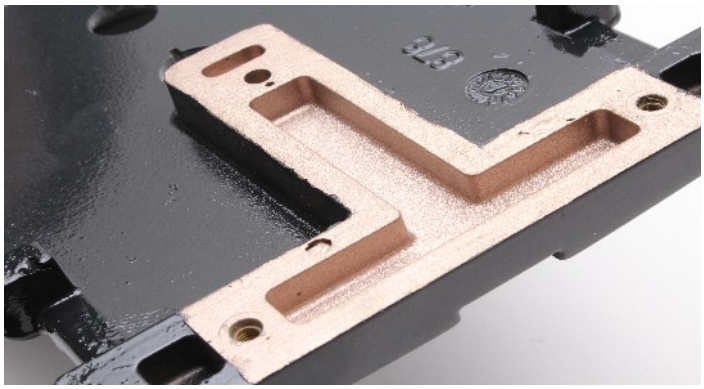
SHARP LOOKS.
SMART SAFETY.



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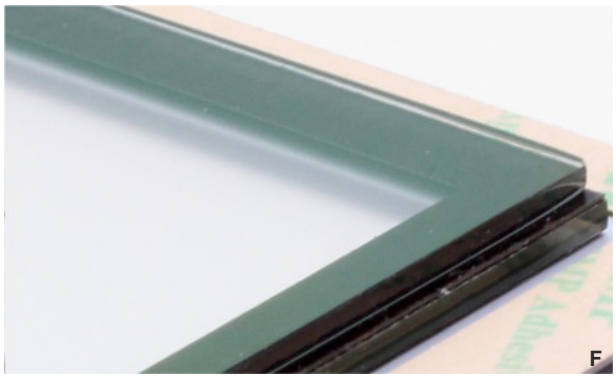
Transparent EMC solutions for your HMI


C


F

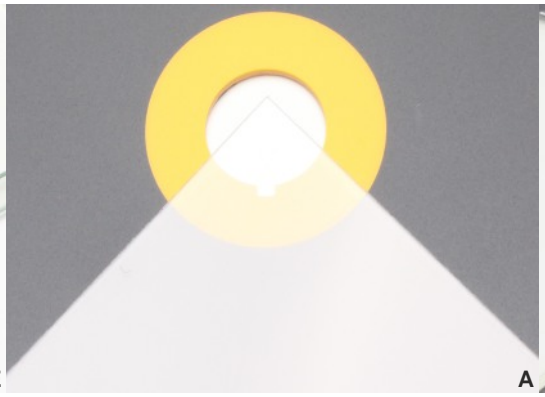
Clear view. Strong shielding.

Our transparent EMC solutions protect your electronics – visibly strong, invisibly effective. Whether in medical technology, military, or industry, our solutions are fully customizable and meet the highest standards of safety and efficiency.We develop tailored display shielding concepts that ensure not only interference-free performance but also long-term reliability. Our range of services includes transparent EMC films, conductive coatings, and innovative shielding glass.

Together, we will find the perfect transparent system for your project.

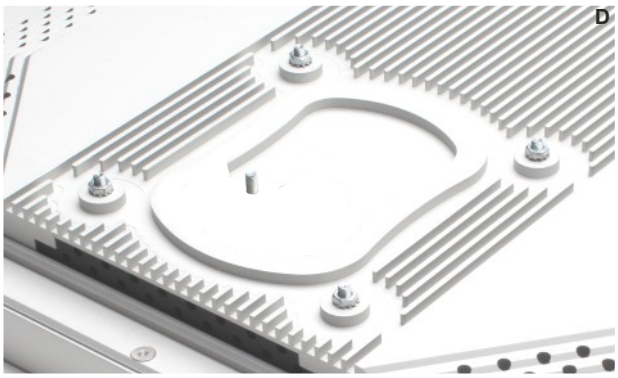
Ref.	Shielding Solution	Shielding Performance	Flexibility in Mechanics	Optics	Cost-effectiveness	Application Examples	Advantages
A	Metal-mesh foil on plastic/glass (organic)	ooo ≤0.3 Ω/□ mesh width : 100-250 µm	ooo Foil with 50-120 µm	oo VLT: 75-81% Irregular mesh possible	ooo	Display cover glasses; viewing windows	Highly conductive, large areas
B	Metal-mesh foil on plastic/glass (mineral)	ooo ≤0.3 Ω/□ mesh width : 100-250 µm	ooo Foil with 50-120 µm	oo VLT: 75-81% Irregular mesh possible	oo	Display cover glasses; viewing windows	Versatile, hard surfaces
C	Metal-mesh embedded in plastic/glass (organic)	ooo ≤0.3 Ω/□ mesh width : 250 µm	o Material thickness 1.5-4.0mm	o VLT: 75% Regular mesh	oo	Display cover glasses	Integrated in PMMA, anti-reflective coating possible
D	Plastic/glass with conductive coating	oo ≤50-100 Ω/□ fully conductive	o Material thickness 1.5-3.0mm	oo-ooo VLT: 80-98%	oo	Display cover glasses	Integrated in PMMA, anti-reflective coating possible
E	Glass with conductive coating (mineral)	oo ≤10-20 Ω/□ fully conductive	o Material thickness 2.0-4.0mm	ooo VLT: 85-90%	oo	Display cover glasses	Integrated, can be refined
F	Glass (mineral) with optically bonded conductive coating	oo ≤10-20 Ω/□ fully conductive	o-ooo Depending on structure	oo VLT: 85-90% plus additional components	o	Conductive shielding glass behind touch sensors	High flexibility
G	Carbon-nanotube foil on plastic/glass (organic)	o Ω/□: 800-1000 fully or selectively conductive	ooo Foil with 50-125 µm	oo VLT: 78% layout up to full surface	ooo	Display cover glasses; transparent heaters	Freely configurable layout
H	Carbon-nanotube foil on plastic/glass (mineral)	o Ω/□: 800-1000 fully or selectively conductive	ooo Foil with 50-125 µm	oo VLT: 78% layout up to full surface	ooo	Display cover glasses; transparent heaters	Freely configurable layout

