POPULUS Series

Outdoor Digital Signage

HIGH BRIGHTNESS LED

Outdoor optimization for your business

High visibility for clear

More concise communication

Sunlight
Viewable Image

Weather Proof

Front Removal
Of Module

Integrated Cabinet

GEM SIGN

The populus series provides bright, vibrant images through high-resolution surface mount LED technology in 3-10 mm pixel pitches.

FEATURE SET

- Fully sealed cabinet, Single section or large multi-sections for fast installation.
- Sealing glue on the back of the module to protect electronic devices from corrosion.
- Different mounting clips according to different installation requirements
- Module disassembled from the front for easy maintenance.
- The maximum brightness can reach 10000 nit.

Pylon

Pole

SERIES TECHNICAL SPECIFICATIONS

Estimated LED Lifetime	100,000+ hours
Refresh Rate	3840 Hz
Color Processing	16 bit
Brightness	6000-10000 nit
Dimming Capability	256 levels
Power	110-220 VAC, 50/60Hz
Operating Temperature	-30°C to 50°C with 99% RH non-condensing
Compliance Information	UL/ FCC compliant
Warranty Coverage	3 Years

Monument

GEM SIGN
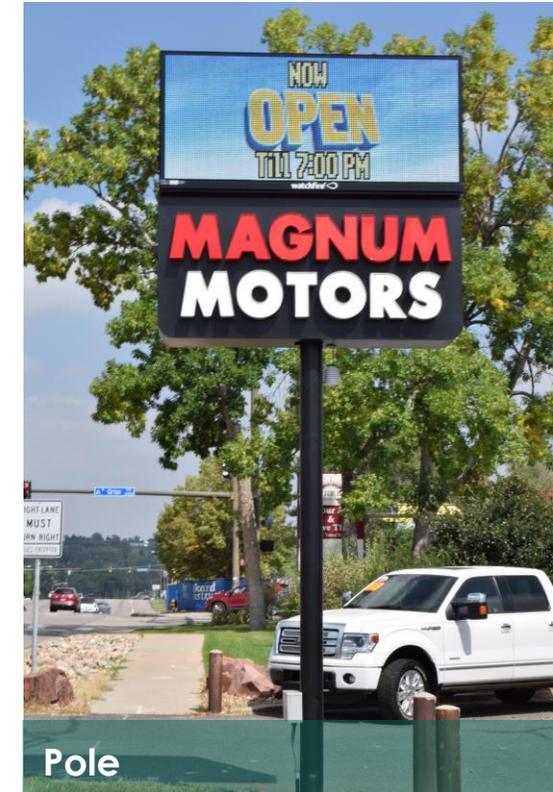
THREE SIZES OF MODULE

The Populus series has three sizes of modules that can meet various size requirements of customers.
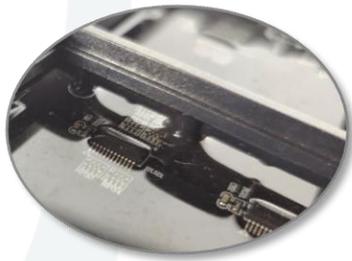
Metric size

POPULUS-MA

Module size:
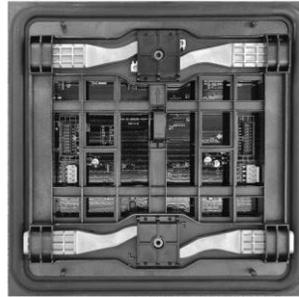320mmx320mm (1.05ftx1.05ft)

Pixel pitch:
5/6.67/8/10 mm

Back gluing

Metric size

POPULUS-MB

Module size:
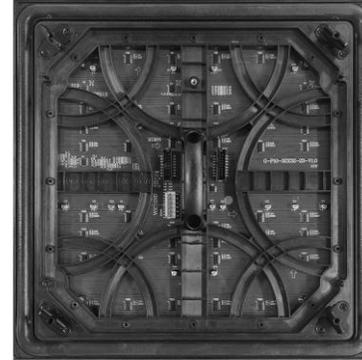250mmx250mm (0.82ftx0.82ft)

Pixel pitch:
2.98/3.91/4.81 mm

Front removed rotary lock

British size

POPULUS-B

Module size:
1ftx1ft (304.8mmx304.8mm)

