

# 2023 NEW



## TUSM SERIES LED DISPLAY MODULE

TUSM is an LED module that can be applied to mainstream control systems and the self-developed control system of Leyard. TUSM modules use Nationstar LED lamps and PWM drivers. Leyard's professional LED components engineers control the production of raw materials, and strict manage the craft, process-es, and production. TUSM series is flexible, lightweight, easy to install and maintain, and is widely used in building facades, shopping malls, weddingdecorations,and festive events.



- ◇ High-performance flame-retardant suite, reliable and safe.
- ◇ Common HUB board.
- ◇ 160° wide viewing angle.
- ◇ Pixel by pixel calibration technology for better display.
- ◇  $\geq 100\%$  NTSC color gamut makes the display more realistic.
- ◇ No-clean solder paste printing, full penetration of welding feet.

### PRODUCT IMAGES



# TECHNICAL PARAMETERS

## TUSM SERIES INDOOR

Item	TUS-P15-M	TUS-18-M	TUS-P2-M	TUS-P25-M	TUS-P3-M	TUS-P4-M
Pixel Configuration	SMD	SMD	SMD	SMD	SMD	SMD
Pitch(mm)	1.538	1.86	2.0	2.5	3	4
Module Resolution(WxH)	208x104	128x128	160x80	128x64	64x64	64x32
Module Size(mm)(WxHxD)	320x160x17	240x240x17	320x160x17	320x160x17	192x192x16.5	256x128x16.5
Module Weight (Kg)	0.46	0.46	0.45	0.45	0.275	0.23
Unit Area(m')	0.0512	0.0512	0.0512	0.0512	0.03686	0.03277
Pixel Density	422500	288906	250000	160000	111111	62500
Brightness(nits)	≥500	≥500	≥600	≥600	≥600	≥600
Color Temperature(K)	3000 - 15000 Adjustable					
Horizontal Viewing Angle(°)	160	160	160	160	160	160
Vertical Viewing Angle(°)	160	160	160	160	160	160
Deviation of LED Luminance Center	<3%	<3%	<3%	<3%	<3%	<3%
Brightness Uniformity	≥97%	≥97%	≥97%	≥97%	≥97%	≥97%
Contrast Ratio	5000:1	5000:1	5000:1	5000:1	5000:1	5000:1
Max Power Consumption(W/m2)	≤438	≤504	≤427	≤385	≤456	≤385
Average Power Consumption (W/m2)	≤146	≤168	≤142	≤128	≤152	≤128
Power Supply	AC100-240V(50-60Hz)					
Drive Mode	Constant Current 52S	Constant Current 43S	Constant Current 32S	Constant Current 32S	Constant Current 32S	Constant Current 16S
Frame Rate(Hz)	50&60	50&60	50&60	50&60	50&60	50&60
Refresh Rate(Hz)	≥3840	≥3840	≥3840	≥3840	≥3840	≥3840
Lifetime(hrs)	50,000	50,000	100,000	100,000	100,000	100,000
Operation Temperature(°C)	-10 ~ 40	-10 ~ 40	-10 ~ 40	-10 ~ 40	-10 ~ 40	-10 ~ 40
Storage Temperature(°C)	-20 ~ 60	-20 ~ 60	-20 ~ 60	-20 ~ 60	-20 ~ 60	-20 ~ 60
Operation Humidity(RH)	10-80% no condensation					
Storage Humidity(RH)	10-85% no condensation					
Chip Brand Support	Harvatek (Taiwan)					

## TUSM SERIES OUTDOOR

Item	TUS-P4-OHA	TUS-P5-OHA	TUS-P6-OHA	TUS-P8-OHA	TUS-P10-OHA
Pixel Configuration	SMD	SMD	SMD	SMD	SMD
Pitch(mm)	4	5	6	8	10
Module Resolution(WxH)	64x32	64x32	32x32	32x16	32x16
Module Size(mm)(WxHxD)	256x128x17	320x160x17.4	192x192x18	256x128x18	320x160x25
Module Weight (Kg)	0.32	0.48	0.34	0.30	0.46
Unit Area(m')	0.03277	0.0512	0.03686	0.03277	0.03277
Pixel Density	62500	40000	27778	15625	10000
Brightness(nits)	≥ 5000	≥ 5000	≥ 5000	≥ 5000	≥ 5000
Color Temperature(K)	3000-15000 Adjustable				
Horizontal Viewing Angle(°)	160	160	160	160	160
Vertical Viewing Angle(°)	160	160	160	160	160
Deviation of LED Luminance Center	<3%	<3%	<3%	<3%	<3%
Brightness Uniformity	≥97%	≥97%	≥97%	≥97%	≥97%
Contrast Ratio	5000:1	5000:1	5000:1	5000:1	5000:1
Max Power Consumption(W/m2)	667	656	798	833	967
Average Power Consumption (W/m2)	222	219	266	278	383
Power Supply	AC100-240V(50-60Hz)				
Drive Mode	Constant Current 8S	Constant Current 8S	Constant Current 8S	Constant Current 8S	Constant Current 8S
Frame Rate(Hz)	50&60	50&60	50&60	50&60	50&60
Refresh Rate(Hz)	3840	3840	3840	3840	3840
Lifetime(hrs)	100,000	100,000	100,000	100,000	100,000
Operation Temperature(°C)	-20 ~ 60	-20 ~ 60	-20 ~ 60	-20 ~ 60	-20 ~ 60
Storage Temperature(°C)	-20 ~ 60	-20 ~ 60	-20 ~ 60	-20 ~ 60	-20 ~ 60
Operation Humidity(RH)	10-80% no condensation				
Storage Humidity(RH)	10-85% no condensation				
Chip Brand Support	Harvatek (Taiwan)				

Remake: Above data is subject to cMnge without previous notice

### TWT APPLIED TECHNOLOGY AND SERVICES PTE LTD

TWT reserves the right to make product appearance , dimensions and specifications alternations.

TWT APPLIED TECHNOLOGY AND SERVICES PTE LTD reserves the ultimate right to the interpretation of this catalogue.

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