# LED DISPLAY SOLUTIONS

creating experiences that excite

# CHOOSING THE RIGHT SOLUTIONS PARTNER

Selecting the right LED video display solution can be a daunting task. The quality, performance and cost of the product as well as the company behind the installation, service, and support, are amongst the leading factors in the decision making process.

As a world-class Audio Visual electronics company, Panasonic applies decades of engineering and design expertise to provide a complete end-to-end solution.



### CONSULTANCY

Panasonic understands the the complexity of the decision making process when it comes to choosing the right technology, and we aim to make this as easy as possible. Our industry professionals have years of experience and are here to help you every step of the way.

# **DESIGN**

With over 30 years experience in the LED Signage Solutions Market, Panasonic has a wealth of knowledge when it comes to designing the right turnkey system for your business, and remains one of the longest standing LED display providers, with a number of LED installations across the worldwide.

## COLLABORATION

As part of the company's commitment to offering a full turnkey solution, Panasonic also works closely with a range of industry partners to ensure our solutions successfully address all of your business needs.



# COMMUNICATION WTHOUT BORDERS

The Panasonic brand is synonymous with cutting edge video technology and our high resolution LED displays are no exception.

With an abundance of screen options and continually advancing technology, Panasonic is perfectly positioned to help you take the edge off when choosing the right display solution. Bezel-less LED displays are able to deliver an all screen experience and be customised to any shape and size, and to suit any type of environment.



# ENGINEERED TO PERFECTION

Reliable die-cast manufacturing creates a flawless image with no gaps between modules.



#### CUSTOMISED DESIGNS

LED displays offer more than your traditional LCD screens. Panasonic's bespoke designs can be tailored to meet any business requirement, providing effective and long lasting branding or messaging.



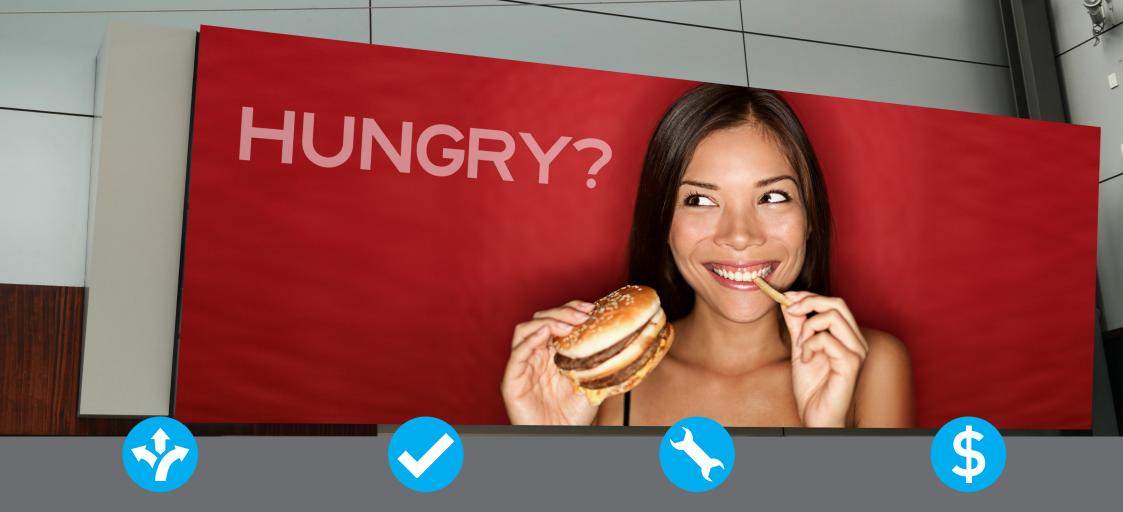
#### **INTELLIGENT**

Panasonic intelligent series provides – thin/low weight intelligent module. Less wired connection, and smarter control.



#### /IEWABLE FROM ANY ANGLE

An extra wide 160° viewing angle, both vertically and horizontally, means maximum exposure and visibility.



# FLEXIBLE PURCHASE OPTIONS

Do you need finance or the flexibility of hassle free monthly repayments? Whatever your requirement, Panasonic is able to consider the multiple purchasing options to best suit your needs.

