

Safety Equipment & Solution

Laser Protection Cabin & PPE

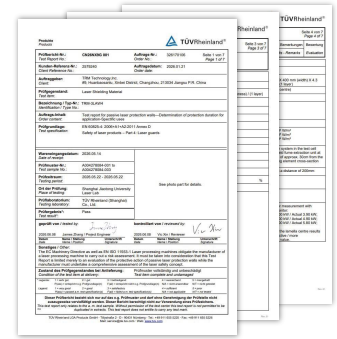


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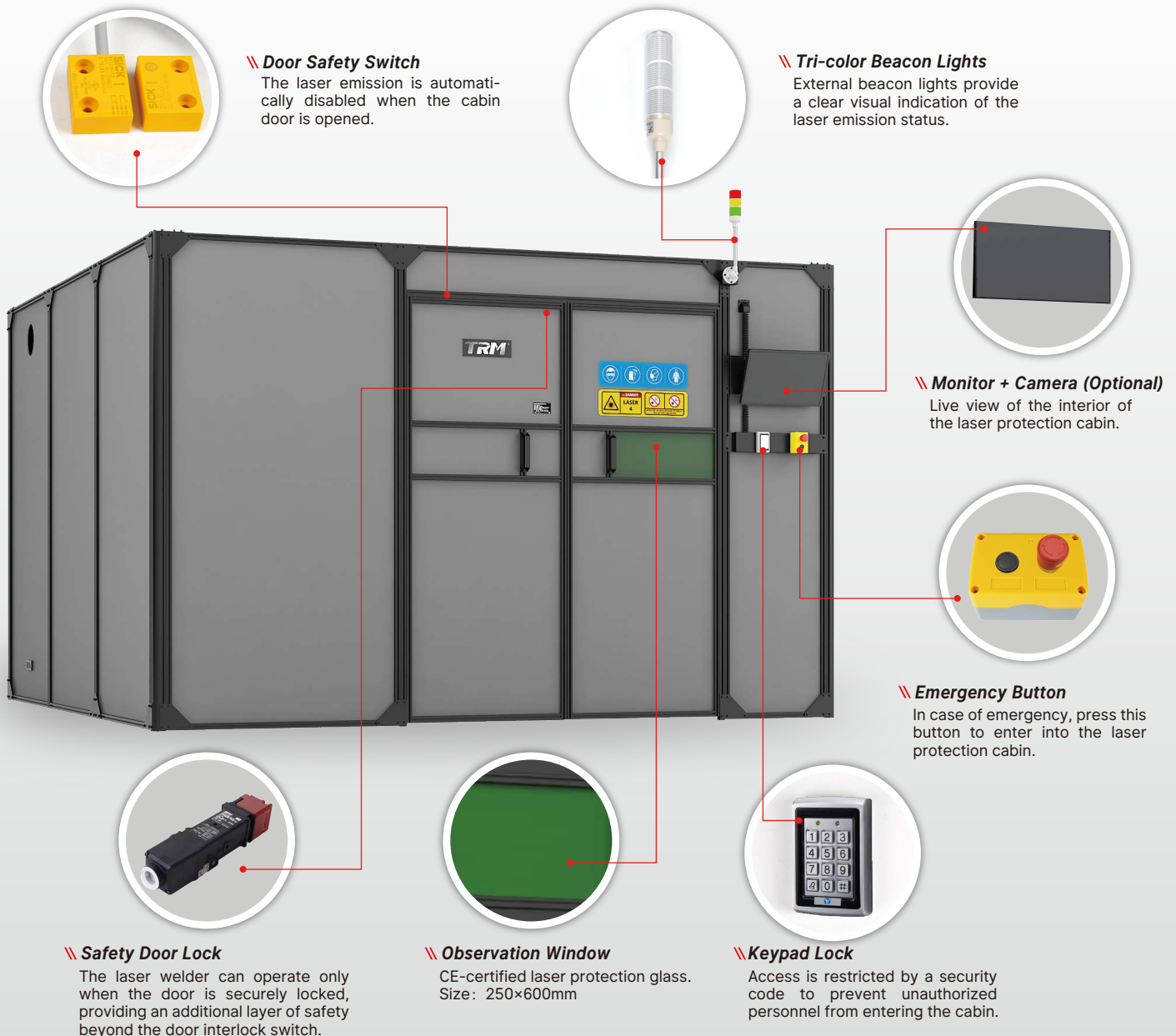
Laser Protection Cabin

