Innovative Input Devices



INSIDE H+K



Individual input systems Membrane keyboards and front panels Capacitive keyboards Customized operating controls Industrial PC systems Turnkey systems with electronics Membrane potentiometer and sensor controller Strong competence in all ranks

Hoffmann + Krippner explores innovative perspectives in problem solving while implementing advancements in the area of flexible input systems and keyboards with electronics.

As our customer you benefit from a high bandwidth of innovative engineering at the highest stage, as well as our longtime experience as leading manufacturer of individual and customized keyboards and turnkey solutions for input systems.

Welcome to Hoffmann + Krippner

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The company A tradition of innovation

Innovation from conviction.



1972 Max Hoffmann + Fritz Krippner found Hoffmann and Krippner as a company for silk screen printing

1977 Relocation to Buchen and opening of larger production facilities

1979 First printing on foil and development of the first membrane keyboard

1987 Expansion of the production facilities

1994 Quality management certification according to DIN EN ISO 9001-2000

1997 Founding of Hoffmann + Krippner Switzerland

1997 Extension of the administration building. Now, sales, marketing, design, technical consulting, purchasing and many more departments are under one roof

2005 Ralf Krippner becomes CEO in the second generation

2007 Founding of Hoffmann + Krippner Inc. in Peachtree City (GA)/USA

2008 Environmental management certification according to DIN EN ISO 14001

2008 Opening of a sales office in Austria

2009 Opening of a sales office in The Netherlands

2010 Expansion of the production facility in Buchen/Germany (new building)



INNOVATION MADE IN GERMANY. HOFFMANN + KRIPPNER.

Hoffmann+ Krippner

Product overview

Broad product portfolio with a large scope of engineering & design

Whether customized membrane keyboards or turnkey solutions – our developments have set standards for over 35 years.

In the area of standard products Hoffmann + Krippner progressively sets high quality standards. We produce your customized PC keyboards or membrane sensors, develop electronic interfaces with adequate keyboard controllers, design your front panels, and integrate touch screens into your input systems.

Our turnkey solutions with printed circuit boards in multilayer technology with electronics as well as customized software programming and designed enclosure are internationally leading; naturally including all required injection mold.

Furthermore we possess state-of-the-art technical equipment that ensures a 100% testing and quality control.

Product overview

- Turnkey solutions with electronics, software and enclosures
- Membrane keyboards and front panels
- Keyboards with GT technology
- Capacitive keyboards
- Illuminated input devices
- Sensofoil[®] membrane potentiometer
- Sensotouch[®] sensor controller
- Customized control units
- Touch screen solutions



For us, MADE IN GERMANY promises quality!

No demand is as high as the expectations we make on ourselves. For us, Germany as our headquartered location is the guarantee for our ability to implement even complex solutions in a time and cost- effective manner.



Turnkey solutions

Input systems with electronics, software and enclosure

We break the mold and search for unconventional possibilities to achieve the ideal for our customers – naturally in close cooperative collaboration. Hoffmann + Krippner's vertical range of manufacturing allows for products with electronics, software interfaces, and enclosures.

Possibilities and sample applications

- SIEMENS MEDIZINTECHNIK
 Remote control for x-ray machines
- KAESSBOHRER ALL-PURPOSE-VEHICLES Control panel for snow groomer
- PRUEFTECHNIK ALIGNMENT SYSTEMS Input system for laser optic precision adjustment device
- PIXY AG
 Capacitive control panel for railway vehicles





Experience and know how

Beyond membrane keyboards we develop, design, and manufacture your complex input systems according to your instructions – for example with plastic or metal enclosure, with electronic control and analyzing elements, display and touch screen, interfaces and software.

Our experienced specialists in the Research and Development and design department work with 3D-CAD and eCAD. Their know how is the basis for solutions with very complex requirements needed in sectors such as mechanical engineering, electrical engineering, military technology, automotive, consumer goods, aviation, and medical technology.



RAYMA.



Membrane keyboards and front panels

Highest demands on design and quality

With membrane keyboards one can realize design ideas almost without any limits. With or without tactile feedback, stiff or flexible depending on the application, membrane keyboards can offer the product features you need.

Flat input systems for numerous applications

Membrane keyboards with pressure point allow for a clear, low-bounce switching operation, independent from the way of key operation. The design of the contact spring guarantees a secure contact with a clear feedback signal.