### PERFECT PITCH

With an incredibly diverse pixel range from 0.9 fine pitch indoor displays to robust 20mm outdoor displays, Panasonic has the ability to deliver dazzling picture quality that engages viewers in any environment.

# STRESS FREE INSTALLATION

Installation of your Panasonic LED display is quick and effortless due to its modular design, saving you time and resources, whilst minimising overall project costs.

#### **SUPPORT & MAINTENANCE**

Keep your display looking great and ask our expert team about support and maintenance packages to help keep your business running smoothly and reduce the daily stresses from your day to day operations.



# OUTDOOR DISPLAYS

Panasonic's range of large format outdoor LED displays deliver the most vibrant images with unrivalled brightness and clarity, rain or shine. From theatre and shopping mall entrances to sports stadiums, we have what you need for any occasion.

### THE PERFORMANCE BENCHMARK

The PFS Series is our classic line of fixed outdoor LED displays. As one of the most popular products in the line up, the PFS Series has been in production for over a decade, undergoing continuous improvements in its design and performance that have established it as the benchmark in LED displays today. Modules are separated from the power supply to double heat dissipation channels, which helps to extend the service lifespan to maximize the investment returns for you.

### THE LATEST TECHNOLOGY

The latest technology of outdoor module with smaller pitch size 3.9 and 4.8mm.



# INDOOR DISPLAYS

Panasonic offers a wide range of indoor LED displays in varying sizes and pixel pitches. Regardless of the series, our displays are a guaranteed stand out and are suitable for a variety of locations including concert arenas, conference venues, retail environments, control rooms, and even broadcast studios.



