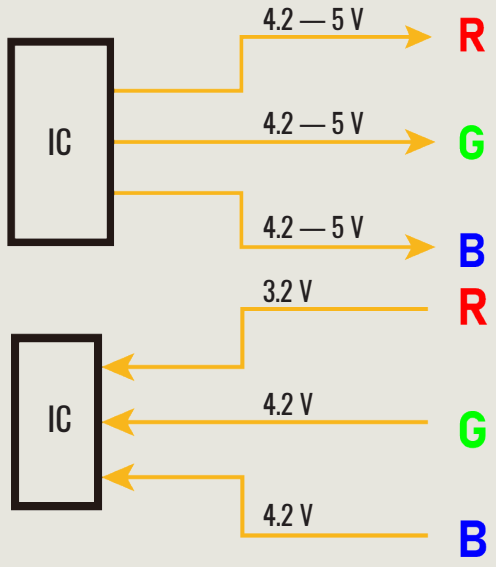
Ember Elite	P1.2	P1.5	P1.9
LED type		Flip Chip SMD	
Pixel Pitch (㎜)	1.25	1.5625	1.953
Pixel Density (dots/m^2)	640000	409600	262144
Module Size (㎜)		250 × 250	
Module Resolution (dot)	200 × 200	160 × 160	128 × 128
Panel Size (㎜)		500 × 500 × 75.4	
Panel Resolution	400 × 400	320 × 320	256 × 256
Material		Die-casting Aluminum	
Weight (kg/pcs)		10.5	
Brightness (cd/m^2)		3000	
Viewing Angle (H)		160°	
Viewing Angle (V)		140°	
Max Power (W/m^2)		680	
Avg Power (W/m^2)		227	
Refresh Rate (Hz)		⩾ 3840	
IP rate		IP65 / IP54	
Contrast Ratio		10000:1	
Black Area Proportion	96.5 %	97.8 %	98.5 %
Operating T&H		-10 ~ 40℃ & 10 %~80 % RH	
Storage T&H		-30 ~ 60℃ & 10 %~85 % RH	
Installation Method		Front & Rear	
Maintenance method		Front & Rear	



Common Cathode

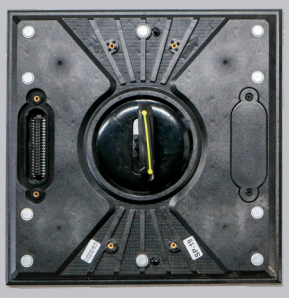
Ember Elite series utilizes common cathode design. While the power consumption of the screen greatly drops down, the heat generated will also be correspondingly reduced.

Extremely High Contrast

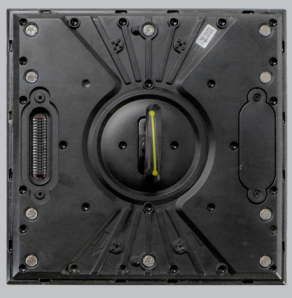
① MIP LED lamp, has more spaces for black color which increases the contrast ratio.
② The surface and bottom of LED package with blackening improve the contrast in multiple ways.
③ PCB blackening process brings further black background.
④ Colorless GOB layer won't be affected by UV fading and yellowing; furthermore it almost keeps the original brightness.

Lower Heat & Higher Precision

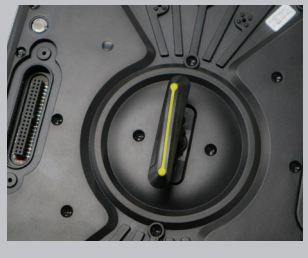
Better thermal management and smoother display surface can be achieved by the die-cast aluminum module shell.



PC



Die-casting Aluminum



Pixel Reinforced Technology

All Ember series is able to be added pixel reinforced process if neccessary. And the pixels at the panel edge will be protected better from frequency bumping.

Normal

Bumped

Next-Generation High-Brightness and High-Contrast Qutdoor Fine-Pitch Display Powered by Flip Chip Mini LED Technology and Advanced Surface Treatment

1.Challenges of Conventional Qutdoor White LED Displays

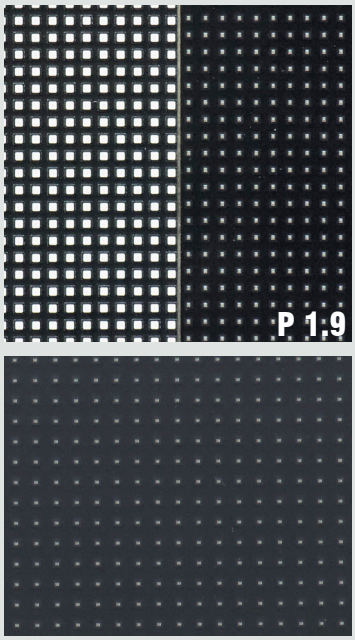
Typically, outdoor white LED displays with a 2.6mm pitch have a black area coverage of only 66%, leaving more than one-third of the surface appearing white. As a result when displaying black screens, the effect is far from achieving true black, significantly limiting the contrast performance.

2. Innovations Brought by SHISAI's "Ember Elite"

SHISAI's Ember Elite series combines Flip Chip Mini LED technology with advanced surface treatment techniques to achieve an impressive 99.2% black area coverage even at a 2.6mm pitch.

This enables perfect black representation during black screen displays and maintains an outstanding contrast ratio of over 5000:1 even in outdoor environments.

This breakthrough technology bridges the gap, bringing the stunning image quality of indoor fine-pitch displays to outdoor applications.



3. Black Area Coverage Across Ember Elite Series

The black area coverage rates of SHISAI's "Ember Elite" series models are as follows:

Ember Elite				
Pitch	Black Area Coverage	White Area Coverage	LED Area Proportion	Chip Area Proportion
3.9 mm	99.64%	73.79%	26.21%	0.36%
2.9 mm	99.39%	74.6%	25.4%	0.61%
2.6 mm	99.2%	66.82%	33.18%	0.8%
1.9 mm	98.58%	62.21%	37.79%	1.42%
1.5 mm	97.78%	59.04%	40.96%	2.22%
1.25 mm	96.53%	36%	64%	3.47%