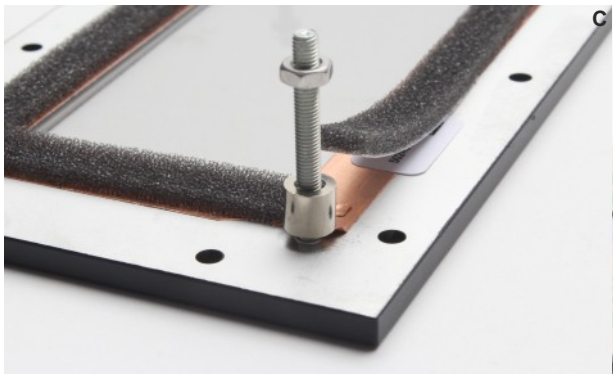

E


A


G

Integrated EMC solutions for your HMI





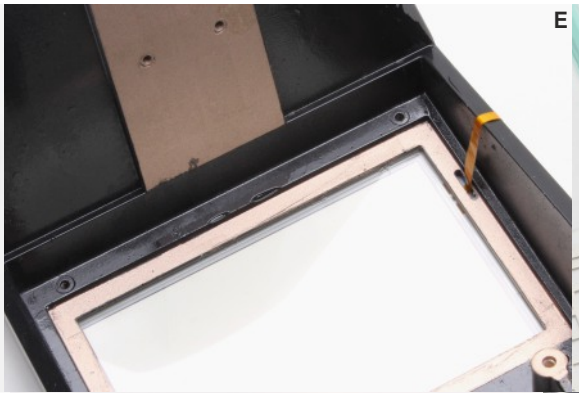
Strong protection, seamlessly integrated.

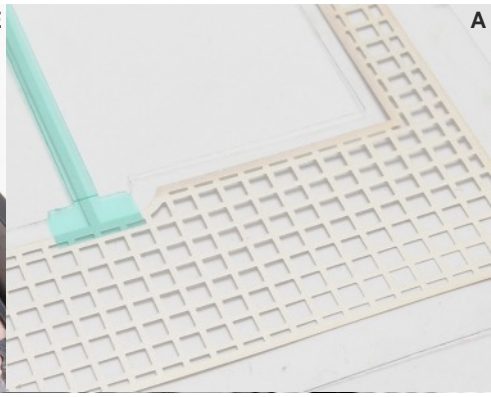
Our customized EMC solutions provide reliable protection for HMIs and are particularly suited for demanding applications in medical technology, the military sector, and advanced electronics. We rely on cutting-edge technologies and precise implementation to effectively minimize electromagnetic interference and ensure the flawless operation of your systems.Whether conductive films, specially developed enclosures, or integrated carrier structures – we select the optimal materials and manufacturing methods to develop a solution perfectly tailored to your project. We place special emphasis on achieving the ideal balance between shielding effectiveness, functionality, and design.

Ref.	Shielding Solution	Shielding Performance	Flexibility in Mechanics	Cost-effectiveness	Application Examples	Advantages
A	Silver mesh printed on foil	oo Ω/□: **1 - 200 depending on layer thickness and mesh design**	ooo No additional structure required	o	Membrane keyboard with mesh at key level	Flexible printing layout, no extra layer needed for membrane keyboards
B	Cu mesh integrated into PCB layout	oo Ω/□: **0.5 - 100 depending on layer thickness and mesh design**	ooo No additional structure required	o	Membrane keyboard with mesh at PCB level	Free layout of the conductive layer, no extra layer needed
C	Cu foil as an intermediate layer	ooo Ω/□: **< 0.5 at 40µm Cu, fully conductive**	oo Foil with 43µm	o	Membrane keyboard with Cu foil as an intermediate layer	Easy integration, space-saving
D	Aluminum carrier plate/housing	ooo <1 Ω/□ **fully conductive**	ooo No additional structure required	o	Classic carrier plate or enclosed housing	Integrated shielding, highly adaptable (e.g., surface treatment)
E	Conductively coated plastic housings	oo <1 Ω/□, **fully or selectively conductive**	ooo Adapts to existing design	oo	Housings for medical devices	Customizable shielding while maintaining design flexibility

Our goal is to provide durable and high-performance shielding solutions that meet the highest standards, using high-quality materials and precise craftsmanship. Our experienced team of experts will support you throughout the entire development process – from the initial idea and technical design to the final implementation. Through close collaboration and personalized consultation, we ensure that each solution is perfectly tailored to your specific needs.

Rely on our years of experience and expertise to achieve optimal EMC shielding for your application.





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10,1" Einbau Web Panel – WEB-PRO10

In den Warenkorb

Produkt-Details

Multitouch Display Panel 15,6" E-PRO

In den Warenkorb

Produkt-Details

Multi-Touch-Sensor-Kit ohne Coverglas

Ausführung wählen

Produkt-Details

You can now find standard components in our online shop. Curious? Then contact us!