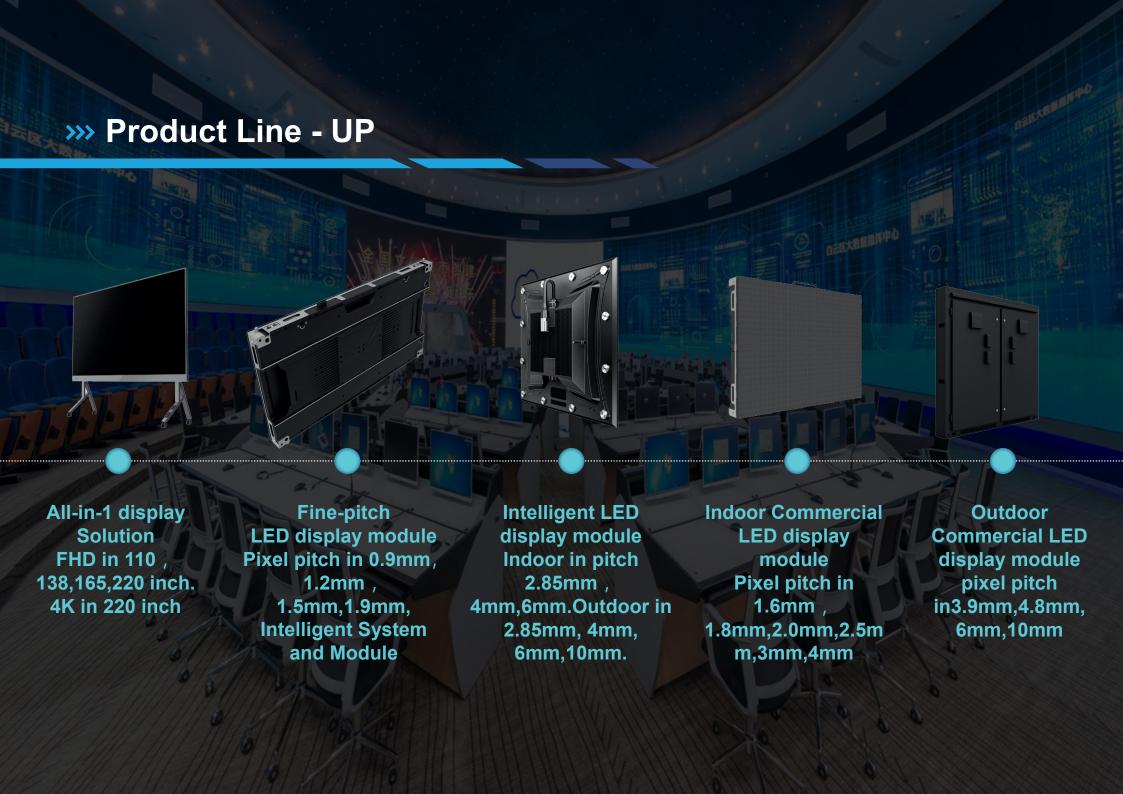
### SLEEK CLEAN DESIGN

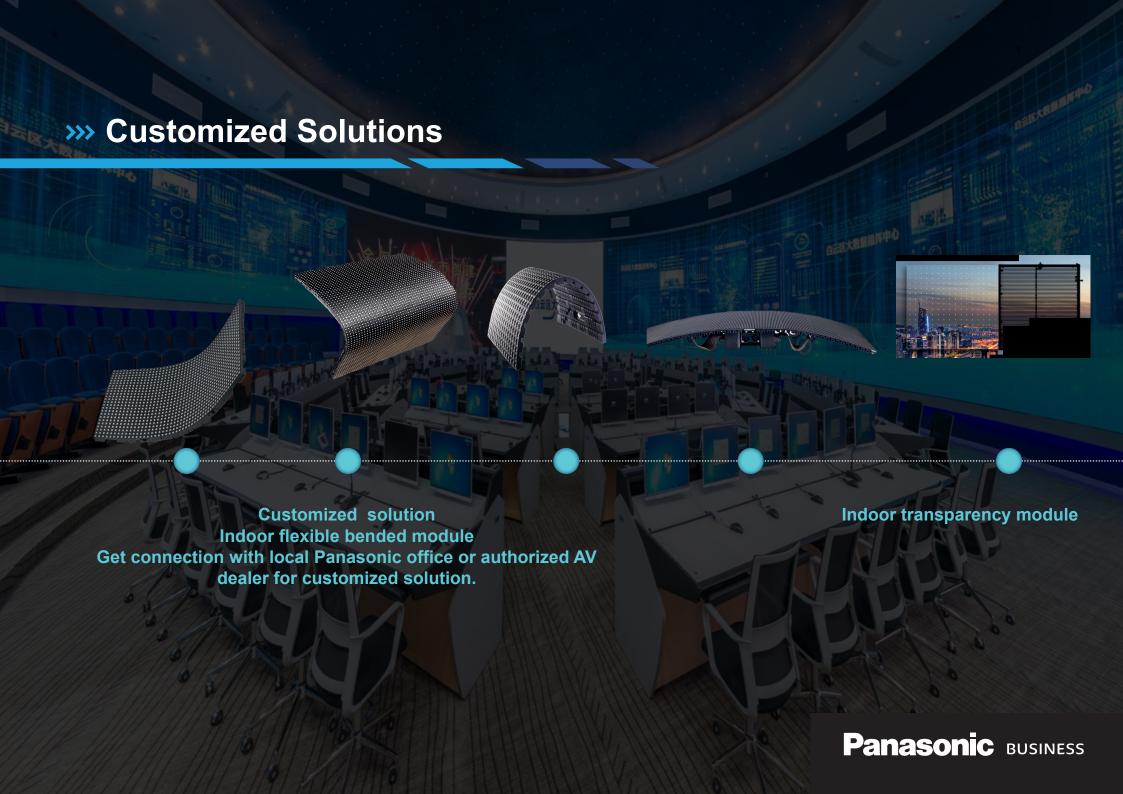
The PVF Series incorporates a small pixel pitch slick and clean design. With a sleek back, no cables or wires are exposed on the exterior, making the rear side of the LED screen just as attractive as the illuminated front.



### FEATURE PACKED

The PVF Series combine several design features that ensure ease of installation, with clear, vibrant, colorful images. Status of cabinet can be monitored Intelligent data backup, one-button reset, auto module calibration, and arbitrary rotation of display content are supported as well. Exclusive Powder Coating& Ink processing layer technology, no gaps in between LED tiles. Better image display quality & higher contrast.







