

Datasheet

UniPixel's Diamond Guard™ DG-H hard coat cover film with self-wetting adhesive protects displays from scratches and abrasions on the screen surface. Diamond Guard™ is a crystal clear, super hard polymer film that looks like glass. The result is a *Clearly Superior™* touch screen viewing experience.

KEY FEATURES

1. Glass-like Surface
2. Super Hard
3. Optically Clear
4. Screen Protection
5. Easy Installation with self-wetting adhesive

**Diamond Guard™ DG-H
Film Layers**



Diamond Guard™ Technical Specifications

Category	Specification	Test Method	Diamond Guard™ - Hard Coat H
Dimensions	Hard Coat Layer		0.005mm to 0.025mm
	Carrier Film		0.100mm (4mil) PET
Optical Performance	Refractive index		1.52 Hard Coat material only @ 550nm
	Transmission	ASTM D1003	1.5% increase due to Hard Coat on PET (free standing film measurement)
	Haze	ASTM D1003	<0.6% - base PET haze <0.6% - Hard Coat on PET (free standing film measurement)
	Gloss	ASTM D523	20° = 92, 60° = 97, 85° = 95
	Brightness Loss	Photometer	<1.7% decrease when film is laminated to display
Physical Properties	Surface Energy	Contact Angle Goniometer Measurements	<27 dynes/cm (water contact angle: 88±2°)
Wear	Abrasion	Tabor with Denim, 1000 cycles, 500g	Transmission: 0.4% loss after test Haze: 0.0% change after test
Scratch Resistance	Hardness	ASTM D3363	H
Thermal Stress	Operating Temperature	-20°C to 65°C, 100 cycles	Pass
	Storage Temperature	-40°C for 48 hrs, 85°C for 240 hrs @ 85% Humidity	Pass
Chemical	Chemical Resistance	ASTM D1308: exposure* for 1 hour @ 70°F	Resistant

*IPA, acetone, Windex, vinegar, coffee, tea, cola, ketchup, mustard