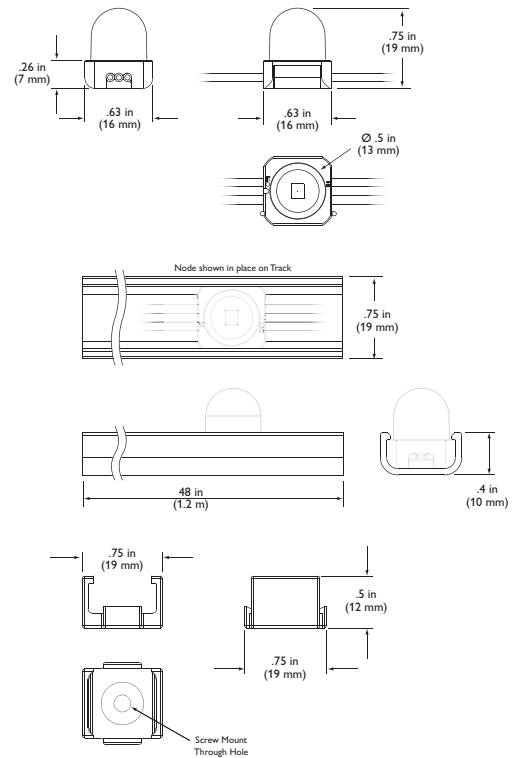# iColor Flex MX

Flexible strands of high-intensity LED nodes with intelligent color light

iColor Flex MX is a multi-purpose, high-intensity strand of 50 full-color LED nodes for generating extraordinary effects without the constraints of fixture size or shape. iColor Flex MX enables patterns and video on almost any interior or exterior surface, including ceilings, floors, three-dimensional objects, sculptures, and more. Its small node size allows installation in tighter spaces than the larger iColor Flex SLX and iColor Flex LMX strands.

- Superior light output — iColor Flex MX strands consist of 50 individually controllable, high-intensity LED nodes. Each node produces full-color light output of up to 1.44 candela.

- Supports cost-effective video displays — Flexible form factor, offering maximum lighting control at 25 W per strand, accommodates unique lighting installations, including two- and three-dimensional video displays.

- Multiple lens options — Clear dome and translucent dome lenses are standard. Clear flat and translucent flat lenses are also available.

- Adaptable mounting — Strands can be mounted directly to a surface, like traditional string lights. Detachable leader cables in multiple lengths allow you to install strings at the appropriate distance from power / data supplies. Optional mounting tracks ensure straight linear runs, while snap-on spacers hide cabling and mounting hardware. Single node mounts can be positioned individually as anchor points for installations with uneven node spacing or complex geometries.

- Standard and custom lengths and node spacing — iColor Flex MX strands are available with standard on-center node spacing of 4 in (102 mm) or 12 in (305 mm) along a three-wire, 18 AWG cable. Custom on-center node spacing from 2 in (51 mm) to 24 in (610 mm) supports virtually any lighting or video design and offers finer pixel pitch than the larger Flex strands. Standard 50-node lengths can be shortened in the field. Custom lengths of 5 to 72 nodes are also available.

.26 in (7 mm) .63 in (16 mm) .75 in (19 mm) .63 in (16 mm) Ø .5 in (13 mm)

Node shown in place on Track

.75 in (19 mm)

48 in (1.2 m) .4 in (10 mm)

.75 in (19 mm) .5 in (12 mm) .75 in (19 mm)

Screw Mount Through Hole

- Custom Leader Cables — Custom Leader Cable lengths are available in addition to standard cables of 25 ft (7.6 m), 50 ft (15.2 m), and 100 ft (30.5 m).

- Industry-leading controls — iColor Flex MX works seamlessly with the complete Philips line of controllers, including Video System Manager Pro, Light System Manager, and iPlayer 3, as well as third-party DMX controllers.

- Durable and weather-resistant — Fully sealed for maximum fixture life and IP66-rated for outdoor applications.

For detailed product information, please refer to the iColor Flex MX Product Guide at www.philipscolorkinetics.com/ls/rgb/flexmx/

PHILIPS

Specifications

Due to continuous improvements and innovations, specifications may change without notice.

