCHASING AND LOGISTICS DEPARTMENTS

Transition and change of department's head for the new financial year.

The Purchasing and Logistics departments are starting the 2022/2023 financial year under new management. Since the beginning of July, Mr. Alexander Krylow, who was already the logistics team leader for OKW, has taken on the role of logistics manager and customs officer.

At the beginning of the new financial year, supplier management and the associated areas of purchasing and technology were also continued under the uniform management of Mr. Philipp Schell.

We wish Mr. Krylow and Mr. Schell great success in their new areas of responsibility and the necessary support from their employees at all times.



Picture shows the logistics team with the management



Picture shows the purchasing department



LINKEDIN

LinkedIn is a value creation tool that collaborates in promoting your business, improving the quality of your contacts and increasing your brand awareness.

LinkedIn is the world's most extensive professional network, with more than 610 million users in more than 200 countries and territories worldwide. This well-known social media, is the perfect platform for delivering our professional content. LinkedIn is simply unrivalled when it comes to professional business connections, and this is what makes the social platform the perfect asset for any business. Success for any enterprise depends on the customer base and potential supplier base. LinkedIn offers a simple connection to both. Any company can raise and develop its brand awareness take advantage of advanced search to reach out to the target audience. Company Pages can also be used to promote your brand's core values, nurture leads and of course, improve the visibility of any job opportunities currently available. As with any form of social media, it can be used to deliver traffic to your website.

This year 2022 has brought challenging times for business worldwide, which is why we have put our efforts into increasing the visibility of our brand.

In an effort to increase our support for our partners and agents, we have launched our **International Corporate LinkedIn Page** in which we offer content on a regular basis **in English** language to increase OKW's brand awareness. To promote our brand in the **German-speaking market**, we have our well-known **OKW Corporate LinkedIn Page** from which you can follow the latest news regarding our wide range of plastic and aluminium enclosures, potentiometers and tuning knobs as well as its countless application options. Both profiles are available to be followed, which are updated continuously.

We recommend that you take a look at our profiles and follow us. We also encourage you to actively participate in our publications with Likes, comments or shares.



<https://de.linkedin.com/company/okw-gehauesysteme/>



<https://www.linkedin.com/company/okw-worldwide/>

Author: Patricia Hart, Marketing at OKW Gehäusesysteme



TRAINEE 'GET-TO-KNOW-YOU' DAY

In order to have a good start to the apprenticeship, OKW has the trainee 'get-to-know-you' day.

After a brief welcome, the trainees were given an insight into the OKW Group on the premises of the ÜAB (inter-company training workshop) in Buchen. The associated companies were introduced using presentations and the respective fields of activity were explained. A tour of the ÜAB rounded off the morning before we moved to Obrigheim and continued our day at "Rock'n Bowl".

Here the trainees had the opportunity to get to know each other and exchange ideas in a relaxed atmosphere while bowling.

The day came to a successful conclusion with a joint final meal in a relaxed atmosphere.



You can find more information about our apprenticeships at:

www.okw.com - Career section



MOMENTS INSIDE: OUR VISITOR DAY

This year, 9th July was a very special day for us: after a longer break, we were able to continue our "moments inside" series of events, this time as an open day. Using the concept of "A look behind the scenes", we wanted to offer all interested parties the opportunity to get to know the Turtle family better.

Author: Kerstin Riedling, Marketing at OKW Gehäusesysteme

The central idea of this day, "come in, get information & feel good", became reality - the around 200 visitors got a deeper insight into everyday company life and were able to get a comprehensive picture of everything that belongs to OKW's fields of activity.

WITH GUIDED TOURS THROUGH THE NEW ADMINISTRATION BUILDING

Management, development & construction, sales & marketing and purchasing are located in the administration building, which was moved into in 2019, with access from Friedrich-List-Straße.

Guided tours every half hour enabled visitors to take a look at these premises and learn something about the size of the departments and the areas of



responsibility of the individual departments.

The tours in the new administration building were so well received that Christoph Schneider and Yvonne Ellwanger spontaneously offered additional tours. Of course, it was also interesting for many to see what the completely renovated administration building looks like from the inside.

In order to keep things entertaining, our trainees offered a competition as part of the company tours, which dealt with questions about OKW.

INFORMATION STATIONS IN PRODUCTION AND LOGISTICS

Information stations in the production and logistics departments provided orientation and knowledge about their responsibilities and internal processes. The employees of the individual functional areas were happy to answer questions for deeper insights.



TRAINING AND DEVELOPMENT OF YOUNG TALENT AT OKW

The training subject had a great reception: our training managers and the trainees themselves were available throughout the day to answer any questions about this topic.



The project "MimO - MINT in the Odenwald", which is supported by the BMBF (Federal Ministry of Education and Research), was also presented: the younger guests were specifically addressed with experiment

kits and microscopes. Here the little researchers could immerse themselves directly in the world of natural sciences.

AN ALL-ROUND SUCCESSFUL DAY



With this extensive and equally informative offer, the visitors could spend a few entertaining hours in a relaxed atmosphere "Im Kröteenteich 2b". Grilled specialties, various drinks and an ice cream truck were also provided and invited to relax and enjoy the best weather on the company premises. Even the youngest guests had a lot of fun with activities like children's face painting and the bouncy castle that provided great entertainment.

The day was a complete success and there really was something for everyone. Managing director Christoph Schneider was also very satisfied at the end of the day: "moments inside is a very special series of events for us. We are very pleased that we were able to revive this series again with this open day and that it went down so well."



OKW

GEHÄUSE
SYSTEME



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