# OUTDOOR DISPLAY SPECIFICATIONS

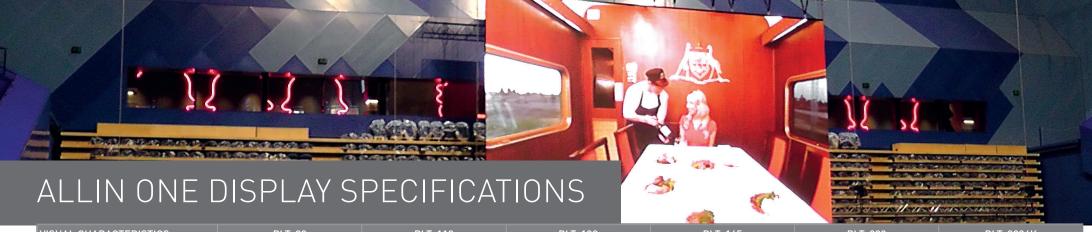
VISUAL CHARACTERISTICS	PFS6	PFS10	PFL3T	REP3T	REP4T				
Pitch size	6mm	10mm	3.9mm	4.8mm					
Module Dimensions(w x H/mm)	960 x 960	960 x 960	500 x 1000	500 x 500	500 x 500				
Raw Material of Module Cabinet	Steel	Steel	Steel	Aluminum Die Casting	Aluminum Die Casting				
Module Weight(kg/pcs)	<b>⇒</b> 51	<b>⇒</b> 51							
Application	Outdoor - Fix installation only Outdoor - Fix installation only Outdoor								
Ingress Protection			IP65/54 (front/rear mod	ule)					
Resolution by Module(Wx H)	160 x 160 pixels	96 x 96 pixels	128 x 256 pixels	128 x 128 pixels	104 x 104 pixels				
Power Consumption approx. (w/sqm)	<b>⇒</b> 700	≒ 700 (I	≒ 850w Based on 5000 nits max. brigh	⇒ 740w (Based on 6000 nits max. brightness)	⇒ 740 w (Based on 6000 nits max. brightness)				
Brightness at White Balance	6000 nits	6000 nits	5000 nits	5000 nits	5000 nits				
Visible Angle (Horizontal)			+-80°						
Visible Angle (Vertical)			+-80°						
Maintenance	Front or Rear (could be decided) Front or Rear (could be decided) Rear Front or Rear (could be decided) Front or Rear (could be decided)								
Processing Bit			16 bits						
Grey Scale			16 bit						
Dimming Level			16 levels						
Brightness Control (min)			16 levels						
Pixel Configuration			1R 1G 1B SMD						
Frames Rate			60Hz						
Colour			281 trillions						
Refresh Rate			1920 Hz						
LED Panel Uniformity Adjustment			Adjustment by softwa	re					
Lifetime			100,000 hours						
Gradation			65,536 Levels						
Power Source Input Voltage	AC 240V±10% / 50~60Hz								
Colour Temperature	3500° K - 9500°K Fully Adjustable								
Video Compatibility	PAL、NTSC								
Graphics Compatibility	DVI、S- Video、HDMI								
Operating Temperature	-20 - +50°C								
Redundancy	Signal redundancy back up (option)								
Auto Detect	Module Temp./Signal flow/Power supply unit								
Contrast	3500:1								