Pixel pitch:
3.81/5.08/6.35/9.525 mm

Front removed gear lock
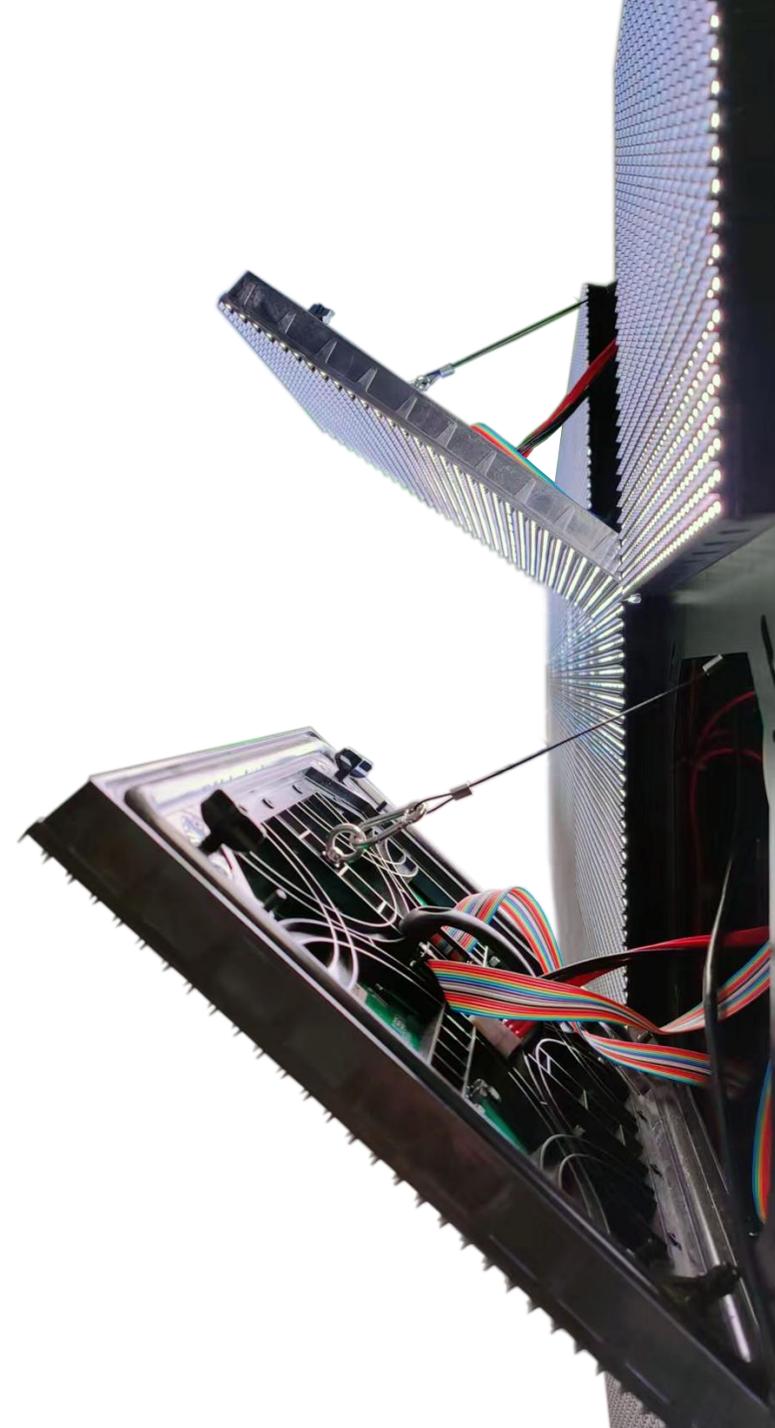
GEM SIGN

POPULUS
Series

THREE SIZES OF MODULE

BRITISH SIZE
POPULUS-B

Module size:
1ftx1ft (304.8mmx304.8mm)

Pixel pitch:
3.81/5.08/6.35/9.525 mm

PRODUCT MODE	Populus-B-3	Populus-B-5	Populus-B-6	Populus-B-9
Pixel Pitch (mm)	3.81	5.08	6.35	9.525
Pixel Density (dots)	68,889	38,750	24,800	11,022
LED Type	SMD1921	SMD2727	SMD2727	SMD2727
Module Dimensions (mm)	304.8x304.8	304.8x304.8	304.8x304.8	304.8x304.8
Module Matrix (dots)	80x80	60x60	48x48	32x32
Video Rate (Hz)	60	60	60	60
Color Processing (bit)	16	16	16	16
Refresh rate (Hz)	3840	3840	3840	3840
Max. consumption (w/m²)	600-800	600-800	600-800	600-800
Brightness (nit)	6000-8000	8000-10000	8000-10000	8000-10000
Ingress Protection	IP65	IP65	IP65	IP65

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BRITISH SIZE
POPULUS-B

Module size:
1ftx1ft (304.8mmx304.8mm)

Pixel pitch:
3.81/5.08/6.35/9.525 mm

- After calculating the size you want to installation, use this chart to determine the corresponding display size.
- This is the size of single section. Large size need multi-sections .
- Additional sizes are available as a special order.