Highest demands on the dependence of practically currentless circuits can be achieved through double sided gilding of contacts, thru stiff designs with PCB's.

Of course high quality and long life cycles are given: more than 1 million operations are guaranteed.



Technical data (compendium) according to DIN 42115

Conductor and	Gold, silver, copper, carbon
contact materials	
Switching voltage	AC 25V, DC 42 V (max.)
Switching current	100 mA (max.)
Switching capacity	1 W
Insulation resistance	$e > 2 \times 10^8 \Omega$
Life cycle	> 1 million operations
Bounce time	< 5 ms
Contact travel	0,3 - 0,6 mm
Actuation force	2 - 5 N
Mechanical load	100 N, for 60 seconds

Storage temp.

-40 °C to +70 °C (depending on layout) Operating temp. -40 °C to +85 °C (depending on layout)

- Pressure point keyboards in GT technology
- Front foil membrane polyester matt and gloss
- Keyboards in night design
- Keyboard controller and software development
- Keyboard combination with touch screen
- Keyboards with sensor technology
- Operating systems for heavy duty areas
- Complete customized solutions

Switching of Hoffmann + Krippner's membrane keyboards

Matrix key arrangement, combined control wires or electronics according to wiring diagram. Contact pairs according to keyboard type with or without tactile feedback. Contact springs X 12 CrNi 177 one-sided 0.2 µm Ni, 0.2 µm Au.



GT Technology User-friendly and sturdy

By developing an innovative technique Hoffmann + Krippner has given membrane keyboards key domes.

The generated tactile feedback allows you to feel at which point the key functions are being actuated – even when operated blindly.



Technical data (compendium)

Actuation force	3 - 7 N, dep
Key distances	Spacing from
	Should the o
	the individua
	is as follows
Keyboard thickness	Approx. 2 m
Dome height	$1.0\pm0.5~m$
	tolerance of
Key geometry	Any key forn
Dome hardness	75 Shore
Operating temp.	-20 $^\circ$ C to +
Storage temp.	-40 $^{\circ}$ C to +
Front membrane foil	Polyester ma

 3 - 7 N, depending on the dome design
 12

 Spacing from 16 mm
 such a

 Should the design foil be adhered between
 also of

 the individual keys, the minimum distance
 Ext

 is as follows: Ø from dome plus 8 mm
 0 p

 Approx. 2 mm
 0 cu

 1.0 ± 0.5 mm, dependent on key geometry,
 6 cc

 tolerance of dome height ± 0.2 mm
 Us

 Any key form is possible
 75 Shore
 Dama

 -20 ° C to + 70 ° C
 origin

 -40 ° C to + 80 ° C
 C

att and glossy

12 years experience with unique concept possibilities in design, such as mounting the laminar domes not only over the keys but also over company logos, displays, LEDs etc.

Extremely high mechanical and chemical key durability

- Optimum finger guidance
- Quicker serviceability
- Good tactile feedback
- User-friendly key surface, pleasant to the touch

Damage to the dome caused by mechanical strain reverts back to original state after a short time.

A plastic dome is mounted on the design foil membrane which evenly distributes the forces affecting the key, allowing the contact fields to switch reliably even in the most extreme conditions.

Crystal clear advantages in application

A special dome-like and high gloss finished plastic composition is being applied onto the membrane surface right above the keypads.

The crystal clear material supports the optic of signal and control lights, improving the readability even at wide viewing angles. Additionally the material is self healing, which means that scratches and damages in key domes correct independently.

This technology is especially suitable for robust applications. It stands out due to its high chemical and mechanical resistance and is therefore predestined for the use in rough industries.

There are no limits to the designers: the shape of the key domes (round, oval, angular, square) is arbitrary and not limited to the area of keypads. Large and longish keys are also easy to manufacture.

The GT technology increases the tactile feedback and supports an accurate and easy operation under all environmental conditions.

Capacitive keyboards -Input devices of the future

Flat design behind glass and plastic By entering into the new technology of capacitive keyboards, Hoffmann + Krippner increases its product portfolio by robust input devices for high mechanical load.