Item	Specification	Details
Output	Lumen Maintenance*	50,000+ hours L_{50} @ 50° C (full output)
	LED Channels	Red / Green / Blue
Electrical	Input Voltage	7.5 VDC via PDS-60ca and sPDS-480ca
	Power Consumption	.5 W max. per node at full output, steady state
	Power Factor	.98 @ 120 VAC
Control	Interface	sPDS-480ca 7.5V (Ethernet) PDS-60ca 7.5V (Pre-programmed or DMX / Ethernet)
	Control System	Philips full range of controllers, including Video System Manager Pro, Light System Manager, and iPlayer 3, or third-party DMX controllers
Physical	Node Dimensions (Height x Width x Depth)	.63 x .63 x .75 in (16 x 16 x 19 mm)
	Weight	13.4 oz (381 g) 50-node strand, 4 in on-center node spacing
	Housing	White or black polycarbonate
	Lens	Clear or translucent plastic
	Fixture Connections	Integrated watertight 3-pin connector
	Temperature Ranges	-40° – 122° F (-40° – 50° C) Operating ≥ 32° F (≥ 0° C) Handling -4° – 122° F (-20° – 50° C) Startup -22° – 185° F (-30° – 85° C) Storage
	Humidity	0 – 95%, non-condensing
	Maximum Fixtures Per Power / Data Supply	sPDS-480ca 7.5V: 16 strands PDS-60ca 7.5V: 2 strands
Certification and Safety	Certification	UL / cUL, FCC Class A, CE
	Environment	Dry / Damp / Wet Location, IP66

* L_{50} = 50% lumen maintenance (when light output drops below 50% of initial output). Ambient luminaire temperatures specified. Lumen maintenance calculations are based on lifetime prediction graphs supplied by LED source manufacturers. Calculations for white-light LED fixtures are based on measurements that comply with IES LM-80-08 testing procedures. Refer to www.philipscolorkinetics.com/support/appnotes/lm-80-08.pdf for more information.

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Photometrics

Brightness Per Node

Lensing	On-Axis Candela	Viewing Angle
Clear flat lens	1.44	104°
Clear dome lens	1.23	110°
Translucent flat lens	0.81	109°
Translucent dome lens	0.52	149°

Luminance of 1 m² Grid

All figures in nits (cd / m²)	On-Center Node Spacing		
Lensing	2 in	4 in	12 in
Clear flat lens	520	144	23
Clear dome lens	444	123	20
Translucent flat lens	292	81	13
Translucent dome lens	188	52	8

Fixtures and Accessories

Item	Type		Item Number	Philips 12NC
iColor Flex MX 4 in on-center node spacing	White	Clear Dome Lens	101-000068-04	910503700712
		Translucent Dome Lens	101-000068-00	910503700708
	Black	Clear Dome Lens	101-000068-06	910503700714
		Translucent Dome Lens	101-000068-02	910503700710
iColor Flex MX 12 in on-center node spacing	White	Clear Dome Lens	101-000068-05	910503700713
		Translucent Dome Lens	101-000068-01	910503700709
	Black	Clear Dome Lens	101-000068-07	910503700715
		Translucent Dome Lens	101-000068-03	910503700711
Leader Cables	Black	25 ft (7.6 m)	108-000045-00	910503700696
		50 ft (15.2 m)	108-000045-01	910503700697
		100 ft (30.5 m)	108-000045-02	910503700698
Mounting Track Qty 1	White	4 ft (1.2 m)	101-000024-00	910503700015
	Black		101-000024-01	910503700016
Spacers Qty 50	White	4 in (102 mm)	101-000047-00	910503700030
	Black		101-000047-01	910503700031
	White	12 in (305 mm)	101-000048-00	910503700032
	Black		101-000048-01	910503700033
Single Node Mounts Qty 50	White		101-000039-00	910503700025
	Black		101-000039-01	910503700026

Power / Data Supplies

Item	Type	Item Number	Philips 12NC
PDS-60ca 7.5V	Pre-programmed	109-000015-00	910503700093
	DMX / Ethernet	109-000015-03	910503700094
sPDS-480ca 7.5V	Ethernet	109-000022-00	910503700107

Use Item Number when ordering in North America.

PHILIPS

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