

HEIQ[®] XPECTRA

Transparent conductive coating

FLEXIBLE, TRANSPARENT, AND HIGHLY CONDUCTIVE COATING

HeiQ Xpectra OPV is a transparent conductive coating designed for flexible and wearable electronics such as organic photovoltaics (OPV). The coatings are characterized by the combination of high conductivity and transparency with a haze value of less than 5%.

There is growing demand for high-performance transparent conductive coatings. HeiQ Xpectra OPV provides a scalable, roll-to-roll compatible solution for cost-efficient production and seamless integration into flexible electronic applications.

HOW DOES IT WORK?

HeiQ Xpectra OPV is a highly effective conductive coating based on a network of embedded precious metal wires in a flexible, transparent matrix. HeiQ Xpectra OPV has been successfully tested as transparent electrodes.

It delivers:

- **High conductivity** for efficient charge transport
- **High transparency** with a haze value of less than 5%
- **Low processing temperature**, making it compatible with flexible substrates
- **Roll-to-roll compatibility** for scalable OPV production



Supported by:



on the basis of a decision
by the German Bundestag

Development Partners



Member

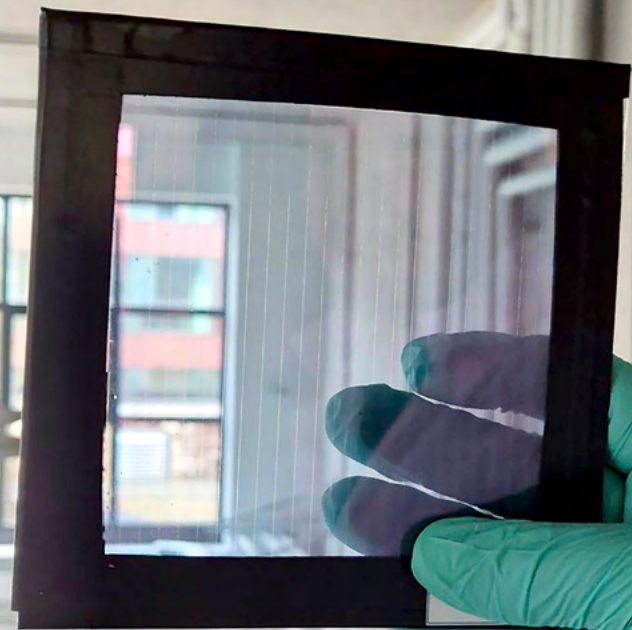


**SWISS
GERMAN
TECH
INSIDE**

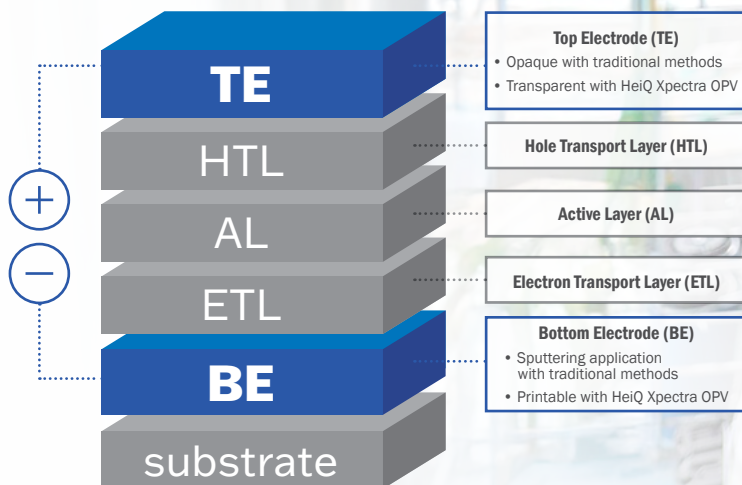
TRANSPARENT. FLEXIBLE. POWERFUL.

OUTSTANDING QUALITIES

- **High conductivity, high transparency:**
Available in $<10 \Omega/\text{sq}$, $>83\%$ TT
and $<25 \Omega/\text{sq}$, $>88\%$ TT versions
- **Low haze ($<5\%$):**
Maintains optical clarity while ensuring efficient charge transport
- **Flexible:**
Adapts to bendable substrates for next-generation solar and electronic applications
- **Scalable:**
Supports roll-to-roll processing for cost-efficient, high-volume production
- **Processable at low temperatures:**
Compatible with various materials and substrates
- **Versatile formulation:**
Available in aqueous and nonaqueous solvents for different processing needs



ARCHITECTURE OF ORGANIC SOLAR CELL



**Are you interested in HeiQ Xpectra OPV?
Get in touch!**

HeiQ Xpectra GmbH

Rudolf Vogt Straße 8-10, 93053 Regensburg, Germany

Phone: +49 941 60717-300

Email: xpectra@heiq.com