Technical data (compendium)

Surface material	Glass, PVC, wood	
Surface thickness	Recommended to a maximum of10 mm (depending on design and size of keys	
Size of sensor pad	From approx. 1 cm to 10 cm (depending on material and its thickness)	
Recommended key seperation	Minimum approx. 5 mm	
key geometry	Basically any, round or rectangular preferred	
Key illumination	Background lighting and status display inside or outside of keypad possible	
Number of keys	Any, customer-specific	
Temperature range	-25 °C to +60 °C (expended temperature range possible)	
Request rate	Approx. 40 ms at 24 active keys (sample value)	
Slider function*	Realizable up to a standard length of 60 mm (long slider up to 200 mm)	

* Not available yet (as of 10/2008)

The systems behind glass are resistant to acids, dirt and other industrial contaminations. The even surface allows for comfortable handling without pressure and by only slight touches.

New freedom in product design

The technology allows for flat designs and is applicable behind glass, plastic or other insulating surfaces. Any type of keys are possible.

A capacitive wiper makes contactless switching possible. This is achieved by a systematic change of the key surface's electrical field while touching.

This modification is being evaluated and forwarded to the adjacent electronics.

14 | Capacitive keyboards

www.hoffmann-krippner.com



Illuminated Input Devices | Nightdesign

Optimal operation under aggravated conditions

Workplaces in dimly lit rooms (e.g. in transportation technologies or medical engineering) require illuminated keyboards.

Among others Hoffmann + Krippner's electro-luminescence technology or keyboards lit with light emitting diodes (LEDs) have been proven to be reliable.

You won't be left in the darkness

Membrane keyboards can be illuminated from the inside so that important key functions can be located without any problems.

Optimal operating safety at darkness is achieved by holohedral backlight. Optional different colored Micro-LEDs can be integrated into your system.

Pressure point keyboards with springs are no exception. Depending on the source og light even a colored composition in night design is possible.







CTRL D. SEL (UM

Technical data of the electro-luminescence foil

Thickness	0,18 mm
Illuminated area	650 cm ²
Operating temp.	-40° C to +60° C
Mechanical strength	95 kg cm ²
Life cycle	over 20.000 h
Capacity (typ.)	300 pF/cm ² to 900 pF/cm ²
Power consumption	0,15 mA/cm ²
Operating voltage	120V AC
Frequency	400 Hz
Form of control volt.	Sinusoidal
Colors	Yellow-green, green-blue, white

Technical data of the converter

ut voltage	1,5 - 36 V D
put voltage	80 -140 V A0
put frequency	70 - 1200 Hz
m	Sinusoidal

Inp

Out

Out

- Extremely flat cold light source
- Ideal supplement to foil membrane keyboards
- Even surface illumination of labels or key surfaces
- Luminosity can be adjusted within a wide range
- Superb for night designs

Integration of LEDs into membrane keyboards

The technical design of membrane keyboards allows for the integration of LEDs by gluing into flexible circuits onto membrane layers or by soldering onto PCBs.

Hoffmann + Krippner's specially developed keyboard layout allows for illuminated LED keypads for night design applications.



Edge protection and sealing Safe. Aesthetic. Efficient.

Among the decisive factors in favor of membrane keyboards are both protection from water and dust and the sealing of the inside of the device against every type of external influence.

The all-round protective edge coating on keyboards from Hoffmann + Krippner is equally simple and efficient.

Clean, smooth and absolutely sealed

This innovative edge protection means an end to the risks associated with exposed membrane keyboards, especially those of short circuiting due to moisture which penetrates the circuitry due to membrane layers which have come loose at the corners.

A keyboard with clean contours is also considerably more aesthetic than an "opened up" arrangement".

Hoffmann + Krippner protect the edges of their keyboards with a protective coating on the front ends of the entire keyboard structure, which can optionally be either flush with the front membrane or may have an additional frame running circumferentially around the front. The 45 degree chamfer to all front ends guarantees reinforced edges.





Sealing of membrane keyboards

Among the decisive factors in favor of membrane keyboards are both protection from water and dust and the sealing of the inside of the device against every type of external influence.

The keyboard/casing combination is conventionally sealed by inserting sealing cords or mounting cellular rubber seals. Hoffmann + Krippner have developed an efficient and favorably priced solution as an alternative to this complex procedure.

A CNC-controlled dosing plant applies silicon (or in the case of the automobile industry the requisite silicon-free polymers) to exact positions of metal carrier parts, circuit boards and casings. There is no need for the expensive groove for seal cords and their time-consuming processing In the Hoffmann + Krippner process, electrically conductive and non-conductive materials can be used and the height and width of the silicon strip can be varied. Crevices around threaded bolts, cut out areas etc. can easily be complied with.