VISUAL CHARACTERISTICS	PVF0.9	PVF1.2	PVF1.5	PVF1.9	PVF2.5	VMP1.6	VMP1.8	VMP2	VMP2.5	VMP3	VMP4
Pitch size	0.9	1.2	1.5	1.9	2.5	1.6mm	1.8mm	2.0mm	2.5mm	3.0mm	4.0mm
Module Dimensions(w x H/mm)	610 X 343	610 X 343	610 X 343	610 X 343	610 X 343	640 x 480	640 x 480	640 x 480	640 x 480	640 x 480	640 x 480
Raw Material of Module Cabinet	Aluminum Die Casting	Aluminum Die Casting	Aluminum Die Casting	Aluminum Die Casting	Aluminum Die Casting	Aluminum Die Casting	Aluminum Die Casting	Aluminum Die Casting	Aluminum Die Casting	Aluminum Die Casting	Aluminum Die Casting
Module Weight(kg/pcs)	<b>⇒</b> 6.7	<b>⇒</b> 6.7	<b>⇒</b> 6.7	<b>⇒</b> 6.7	<b>⇒</b> 6.7	<b>⇒</b> 9	<b>⇒</b> 9	<b>⇒</b> 9	<b>⇒</b> 9	<b>⇒</b> 9	<b>÷</b> 9
Application			Indoor			Indoor					
Resolution by Module(Wx H)	640 x 360 pixels	480 x 270 pixels	384 x 216 pixels	320 x 180 pixels	240 x 135 pixels	384 x 288 pixels 384 x 261 pixels 320 x 240 pixels 256 x 192 pixels 208 x 156 pixels 160 x 120 pixels					
Power Consumption approx. (w/sqm)	<b>⇒</b> 600	<b>⇒</b> 550	<b>⇒</b> 550	<b>⇒</b> 450	<b>⇒</b> 450	<b>⇒</b> 550	<b>⇒</b> 550	<b>⇒</b> 550	<b>⇒</b> 480	<b>⇒</b> 480	<b>⇒</b> 480
Brightness at White Balance	600 nits	600 nits	600 nits	600 nits	600 nits	600 nits	600 nits	600 nits	600 nits	600 nits	600 nits
Visible Angle (Horizontal)	+-80	+-80	+-80	+-80	+-80	+-80	+-80	+-80	+-80	+-80	+-80
Visible Angle (Vertical)	+-80	+-80	+-80	+-80	+-80	+-80	+-80	+-80	+-80	+-80	+-80
Maintenance	Front					Front or Rear (could be de- cided)	Front or Rear (could be de- cided)	Front or Rear (could be de- cided)	Front or Rear (could be de- cided)	Front or Rear (could be de- cided)	Front or Rear (could be de- cided)
Processing Bit	16 bits	16 bits	16 bits	16 bits	16 bits	16 bits	16 bits	16 bits	16 bits	16 bits	16 bits
Grey Scale	16 bits	16 bits	16 bits	16 bits	16 bits	16 bits	16 bits	16 bits	16 bits	16 bits	16 bits
Dimming Level	0~256	0~256	0~256	0~256	0~256	0~256					
Brightness Control (min)	0~256	0~256	0~256	0~256	0~256			16 le	evels		
Pixel Configuration	2R2G2B 4 in 1 mini	1R1G1B 3 in 1 SMD	1R 1G 1B SMD								
Frames Rate	60 Hz	60 Hz	60 Hz	60 Hz	60 Hz	60Hz					
Colour	281 trillions	281 trillions	281 trillions	281 trillions	281 trillions	281 trillions					
Refresh Rate	3840Hz	3840Hz	3840Hz	3840Hz	3840Hz	2,880Hz	2,880Hz	2,880Hz	2,880Hz	2,880Hz	2,880Hz
LED Panel Uniformity Adjustment		Adj	ustment by softw	are		Adjustment by software					
Lifetime		100000 hours				100,000 hours					
Gradation	65536 levels				65,536 Levels						
Power Source Input Voltage	AC 240V±10% / 50~60Hz				AC 240V±10% / 50~60Hz						
Colour Temperature	3500° K - 9500°K Fully Adjustable				3500° K - 9500°K Fully Adjustable						
Video Compatibility	PAL/NTSC				PAL、NTSC						
Graphics Compatibility	DVI、S- Video、HDMI				DVI、S- Video、HDMI						
Operating Temperature	-10 - +50°C				-10 - +50°C						
Redundancy	Signal redundancy back up (by option)				Signal redundancy back up (by option)						
Auto Detect	Module Temp./Signal flow/PSU				Module Temp./Signal flow/PSU						



