

UVC+ Lock



The UVC+ Lock is a standalone, modular airlock unit designed for the safe transfer of pallets from Grade D cleanrooms into Grade C cleanrooms or defined intermediate classes – including particulate cleaning and microbiological decontamination.

 **Cleanliness**
made in Austria

When transferring pallets between cleanroom classes, the focus is on protecting both the product and the surrounding environment. The UVC+ Lock enables the transfer from Grade D to Grade C cleanrooms or defined intermediate classes – while simultaneously ensuring particulate cleaning and microbiological decontamination. The transfer process takes place via a standalone unit that can be loaded and unloaded manually, semi-automatically, or fully automatically, depending on requirements. Thanks to its modular design and flexible customization options, the system can be seamlessly integrated into existing cleanroom processes.



symbolic image

Ortner Plus

- Patented Cleaning Frame technology with separate process control
 - Surface cleaning using jet technology
 - Microbiological decontamination via UVC irradiation (up to Log4 reduction)
- High throughput capacity (up to 5 pallets per hour)
- Validated process control
- Innovative airflow management within the system
- Designed for Annex 1-compliant airlock processes
- Extendable technical compartment for easy maintenance and calibration
- Safe and compact design
- Compatible with various material logistics systems

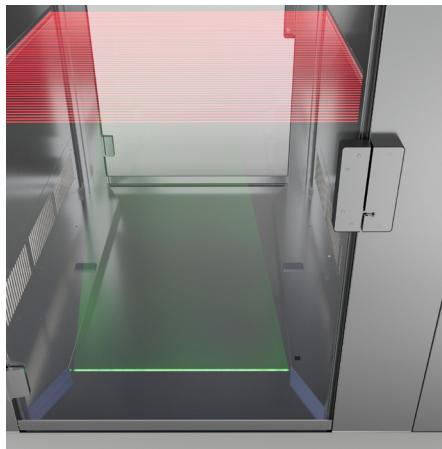


REINHEIT UMWELT
INNOVATION

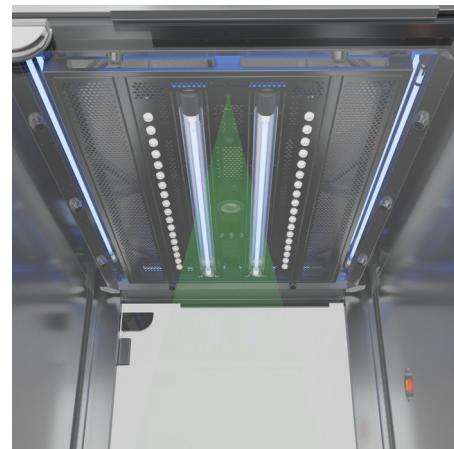
UVC+



UVC+ Lock



symbolic images



*Illustration with optional sensor package ProGuard

MODEL DIMENSIONS		
Max. load dimensions in mm (WxHxD)	External dimensions in mm (WxHxD)	Door opening angle
1000 x 1800 x 1200	2200 x 2600 x 1800	Max. 110°

ADDITIONAL OPTIONS

- Sensor package ProGuard
 - UVC light intensity sensor
 - Position sensor for load in transfer direction
 - Collision sensors for load
- Automatic door drives
- HMI on the inside with audit trail
- Interface UVC+ transport trolley active

COMMUNICATION INTERFACES

- Potential-free contacts for:
 - General fault signal (Out)
 - Emergency stop activated (Out)
 - UVC process "active" (Out)
 - Emergency open activated (Out)
 - Fire alarm (In)
 - General fault message (In)
 - External emergency stop (In)
- Ethernet
 - OPC UA

EQUIPMENT

- UVC+ transport trolley active with 3 levels

PERFORMANCE DATA	
Exterior cladding material	Stainless steel V2A (1.4301 AISI 304) brushed Ra < 1,2 µm
Material inner chamber	Stainless steel V4A (1.4404 AISI 316L) brushed Ra < 0,8 µm
Door material (glass)	VSG 2 x 5 mm tinted
Door seal	Static lip seal and floor drop-down seal
UVC output power at 254 nm	approx. 700 watts (4 x 57 W; 4 x 83 W; 2 x 70)
Particulate cleaning nozzles	10 x jet nozzles based on Venturi principle
Air circulation (lock chamber)	Air volume flow approx. 1500 m ³ /h Ionization & air cooling
Filter technology supply and exhaust air	H14 cassette filters
H14 Filter DEHS test connections	Yes
Chamber differential pressure control	"- 40 bis + 40 pascal"
Maximum sound level	< 67 dB (A)
Control system	Siemens S7 (safety relay circuit)
Operation	Outside 1 x HMI 15" (WIN10) Inside 1 x sensor button with segment display
Acoustic signaling	Visual: RGB LED singal light Acoustic: alarm signal

CONNECTION DATA & MEDIA USAGE	
Power supply	400 VAC / 50 Hz /16 A
Compressed air supply	Compressed air quality DIN ISO 8573-1 [6:4:4] min. 8 bar / 400 l/min
Supply air / exhaust air	max. 350 m ³ /h