Whenever control dials are necessary in a keyboard the sealing process can be quite elaborate.

Alternatively, Hoffmann + Krippner offers to integrate the control dial directly into the membrane keyboard.

Sensofoil® membrane potentiometer Sensotouch[®] sensor controller

Flat. Durable. Hermetically sealed

Sensofoil® membrane potentiometer can be used as a set point device and actual value transducer. The different versions allow contactless connections to machines as well as manual operations for sealed panels. SensoTouch® is a programmable x-y-array, adapted for keyboards as well as x-y-controller. The third dimension (z-level) can also be utilized.





Technical data Sensofoil® (compendium)

Life cycle Operation Working temp. Repeat accuracy Resistance

1 to 20 million cycles (depending on design) Magnet, wiper, hand (depending on application) -40 °C to +125 °C (depending on design) 0.1 mm to 10 µm (depending on operation 2.5 k Ω /100 mm length (standard)

Life cycle Operation Working temp. Repeat accuracy Maximum size

50 mm to 500 mm

Technical data Sensotouch® (compendium)

1 to 20 million cycles (depending on design) Wiper, hand (depending on application) -40 °C to +65 °C (depending on design) Depending on operation 2 cm x 2 cm to 50 cm x 50 cm, irrespective of shape

- Extremely flat potentiometer and sensor field respectively Analog output signal 1:1
- Signal in z-direction possible (by pushing)
- Can be integrated into front foil
- Superb price-performance ratio

The technical specifications of the Sensofoil® membrane potentiometers correspond to those of conventional precision potentiometers or even surpass these.

Sensofoil® and Sensotouch® are applicable both in machines and control panels. Sensotouch® offers a high scope of design to the product designer.

Sensofoil[®] membrane potentiometer

Due to their flat design of 0.7 mm to 1.7 mm Sensofoil[®] membrane potentiometers from Hoffmann + Krippner are the ideal solution for restricted installation conditions.

Standard elements are available as well as customer-specific variations (e.g. contactless magnetic connection). Using Sensofoil® as an actual value transducer bears several essential advantages, such as a high repeat accuracy, easy to achieve redundancy, and smooth integration.

Sensofoil® complies with the function; linear, rotary, or customized developments in regards to your special forms are possible.

Using Sensofoil[®] as set point device in control panels prevents cut-outs in the panel and possibly occurring problems regarding the tightness caused by those cut-outs.

Sensotouch[®] sensor controller

Sensotouch® is a resistive x-y-field in voltage divider circuit and therefore is operable even with gloves on.

You can customize your individual Sensotouch® in regards of shape, size, and position. Also you get to decide on size and number of keys which can be freely programmable within their life cycle.

Sensotouch[®] can be used as a mousepad as well as xy-controller, for example for joysticks.

Sensotouch[®] can be connected contactless. To do so. specifications are necessary.





Resistive touch screen solutions

Innovative input solutions

Graphic operating overlays have been a matter of course for a long time. An obvious consequence is to type what we want straight onto the display or screen.

The resistive touch screens from Hoffmann + Krippner consist of transparent, conductive, cushioned layers. Even light touching of the screen surface triggers the operating function. A small controller unit monitors the touch screen and relays the key actuation.

Technical data

Input	Finger or glove
Material/	Foil - Glass
composition	Foil - Foil - Glass
Diagonal size	4.7" to 18.1" (standard)
	Customer-specific formats available
Total thickness	1.4 mm to 2.1 mm
Surface	Anti-reflective / clear
Light transluency	> 80 % (Foil - Glass)
Operating temp.	-20° C to +70° C
Actuating force	0,5 N (+- 0,3N)
Life cycle	> 1 million contacts
Surface hardness	> 2 H

- Available in many standard sizes (analogue resistive), as well as customer-specific touch screens from prototypes to series
 - Standard touch screens, suitable for most commercial LC and TFT displays
 - Complete solutions as membrane keyboards or front panels with integrated touch screens are our forte
 - High transparency of over 80%
 - Capacitive touch screens and other technologies respectively upon request



Flexible and customized

Gentle pressure on the screen contact is sufficient to activate the operating function. A small controller unit monitors the touch screen and forwards the contact confirmation.

The connected computer always knows where something is happening on the screen - precisely to the millimeter - and can therefore react accordingly.