- The laser protection cabin features a modular design for quick and efficient assembly.
- The panel material has been tested by TÜV in accordance with the following standard:
 - EN 60825-4:2006+A1+A2:2011 Annex D
Safety of laser products-Part 4:Laser guards
- The cabin can be integrated with the laser welding machine to provide a safety interlock system with the following features:
 - The laser emission is automatically disabled when the cabin door is opened.
 - Access is restricted by a security code to prevent unauthorized personnel from entering the cabin.
 - External beacon lights provide a clear visual indication of the laser emission status.
 - When integrated with a TRM laser welding machine, the safety interlock circuit can achieve Performance Level d (PL d).

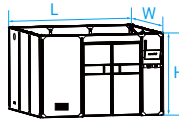
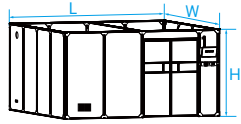
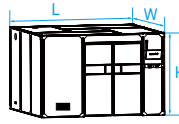
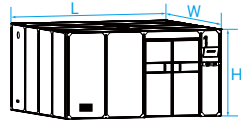


Test Report No.:CN26NX9G 001

Testing Laboratory:TÜV Rheinland(Shanghai) Co., Ltd.



Specifications

Description	Laser Protection Cabin			
Model No.	LWC-8001-00	LWC-8003-00	LWC-8002-00	LWC-8004-00
Roof	No		Yes	
Size	 L×W×H (mm): 3600×3600×2400	 L×W×H (mm): 4800×4800×2400	 L×W×H (mm): 3600×3600×2400	 L×W×H (mm): 4800×4800×2400
Laser Protection Panel Material	Aluminium composite panel, Thickness 4mm			
Framing Profile	30mm			
Laser Protection Panel Protection Capacity	≥1.133x10 ⁶ W/m ² ×100s @1030nm, Diameter 75mm (Test standard DIN EN 60825-4) 1.360x10 ⁶ W/m ² ×71s @1030nm, Diameter 75mm (Test standard DIN EN 60825-4)			
Laser Protection Glass Protection Capacity	900-1030nm: D AB6+I AB6, OD>6 1030-1400nm: D AB4+I AB8+R AB8, OD>7 1400-1700nm: D AB2+I AB3 LP, OD>6			
Door Size	W×H (mm):1800×2140			
Remarks: 1. The laser protection cabin can be expanded in 1.2 × 2.4 m modular sections, providing flexibility for different workspace requirements. 2. The cabin is supplied with pre-assembled panel modules for quick and efficient installation.				

Configurations

A. Door Lock Control System			
Item	Description	Qty	Legend
A	Door Control System (Including circular connectors and cables)	1	
A-1	Safety Door Lock	1	
A-2	Keypad Lock	1	
A-3	Emergency Button	1	
A-4	Exit Switch	1	
A-5	Door Safety Switch	1	
A-6	Proximity Switch Extension Cable	1	

B. Monitoring System			
Item	Description	Qty	Legend
B	Monitoring System	Optional	
B-1	Camera		   
B-2	Network DVR		
B-3	2TB Data Hard Drive		
B-4	Monitor		

C. Other Accessories			
Item	Description	Qty	Legend
C-1	Lighting	2	
C-2	Tri-color Beacon Lights	1	
C-3	Ventilation Fan	1	

Note:

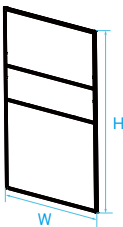
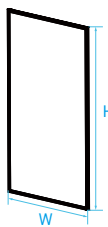
1. This configuration list is for the roofed laser Protection Cabin.
2. For the open-top version, please consult our sales representative.

