

OPTOLITE™ EMISHIELD MICROMESH

Emishield Micromesh products which have been developed to give excellent shielding performance and offer unequalled light transmission and clarity. Furthermore Instrument Plastics can now offer 85, 100 and 150 OPI Micromesh variants which can be supplied with Protective film and adhesive if required. This means that the Micromesh can be directly applied to Glass or polycarbonate displays if needed. However in order to achieve the best optical finish as well as ensure longevity we would recommend integrating the mesh in a fully laminated window.

Physical property parameters							
item	unit	Performance Index			Detection Method	Remark	
		IP-100	IP-150	IP-85			
Thickness	Protective film	µm	50~60			ASTM D374	Material:PE
	Transparent conductive film	µm	100±5				Material:PET
	Adhesive	µm	20±5				Optical pressure sensitive adhesive
	Release liner	µm	38±5				Material:PET
Mesh shape			square 45 degree grid				
Mesh width	µm	17	17	21			
Mesh spacing	µm	238	143	255			
Visible light transmittance	%	≥80	≥75	≥81	GB/T 2410-2008		
Surface resistance (conductive side)	W/□	≤0.2	≤0.2	≤0.2	Four probe surface resistance tester		
Adhesion (conductive side)		At least reach two-grade			GB/T 9286-1998		
Adhesive peel strength	g/25mm	≥100			GB/T 2792-1998	For glass panel	
Wet-heat resistant property	Resistance variation	%	≤30			65℃、90% 100hours	ΔR/R0
	Light transmittance change	%	≤5				ΔT/T0

Main performance												
Model	Transmittance	Frequency(DB)										
		14K	100K	10M	30M	150M	450M	950M	1G	3G	6G	10G
IP-100 (100 Mesh)	>80%	8	9	32	41	66	51	47	47	35	31	26
IP-150 (150 Mesh)	>75%	11	13	38	49	76	63	55	53	44	40	35
IP-85 (85 Mesh)	>81%	8	9	30	40	63	50	45	45	35	30	25