Resistive touch screens consist of 3 layers. The basis is a stable glass plate, metalized with a conductive, transparent coating. Tiny, non-conducting transparent spacing knobs ensure that a defined distance is kept to the polyester front foil membrane. A conductive, transparent coating is also applied to the inside of this foil membrane.

By lightly touching the surface with your finger or glove, a contact placed between both conductive layers is then activated.



Standard Keyboards

Medical and industrial keyboard solutions

The standard PC keybaords by Hoffmann + Krippner combine the advantages of a modern membrane keyboard with sophisticated design and perfect functionality for use in medical and industrial applications.





Safe, functional and user-friendly

In medical environments, a clean keybaord surface is often probelamtic- the MediBoard and CleanBoard products by Hoffmann + Krippner face these challenges and offer perfect conditions for a safe and fast cleaning process through an antimicrobial surface as well as a fully sealed enclosure.

The HeavyBoard products are robust keybaords for use in industrial work spaces, where dirt, dust and oil are permanently present and make common keyboards useless.

All standard PC keyboards can be easily connected via USB and are Plug&Play-ready.





MediBoard

Standard PC keybaord with antimicrobial surface for use in medical workplaces (laboratory, OR, intensive care units, doctors offices etc.). Available in several country versions as well as with and without integrated mouse pad.

Mini-CleanBoard

Standard PC keybaord, optional with antimicrobial surface, for use in medical workplaces (laboratory, OR, intensive care units, doctors offices etc.) **in a very compact design**. Available in several country versions.

Technical data and further specifications about our standard keyboards can be found in a seperate brochure.

CleanBoard

A very slim medical PC keybaord, with and without antimicrobial coating, for use in medical workplaces (laboratory, OR, intensive care units, doctors offices etc.). Integrated mouse pad, numeric keyad as well as PC function keys. Available in several country versions.

HeavyBoard

Industrial keyboard for use in rough environments. Fully sealed keyboard surface, resistant against alcohol, oil, dirt, dust and many chemical fluids. Available in several country versions as well as with and without integrated mouse pad.

flexx-IPC[®] | **The new industrial PC system** Standard and modular systems for machine controlling

Flexible and inexpensive machine controlling based on Windows[®] in combination with customized design options: That's flexx-IPC[®] by Hoffmann + Krippner.





Ausgewählte technische Daten

flexx-IPC [®] M series	flexx-IPC [®] M Advanced	flexx-IPC [®] M Power
CPU	Intel Atom 1.6GHz	AMD Mobile Athlon 1.5GHz
System Memory (RAM)	1 GB	1 GB
HDD / Flash Memory	2 GB / 8 GB	8 GB
Operating System	Windows Embedded Compact 7 or	Windows Embedded Standard 7
	Windows Embedded Standard 7	
LCD Display Size	10.4"	10.4"
Maximum Resolution	800 x 600 (SVGA)	800 x 600 (SVGA)
LCD Display Type	LED Backlight TFT	LED Backlight TFT
Touchscreen	Resistive	Resistive
Number of Input Keys	49 (with 22 self-label keys)	49 (with 22 self-label keys)
IP Rating	Front: IP 65	Front: IP 65
	Enclosure: IP 35	Enclosure: IP 35
I/O Ports	1x Gbit Ethernet	2x Gbit Ethernet
	1x PCIe	1x PCIe
	1x RS-232 (+1 internal)	1x RS-232 (+1 internal)
	4x USB2.0 (+1 internal)	4x USB 2.0 (+2 internal)
	Audio Out/ Mic in	Audio Out/ Mic in
	PS/2 Keyboard & Mouse (internal)	PS/2 Keyboard & Mouse

Flexible systems for individual solutions

With the new flexx-IPC®-series, Hoffmann + Krippner offeres a flexible IPC system for machine controlling The integrated industrial PC, based on an open Windows® plattform with resitive touch screen, offeres the possibility to individual program each key and to label them with slide-in labels.

5.7", 10.4" and 12.1" displays

- Easy integration of customer-specific software applications
- Perfect for retrofitting as well as for original equipment
- Robust aluminum enclosure, fully sealed front
- Front panel can be designed individually (company logo, colors etc)

flexx-IPC[®] - inexpensive and flexible IPC systems for your individual machine controlling.





Industry examples Variety is our strength

Hoffmann + Krippner is the leader in innovation, quality, and a reliable partner for developing and realizing customer-specific input systems for customers from various industries.

