UNIVEX 250
Vacuum Coating System

In the dynamic world of scientific exploration and technological advancement, the UNIVEX 250 is your gateway to seamless coating processes, designed for universities, scientific labs, technical high schools, and industrial R&D facilities worldwide.

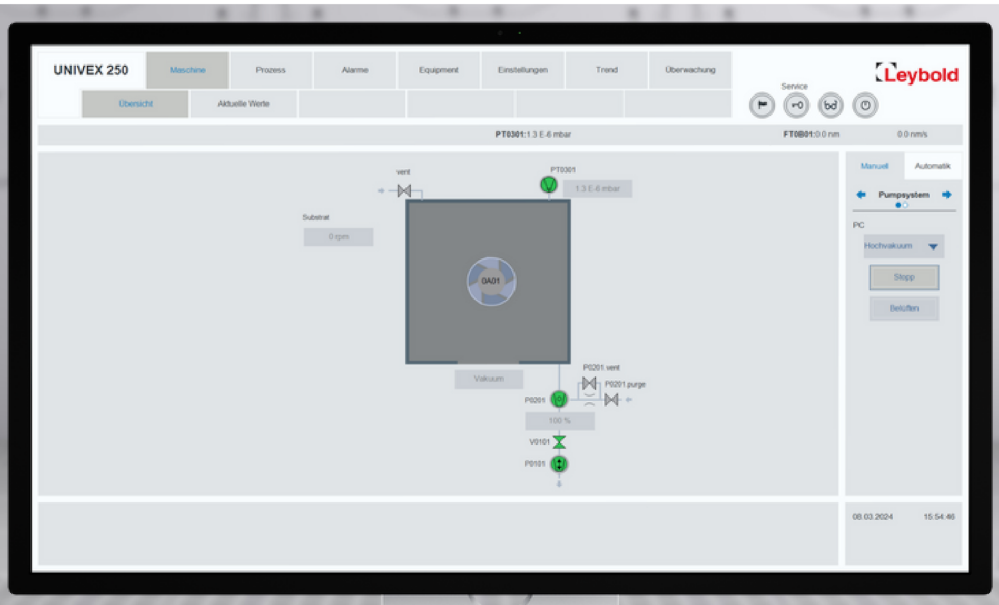
With the UNIVEX 250, you benefit from a cost-effective solution without compromising on quality or performance, meeting your diverse coating needs from contact metallization to contrast imaging for microscopy or thin film applications.

Features and benefits

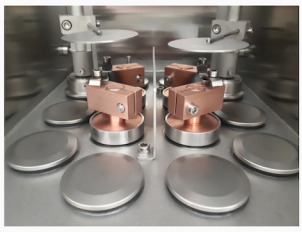
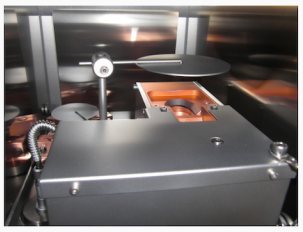
- **Cost-Effective Starter System**: Begin your coating journey without breaking the bank.
- **Simple Operation**: Intuitive controls for hassle-free operation for users of all levels.
- **Convenient Access**: Easy access to your system for maintenance and operation.
- **Modular Extendibility**: Scale your system according to evolving needs with our modular design.
- **Mobile System**: Take your capabilities wherever you go, enabling flexibility and convenience.
- **Vacuum Chamber:** Stainless steel chamber with hinged aluminium front door and inspection window.
- **Substrate Coatings**: Precisely controlled coatings for single substrates in research, development, and prototyping.
- **Maximum Substrate**: Accommodates up to Ø 200 mm.

Intelligent interface functions

- Automatic evacuation sequence
- Automatic venting sequence
- Safety interlocks
- Pressure display
- Failure indication & alarm handling
- Customizable chart configuration and storage
- System condition monitoring and preventive maintenance analysis
- Data logging and graph display for main parameters
- User administration with multiple secure access levels, Individual user level configuration
- Source selection and operation
- Film-thickness and rate control with shutter operation
- Recipe building for complete coating batch management, supporting up to 100 recipes storing and modifying coating recipes
- Optional substrate rotation and temperature control



Technical information

Version	UNIVEX 250 TE	UNIVEX 250 E-Beam	UNIVEX 250 Sputter
Coating technology	Thermal evaporation	Electron beam evaporation	Sputtering
			
Sources *	1 x single	1 x 1 4x4 cm³	1 x 2"
Power	2 kW	3 kW	500W DC 300W RF
Source shutter	Yes		
Substrate stage / substrate size	Static* / max. Ø 200mm		
High vacuum pump	TURBOVAC 450i		
Backing pump	ECODRY 35 plus*		
Mass flow control	Optional		Argon*
System control	PLC with monitor		
Film thickness sensor	Single* (quartz crystal)		Optional
Weight (kg) (approx.)	500	550	550
Chamber inside sizes (mm)	270 x 370 x 400 (width x depth x height)		
Overall sizes (mm) (approx.)	1300 x 860 x1990 (width x depth x height)		

* Further options available, upon request

System information & requirements

Power Supply	System Base Pressure	Cooling Water Supply	Compressed Air Supply
400 V, 3-phase/N/PE, 50-60 Hz	≤1 E-06 mbar (vented with dry nitrogen)	8-15 l/min at 4 bar inlet at 18–25°C (Outlet-pressure less)	4–7 bar

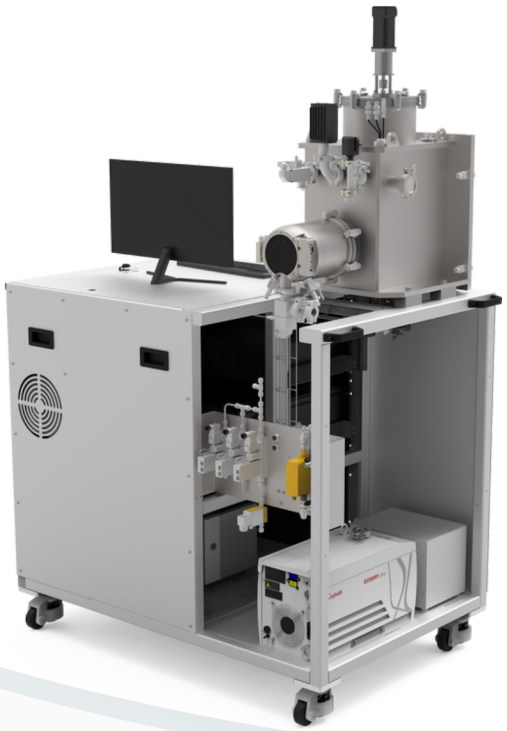
Ordering information

Version	UNIVEX 250 TE	UNIVEX 250 E-Beam	UNIVEX 250 Sputter
Part no.	505600V001	505601V001	505602V001

System compatibility

Basic Configuration Type	UNIVEX 250 TE	UNIVEX 250 E-Beam	UNIVEX 250 Sputter
Substrate rotation	•	•	•
Substrate cooling	•	•	•
Substrate heating	•	•	•
Thermal evaporator	• (Max. 4 single or 2 dual TE)	• (Max. 1 E-beam + 1 single TE or 1 dual TE)	• (Max. 2 Cathodes + 2 single TE or 1 dual TE)

• Option available for this configuration type.
Additional compatibility options: Organic evaporation, Sample BIAS.
Load Lock option available, must be specified at the time of purchase.



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