DISPLAY WIDTH

					4'	5'	6'	7'	8'
Active Area Dimensions (ft)					4'	5'	6'	7'	8'
Matrix Populus-B-9					128	160	192	224	256
Matrix Populus-B-6					192	240	288	336	384
Matrix Populus-B-5					240	300	360	420	480
Matrix Populus-B-3					320	400	480	560	640
				1	2	3	4	5	6	7	8
2'	64	96	120	160	2				
3'	96	144	180	240	3				
4'	128	192	240	320	4				

DISPLAY HEIGHT

GEM SIGN

POPULUS
Series

THREE SIZES OF MODULE

METRIC SIZE
POPULUS-MA

Module size:
320mmx320mm (1.05ftx1.05ft)

Pixel pitch:
5/6.67/8/10 mm

MODEL NUMBER GUIDE
Populus-MA-6-8*4-SF

Series code

MA: Metric size (320x320mm)

Pixel Pitch

Module configuration(W*H)

SF: single face
DF: double face

PRODUCT MODE	Populus-MA-5	Populus-MA-6	Populus-MA-8	Populus-MA-10
Pixel Pitch (mm)	5.00	6.67	8.00	10.00
Pixel Density (dots)	40,000	22,500	15,625	10,000
LED Type	SMD2727	SMD2727	SMD2727	SMD2727
Module Dimensions (mm)	320x320	320x320	320x320	320x320
Module Matrix (dots)	64x64	48x48	40x40	32x32
Video Rate (Hz)	60	60	60	60
Color Processing (bit)	16	16	16	16
Refresh rate (Hz)	3840	3840	3840	3840
Max. consumption (w/m²)	600-800	600-800	600-800	600-800
Brightness (nit)	8000-10000	8000-10000	8000-10000	8000-10000
Ingress Protection	IP65	IP65	IP65	IP65

GEM SIGN

POPULUS
Series

THREE SIZES OF MODULE

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METRIC SIZE

POPULUS-MA

Module size:
320mmx320mm (1.05ftx1.05ft)

Pixel pitch:
5/6.67/8/10 mm

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- This is the size of single section. Large size need multi-sections .
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DISPLAY WIDTH

DISPLAY HEIGHT

									1280	1600	1920	2240	2560
Active Area Dimensions (mm)													
Matrix Populus-MA-10									128	160	192	224	256
Matrix Populus-MA-8									160	200	240	280	320
Matrix Populus-MA-6									192	240	288	336	384
Matrix Populus-MA-5									256	320	384	448	512
					1	2	3	4	5	6	7	8
640	64	80	96	128	2							
960	96	120	144	192	3							
1280	128	160	192	256	4							

POPULUS Series

THREE SIZES OF MODULE

METRIC SIZE

POPULUS-MB

Module size:

250mmx250mm (0.82ftx0.82ft)

Pixel pitch:

2.98/3.91/4.81 mm

MODEL NUMBER GUIDE

Populus-MB-3-8*4-SF

Series code

MA: Metric size (250x250mm)

Pixel Pitch

Module configuration(W*H)

SF: single face
DF: double face

PRODUCT MODE	Populus-MB-2	Populus-MB-3	Populus-MB-4
Pixel Pitch (mm)	2.98	3.91	4.81
Pixel Density (dots)	112,896	65,536	43,264
LED Type	SMD1515	SMD1921	SMD1921
Module Dimensions (mm)	250x250	250x250	250x250
Module Matrix (dots)	84x84	64x64	52x52
Video Rate (Hz)	60	60	60
Color Processing (bit)	16	16	16
Refresh rate (Hz)	3840	3840	3840
Max. consumption (w/m²)	600-800	600-800	600-800
Brightness (nit)	5000-6000	6000-8000	6000-8000
Ingress Protection	IP65	IP65	IP65

GEM SIGN

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POPULUS Series

METRIC SIZE
POPULUS-MB

Module size:
250mmx250mm (0.82ftx0.82ft)

Pixel pitch:
2.98/3.91/4.81 mm

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- This is the size of single section. Large size need multi-sections .
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THREE SIZES OF MODULE

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GEM SIGN

DISPLAY WIDTH

DISPLAY HEIGHT

Active Area Dimensions (mm)				1000	1250	1500	1750	2000	2250	2500
Matrix Populus-MB-4				208	260	312	364	416	468	520
	Matrix Populus-MB-3			256	320	384	448	512	576	640
		Matrix Populus-MB-2		336	420	504	588	672	756	840
			1	2	3	4	5	6	7	8	9	10
500	104	128	168	2						
750	156	192	252	3						
1000	208	256	336	4						
1250	260	320	420	5						
1500	312	384	504	6						