Input solutions for many industries

- Plant and Mechanical engineering
- Tool manufacturing
- Food processing
- Electrical engineering
- Aerospace
- Automotive
- Medical Engineering
- Facility engineering
- Measurement and control technology
- Household devices
- Military applications
- Communication technology
- Optical industry
- Laboratories
- Agriculture

24 | Industry examples

Telecommunications

EXAMPLE: KAESSBOHRER SWITZERLAND

Development and production of an operating unit to control the vehicle electrics and hydraulics of a snow groomer using a central electronics unit with CAN bus interface.

The aim was to develop an operating panel as comprehensive and central operating unit for most vehicle functions as well as two smaller operating units in the steering wheel.

Operation needed to be possible without a problem under all climatic conditions by day or night as well as when wearing gloves.

EXAMPLE: SIEMENS

Design of a remote control unit for universal use with the different medical devices of Siemens AG, development of a corresponding and aesthetically pleasing plastic casing with ergonomic key input, integration of an electronic control unit with adequate software, production of the membrane keyboard and the casing as well as designing its own charging station for fast recharging.





Innovative Input Devices



Quality and Innovation The customer in the center of our thinking and practice

Since 1994 Hoffmann + Krippner is certified according to DIN EN ISO 9001, which proves that our company has consistently strived to continuously maintain and improve our internal quality standards. Our goal is to continue to excel and fulfill the high demands on the quality of our products. This will be one of our top directives.

We not only set standards with the internal improvement processes, we also provide highest quality standards in regards to engineering and manufacturing. Our customers are the center of thinking and practice. Our drive for the development of international leading input systems and control panels has always been the realization of individual requirements and the focus on quality and innovation.



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Innovation results from trust

Today, we work together with our customers on solutions for input devices for tomorrow.



Social responsibility Global thinking – local action

As a medium-sized company with international orientation we are aware of the fact that our actions always have effects beyond our own horizon.

We identify with our home's roots and traditions, as well as with the challenges of an increasingly globalized world.

Therefore, as leading manufacturer of customized input systems, Hoffmann + Krippner supports local and regional associations and initiatives and establishes a presence in new markets from Europe to North America.

The training of young adults in our region is not only an investment into our company's future; it is also a sign of progressive responsibility. We currently train our own junior staff in more than 10 different professions, and by doing so we secure our competitiveness and jobs at Hoffmann + Krippner.



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Conscious Actions

With our actions we have the responsibility for our customers, suppliers, partners, and employees. Today and in the future.



Environment and resources

Responsibility and challenge at the same time

Nowadays environmental protection and the economical handling of resources is a matter of course.

Hoffmann + Krippner not only wants to be considered as the technology leader, but at the same time wants to set a focus on consequently protecting our environment and handling resources responsibly.

We are proud to operate an environmental management that is certified according to DIN EN ISO 14001 since 2008. Thereby we limit the impact of production and daily work to a minimum.

In the scope of the certification Hoffmann + Krippner decided to pursue a consistent environmental policy.

As a leader in keyboard manufacturing, Hoffmann+Krippner is committed to focusing on the effects that our production has on the environment and industrial safety as well as our personal health. Furthermore we pledge to observe and follow these existing policies.

According to each employee's area of responsibility, all employees will receive training on current policies and procedures and continued education about environmentally-friendly behavior in regard to work-related safety procedures and personal health care.

In the future, Hoffmann+Krippner will seek more accurate data to reveal the company's highest source of energy demand.

We want to further expand targets relevant to the environment by observing and documenting relevant data and making necessary continuous improvements based on that information. From this information, Hoffmann+Krippner will seek more ways to become environmentally friendly in order to decrease our current environmental impact and prevent all negative impact in the future.



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Reducing emissions and at the same time increasing productivity and quality are the challenges of our time. We are ready for it!



Your contact to Hoffmann + Krippner

Hoffmann + Krippner opens up new vistas, solves problems and realizes visions in the three main business areas complex input devices, ultra-flat position sensors and industrial PC systems.

In business for more than 35 years, we now have become the leading manufacturer of customized keyboards and complex input systems and are a market leader in Europe.

We develop and produce innovative input devices, control units and sensors for international customers in numerous industries, from consumer electronics, medical technology and aviation to mechanical engineering and military technology...

Hoffmann + Krippner's product portfolio meets the highest expectations, from simple membrane keyboards to complex designs including enclosure, electronics and software.



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INNOVATION MADE IN GERMANY. HOFFMANN + KRIPPNER.

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