Portable Laser Protection Panels

- The panel material has been tested by TÜV in accordance with the following standard:
 - EN 60825-4:2006+A1+A2:2011 Annex D
Safety of laser products-Part 4:Laser guards
- The mobile, modular design allows for quick deployment and easy repositioning as needed. The panels provide a high level of laser protection, making them suitable for a wide range of laser-related applications.



Specifications

Description	Portable Laser Protection Panels	
Model No.	LWC-3518-00	LWC-3517-00 (Without Window)
Size	 W×H (mm): 1200×2400	 W×H (mm): 1200×2400
Laser Protection Panel Material	Aluminium composite panel, Thickness 4mm	
Framing Profile	30mm	
Laser Protection Panel Protection Capacity	$\geq 1.133 \times 10^6 \text{W/m}^2 \times 100\text{s}$ @1030nm, Diameter 75mm (Test standard DIN EN 60825-4) $1.360 \times 10^6 \text{W/m}^2 \times 71\text{s}$ @1030nm, Diameter 75mm (Test standard DIN EN 60825-4)	
Laser Protection Glass Protection Capacity	900-1030nm: D AB6+I AB6, OD>6 1030-1400nm: D AB4+I AB8+R AB8, OD>7 1400-1700nm: D AB2+I AB3 LP, OD>6	
Remarks: Multiple panels can be connected on-site in L-shaped, U-shaped, zigzag, or custom configurations to accommodate different workspace requirements.		

Configurations

No.	Description	Legend
1	Laser Protection Panel (With window)	
2	Laser Protection Panel (Without window)	
3	Metallic Light Shield	

No.	Description	Legend
4	Laser Protection Glass (Size:400×1154mm)	
5*	Caster Beam Assembly	
6*	Flexible Light Shield	

* Optional

Laser Protective Eyewear

- The laser protective eyewear complies with the requirements of EN 207:2017 and is CE certified by ECS GmbH.

Specifications

Order No.	LP-ADY-3-DIN4-33	LP-ADY-3-DIN4-305
Main protection band	900-1100nm	
Material	TR90 Frame, PC Filter	
Transmittance	6%	
Optical Density	900-1100nm OD8+DIN4	
LB-Rating	900-1100nm D LB6 +IR LB8 LP CE	



CE Certificates



LP-ADY-3-DIN4-33



LP-ADY-3-DIN4-305

Laser Protective Helmet

- The laser protective helmet is CE certified by ECS GmbH. With the optional interlock kit, it can be seamlessly integrated with a TRM laser welding machine to provide an additional layer of safety through the machine's interlock system.

Specifications

Order No.	LPH-9301-00	LPH-9101-00
Material	Polycarbonate, plastic	Polycarbonate, glass-glass lamination, Polyamide
Filter	Laser Filter	LCD with Laser Filter
Filter Size	114×133×10mm	114×133×9mm
View Size	106×120mm	100×60mm
Shade No.	W2.5	W2.5~5
Low Battery Indicator	-	Yes
Visible Light Transmission	20% (W2.5)	25% (W2.5) 15% (W3) 10% (W3.5) 5% (W4) 2% (W5)
Filter Peak Wavelength Transmittance	W2.5:529nm (>30%)	-
Red Light(650nm) Transmittance	>5%	>15%
Wavelength 900-1000nm	OD6+	OD6+
Wavelength 1000-1080nm	OD7+	OD7+
Eye- and face protection	900-1100 D LB7 IR LB8 CE	900-1080 D LB7 IR LB8 CE
Head-protection	900-1100 D LB5 I LB7 R LB8 CE	900-1100 D LB5 I LB7 R LB8 CE



CE Certificates



LPH-9301-00



LPH-9101-00



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