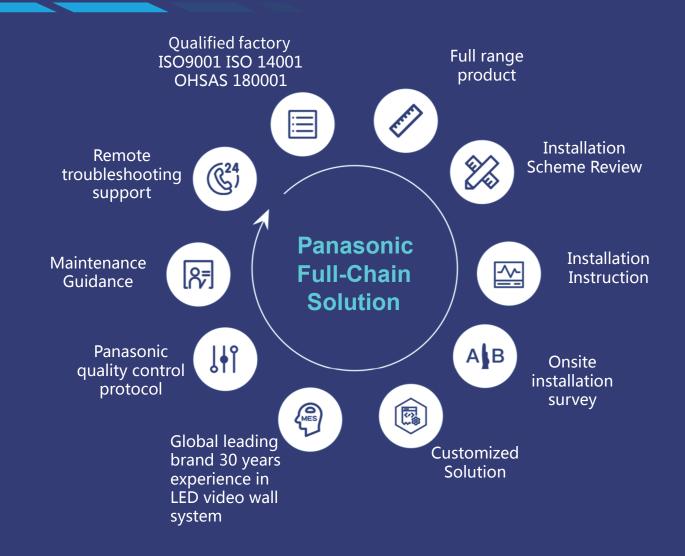
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VISUAL CHARACTERISTICS	LCUT-M2I	LCUT-M4I	LCUT-M6I	LCUT-M20	LCUT-M40	LCUT-M60	LCUT-M100		
Pitch size	2.85mm	4.0mm	6.66mm	2.85mm	4.0mm	6.66mm	10mm		
Module Dimensions(w x H/mm)	320 x 320	320 x 320	320 x 320	320 x 320	320 x 320	320 x 320	320 320		
Raw Material of Module Cabinet	Aluminum Die Casting	Aluminum Die Casting	Aluminum Die Casting	Aluminum Die Casting	Aluminum Die Casting	Aluminum Die Casting	Aluminum Die Casting		
Module Weight(kg/pcs)	<b>≒</b> 1.6								
Application	Indoor	Indoor	Indoor	Outdoor	Outdoor	Outdoor	Outdoor		
Ingress Protection	IP42	IP42	IP42	IP67	IP67	IP67	IP67		
Resolution by Module(Wx H)	112 x 112 pixels	80 x 80 pixels	48 x 48 pixels	112 x 112 pixels	80 x 80 pixels	48 x 48 pixels	160 x 120 pixels		
Power Consumption approx. (w/sqm)	<b>⇒</b> 80	<b>⇒</b> 80	<b>⇒</b> 80	<b>⇒</b> 80	<b>⇒</b> 80	<b>⇒</b> 80	<b>⇒</b> 80		
Brightness at White Balance	1200 nits	1000 nits	1000 nits	1 <b>0</b> 00 nits	5000 nits	5000 nits	<b>50</b> 00 nits		
Visible Angle (Horizontal)	+-80	+-80	+-80	+-80	+-80	+-80	+-80		
Visible Angle (Vertical)	+-80	+-80	+-80	+-80	+-80	+-80	+-80		
Maintenance	Front or Rear (could be decided)	Front or Rear (could be decided)	Front or Rear (could be decided)	Front or Rear (could be decided)					
Processing Bit	16 bit	16 bit	16 bit	16 bit	16 bit	16 bit	16 bit		
Grey Scale	16 bit	16 bit	16 bit	16 bit	16 bit	16 bit	16 bit		
Dimming Level				16 levels					
Brightness Control (min)				16 levels					
Pixel Configuration				1R 1G 1B SMD					
Frames Rate				60Hz					
Colour				281 trillions					
Refresh Rate				3,840Hz					
LED Panel Uniformity Adjustment				Adjustment by software					
Lifetime	100,000 hours								
Gradation	65,536 Levels								
Power Source Input Voltage	AC 240V±10% / 50~60Hz								
Colour Temperature	3500° K - 9500°K Fully Adjustable								
Video Compatibility	PAL, NTSC								
Graphics Compatibility	DVI、S- Video、HDMI								
Operating Temperature	-10 - +50°C								
Redundancy	Signal redundancy back up (by option)								
Auto Detect	Module Temp./Signal flow/PSU								



