

## POE-P502M/P501W/P502MR : Encapsulating solutions for long term durability modules and N-type mono bifacial modules 耐久型组件及N型单晶双面发电组件封装解决方案

### 产品介绍

HIUV POE--P502M/P501W/2MR2POE胶膜为交联型POE胶膜，作为光伏组件封装材料，POE胶膜比EVA胶膜的耐老化性更强，使用年限更持久。

### 产品特色

POE胶膜最大的优势就是低水汽透过率和高体积电阻率，保证了组件在高温高湿环境下运行的安全性及长久的耐老化性，使组件能够长效使用。

海优威POE胶膜层压成品率高，气泡少，层压时间短，交联度高，产品储存期长。

### Introduction

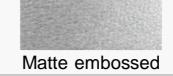
HIUV POE—P502M/P501W/P502MR are pre-cross linking POE film, used in PV modules just like EVA film, but ageing resistance of POE film is much stronger than EVA film.

### Characteristics

The advantage of POE is lower water transmittance and higher volume resistivity, which promises all panels work safety and have ageing resistance ability for a long time in high damp-heat environment.

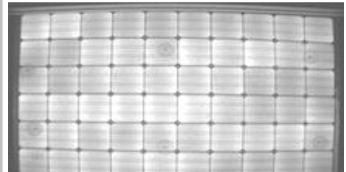
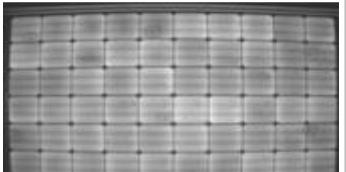
HIUV POE have high lamination yield with little bubbles. Can shorten laminating time, with high degree of cross linking.

### 产品系列 Product series

型号 model	类型 type	压花类型 embossed type	性能及用途 property And usage
P502M	透明 Transparent	 pyramidal embossed	用于长期耐候型组件 For long term durability PV modules
P501W	白色 White color	 Matte embossed	用于提升组件功率 For increase module power efficiency.
P502MR	透明 Transparent	 pyramidal embossed	N型单晶双面发电组件专用，抗PID能力强 For N Type mono bifacial module encapsulation with super anti-PID abilities.

**P502MR专用于N型单晶双面发电组件，抗衰减、抗PID能力强**

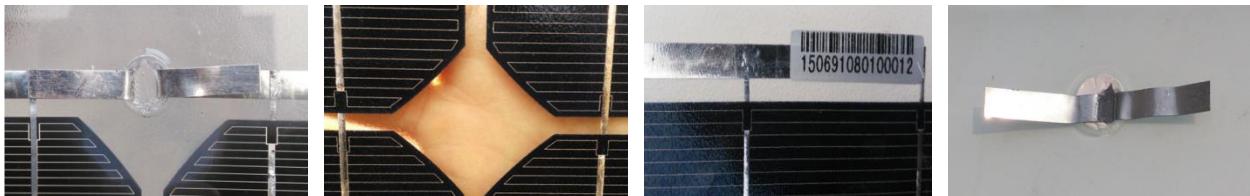
P502MR provide super power resistance and anti-PID ability for N Type mono bifacial module.

型号 model	客户N型单晶双面发电组件测试不同品牌POE抗衰减、抗PID性能 Customer N-type mono bifacial module power resistance and anti-PID ability comparison ( PID test :85°C,RH85%, -1000V,192h, EL)			
HIUV POE P502MR	Before test		After 192hrs Power drop1.4%	
POE brand A	Before test		After 192hrs Power drop16.5%	

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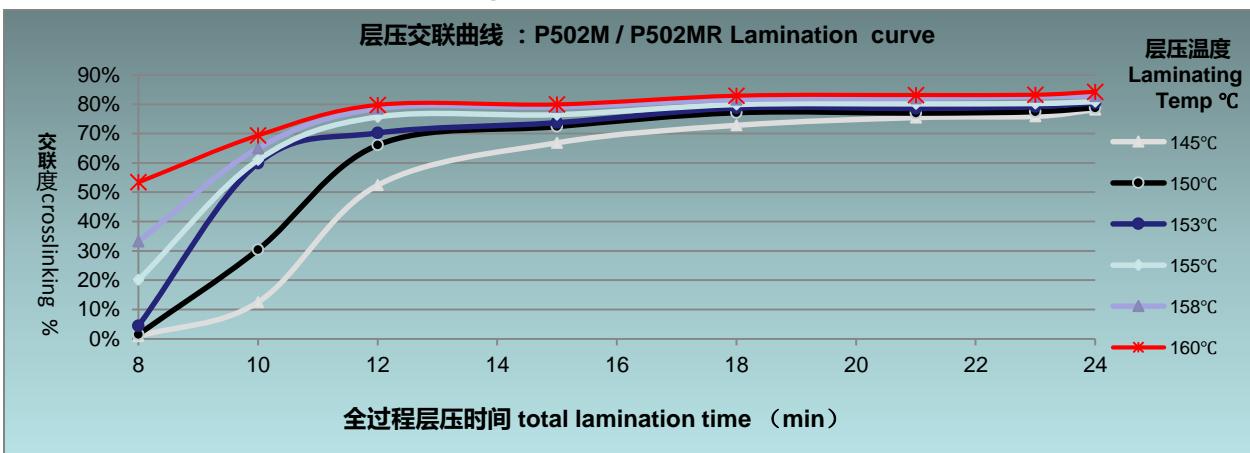
层压成品率高，气泡少，无并片，白色POE-P501W无溢白，无褶皱。

High lamination yield, little bubbles, no cell string moving, White POE P501W-No white over flow, no wrinkles.



层压参数 suggest laminating parameters:

Temp 150-160°C, vacuum 6--7 min, keeping12-15 min.



### 性能参数 Property

性能 Property	单位 Unit	测试方法 Test Method	P502M	P501W	P502MR
宽度 Width	mm	HIUV method	970-1000		
厚度 Thickness	mm		0.60±0.10	0.50±0.10	0.60±0.10
透光率 Optical Transmission ( 380-1100nm )	%		> 91	----	> 91
反光率 Light reflectivity ( 400-700nm )	%		---	> 90	----
交联度 Gel content (155°C,18min)	Gel%	HIUV method	> 70		
收缩率 Shrinkage Rate ( 120°C, 3min)	%		MD≤4.0		
			TD≤1.5		
与玻璃剥离强度 Peeling Strength With Glass	N/cm	ASTM D903	> 60		
与TPE背板剥离强度 Peeling Strength With TPE	N/cm		> 50		
体积电阻率 Volume Insulating Resistance	Ω. cm	GB/T1410-2006	> 1*10 <sup>14</sup>		> 1*10 <sup>16</sup>
耐紫外黄变 UV Light Resistance (120kWh/ m2)	△YI	ASTM G154	< 5.0		
耐湿热黄变Heat/Humidity Resistance (80°C, 85%RH,1000hr)	△YI	ASTM E313	< 5.0		