Manual Characteristics					7 (A. C. )	100 Table 100 Ta	Zet Carlo Salation Comment					
Screen Dimensions(s) k H/mm)   1820 x 1029   2440 x 1372   3050 x 1715   3660 x 2058   4880 x 2744   4880 x 2744   5676 keeps   200 inchess   200 inches   200 inches   200 inchess   200 inches   200 inches   200 inchess   200 inches   200 inchess   200 inchess   200 inchess   200 inchess   200	VISUAL CHARACTERISTICS	PLT-83	PLT-110	PLT-138	PLT-165	PLT-220	PLT-2204K					
Screen size         83 inches         110 inches         138 inches         165 inches         220 inches         220 inches           Screen Weightlikg/ocs)         ≈ 79         ≈ 140         ≈ 200         ≈ 270         ≈ 460         ≈ 560           Application         Indoor         indoor         indoor         indoor         indoor         indoor           Screen resolution (Wx H)         1920 x 1080 pixels         1920 x 1080 pixels         1920 x 1080 pixels         1920 x 1080 pixels         3840 x 2140 pixels           Power Consumption approx. (w/sqnt)         ≈ 80         ≈ 8	Pitch size	0.9mm	1.2mm	1.5mm	1.9mm	2.5mm	1.2mm					
Screen Weight[kg/pes]         5.79         5.140         5.200         5.270         5.450         5.60           Application         Indoor         3340 x 740 ip index         3340 x 740	Screen Dimensions(w x H/mm)	1820 x 1029	2440 x 1372	3050 x 1715	3660 x 2058	4880 x 2744	4880 x 2744					
Application         Indoor         i	Screen size	83 inches	110 inches	138 inches	165 inches	220 inches	220 inches					
Screen resolution   Wx H    1920 x 1080 pixels   3840 x 2160 pixels   280	Screen Weight(kg/pcs)											
Power Consumption approx. (w/sqm)         ≤ 80	Application	Indoor										
Brightness at White Balance         1200 nits         1200 nits         1200 nits         1200 nits           Visible Angle [Horizontal]         +-80         +-	Screen resolution (Wx H)	1920 x 1080 pixels	1920 x 1080 pixels	1920 x 1080 pixels	1920 x 1080 pixels	1920 x 1080 pixels	3840 x 2160 pixels					
Visible Angle [Horizontal]         +-80 <th< td=""><td>Power Consumption approx. (w/sqm)</td><td><b>⇒</b> 80</td><td><b>⇒</b> 80</td><td><b>⇒</b> 80</td><td><b>⇒</b> 80</td><td><b>⇒</b> 80</td><td><b>⇒</b> 80</td></th<>	Power Consumption approx. (w/sqm)	<b>⇒</b> 80	<b>⇒</b> 80	<b>⇒</b> 80	<b>⇒</b> 80	<b>⇒</b> 80	<b>⇒</b> 80					
Visible Angle   Vertical           +-80        80 <t< td=""><td>Brightness at White Balance</td><td>1200 nits</td><td>1200 nits</td><td>1200 nits</td><td>1200 nits</td><td>1200 nits</td><td>1200 nits</td></t<>	Brightness at White Balance	1200 nits	1200 nits	1200 nits	1200 nits	1200 nits	1200 nits					
Maintenance         Front or Rear (could be decided)         60 to 16 to	Visible Angle (Horizontal)	+-80	+-80	+-80	+-80	+-80	+-80					
Maintenance         (could be decided)         (could be dec	Visible Angle (Vertical)	+-80	+-80	+-80	+-80	+-80	+-80					
Grey Scale         16 bit         16	Maintenance											
Dimming Level         16 levels           Brightness Control (min)         16 levels           Pixel Configuration         1R 16 18 SMD           Frames Rate         60Hz           Colour         81 trillions           Refresh Rate         3,840Hz           LED Panel Uniformity Adjustment         Adjustment by software           Lifetime         100,000 hours           Gradation         5,536 Levels           Power Source Input Voltage         AC 240V±10W / 50-60Hz           Colour Temperature         3500° K - 9500° K Fully Adjustable           Video Compatibility         PAL, NTSC           Graphics Compatibility         DIV, S-Video, HDMI           Operating Temperature         510 A PAL, NTSC           Redundancy         Signal redundancy back up (by option)	Processing Bit	16 bit	16 bit	16 bit	16 bit	16 bit	16 bit					
Brightness Control (min) Pixel Configuration Frames Rate Colour Colour Refresh Rate LED Panel Uniformity Adjustment Lifetime Gradation Gradation Grows Conce Input Voltage Colour Temperature Video Compatibility Graphics Compatibility Graphics Compatibility Graphics Compatibility Greating Temperature Refundancy Refundan	Grey Scale	16 bit	16 bit	16 bit	16 bit	16 bit	16 bit					
Pixel Configuration1R 16 1B SMDFrames Rate60HzColour281 trillionsRefresh Rate3,840HzLED Panel Uniformity AdjustmentAdjustment by softwareLifetime100,000 hoursGradation65,536 LevelsPower Source Input VoltageAC 240V±10% / 50-60HzColour Temperature3500° K - 9500° K Fully AdjustableVideo CompatibilityPAL, NTSCGraphics CompatibilityDVI, S - Video, HDMIOperating TemperatureDVI, S - Video, HDMIRedundancySignal redundancy back up (by option)	Dimming Level			16 le	evels							
Frames Rate 60Hz Colour 281 trillions Refresh Rate 3,840Hz LED Panel Uniformity Adjustment 50 Signal redundancy back up (by option)	Brightness Control (min)			16 le	evels							
Colour281 trillionsRefresh Rate3,840HzLED Panel Uniformity AdjustmentAdjustment by softwareLifetime100,000 hoursGradation65,536 LevelsPower Source Input VoltageAC 240V±10V / 50~60HzColour Temperature3500° K - 9500° K Fully AdjustableVideo CompatibilityPAL, NTSCGraphics CompatibilityDVI, S - Video, HDMIOperating Temperature-10 - +50° CRedundancySignal redundancy back up (by option)	Pixel Configuration			1R 1G	1B SMD							
Refresh Rate 3,840Hz LED Panel Uniformity Adjustment   Lifetime 100,000 hours Gradation 65,536 Levels Power Source Input Voltage 65,536 Levels Colour Temperature 700,000 hours 100,000 hours Video Compatibility 700,000 hours 100,000 hours Craphics Compatibility 700,000 hours 100,000 hours 100,000 hours Colour Temperature 700,000 hours 100,000 hours 10	Frames Rate			60	)Hz							
LED Panel Uniformity Adjustment Lifetime Cradation Crower Source Input Voltage Colour Temperature Video Compatibility Craphics Compatibility Operating Temperature Redundancy Colour Signal redundancy back up (by option)	Colour			281 tr	rillions							
Lifetime 100,000 hours Gradation 65,536 Levels Power Source Input Voltage AC 240V±10% / 50~60Hz Colour Temperature 3500° K - 9500° K Fully Adjustable Video Compatibility PAL、NTSC Graphics Compatibility DVI、S- Video、HDMI Operating Temperature 5000° M PAL、NTSC Redundancy Signal redundancy back up (by option)	Refresh Rate			3,84	40Hz							
Gradation 65,536 Levels  Power Source Input Voltage AC 240V±10% / 50~60Hz  Colour Temperature 3550° K - 9500° K Fully Adjustable  Video Compatibility PAL、NTSC  Graphics Compatibility Dyradius DVI、S- Video、HDMI  Operating Temperature - 10 - +50°C  Redundancy Signal redundancy back up (by option)	LED Panel Uniformity Adjustment			Adjustment	by software							
Power Source Input Voltage  AC 240V±10% / 50~60Hz  Colour Temperature  Signal redundancy back up (by option)  AC 240V±10% / 50~60Hz  PAL NTSC  DVI, S- Video, HDMI  -10 - +50°C  Signal redundancy back up (by option)	Lifetime	100,000 hours										
Colour Temperature3500° K - 9500° K Fully AdjustableVideo CompatibilityPAL, NTSCGraphics CompatibilityDVI, S- Video, HDMIOperating Temperature-10 - +50° CRedundancySignal redundancy back up (by option)	Gradation	65,536 Levels										
Video Compatibility     PAL、NTSC       Graphics Compatibility     DVI、S- Video、HDMI       Operating Temperature     -10 - +50°C       Redundancy     Signal redundancy back up (by option)	Power Source Input Voltage	AC 240V±10% / 50~60Hz										
Graphics Compatibility  Operating Temperature  Redundancy  DVI, S- Video, HDMI  -10 - +50°C  Signal redundancy back up (by option)	Colour Temperature	3500° K - 9500°K Fully Adjustable										
Operating Temperature -10 - +50°C Redundancy Signal redundancy back up (by option)	Video Compatibility	PAL, NTSC										
Redundancy Signal redundancy back up (by option)	Graphics Compatibility	DVI、S- Video、HDMI										
	Operating Temperature	-10 - +50°C										
Auto Detect Module Temp./Signal flow/PSU	Redundancy											
	Auto Detect	Module Temp./Signal flow/PSU										

### Panasonic BUSINESS

"Product + Service"

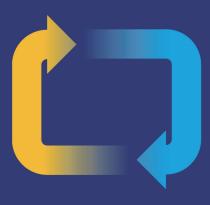


### Panasonic BUSINESS



# >>> Advanced Technologies

## Panasonic BUSINESS



# Leading Technologies

Fine pitch 4in 1 Mini LED

Energy-saving

Non-shut-down fine-pitch LED

Fine-pitch die-casting cabinet fine machining

"N+X" redundancy
Intelligent System and Module

Customized solution for your own creative screen