

# Flex Micro gen3, RGB

Date: \_\_\_\_\_  
Type: \_\_\_\_\_  
Firm Name: \_\_\_\_\_  
Project: \_\_\_\_\_

**Translucent Dome Lens, Black Housing, 12 in On-Center Node Spacing**

## Exterior flexible strands of high-intensity nodes with intelligent RGB light

Flex Micro gen3, RGB is a multi-purpose, high-intensity strand of 50 full-color LED nodes for generating extraordinary effects without the constraints of luminaire size or shape. Flex Micro gen3 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 LMX gen2 strands.



- Supports cost-effective video displays—Flexible form factor, offering maximum lighting control at 22 W per strand, accommodates unique lighting installations, including two- and three-dimensional video displays.
- Multiple lens options—Clear and translucent dome, Clear and translucent flat lenses are standard.
- 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— Flex Micro gen3 strands are available with standard on-center node spacing of 102 mm (4 in) or 305 mm (12 in) along a three-wire, 18 AWG cable. Custom on-center node spacing from 51 mm (2 in) to 610 mm (24 in) 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.
- Custom Leader Cables—Custom Leader Cable lengths are available in addition to standard cables of 7.6 m (25 ft), 15.2 m (50 ft), and 30.5 m (100 ft).
- Industry-leading controls—iColor Flex MX gen2 works seamlessly with the complete Color Kinetics 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 luminaire life and IP66-rated for outdoor applications.

For detailed product information, please refer to the Flex Product Guide at [www.colorkinetics.com/global/products/rgb/flex-micro-gen3/](http://www.colorkinetics.com/global/products/rgb/flex-micro-gen3/)

# Specifications

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

## Output

Viewing Angle	148°
Lumens per node <sup>†</sup>	3.8
Luminance per node	3,839 cd/m <sup>2</sup>
On-Axis Candela per node	0.9
Efficacy (lm/W) per node	9.2
LED Channels	Red/Green/Blue

## Electrical

Input Voltage	7.5 VDC via sPDS-480ca and PDS-60ca
Power Consumption	0.42 W
<small>(Maximum per node at full output, steady state)</small>	

For additional Surge Protection Requirements for LED Lighting Systems, please refer to [www.colorkinetics.com/KB/surge-protection](http://www.colorkinetics.com/KB/surge-protection).

## Control

Interface	sPDS-480ca 7.5V (Ethernet) PDS-60ca 7.5V (Pre-programmed or DMX/Ethernet)
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## Control System

Color Kinetics full range of controllers, including Light System Manager, Video System Manager Pro, iPlayer 3, Antumbra iColor Keypad, and ColorDial Pro, or third-party controllers

Remote Monitoring & Management	Philips ActiveSite Ready, works with Interact Landmark
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## Lumen Maintenance

Threshold <sup>§</sup>	Ambient Temperature	Reported <sup>¶¶</sup>	Calculated <sup>¶¶</sup>
L <sub>90</sub>	25 °C	> 100,000	> 100,000
	50 °C		17,000
L <sub>80</sub>	25 °C	> 100,000	> 100,000
	50 °C		45,000
L <sub>70</sub>	25 °C	> 100,000	> 100,000
	50 °C		70,000
L <sub>50</sub>	25 °C	> 100,000	> 100,000
	50 °C		> 100,000

<sup>†</sup> Lumen output measurements comply with IES LM-79-08 testing procedures.

<sup>§</sup> L<sub>xx</sub> = xx% lumen maintenance (when light output drops below xx% of initial output). All values are given at B10, or the median value where 90% of the LED population is better than the reported or calculated lumen maintenance measurement.

<sup>¶¶</sup> Lumen maintenance figures are based on lifetime prediction graphs supplied by LED source manufacturers. Whenever possible, figures use measurements that comply with IES LM-80-08 testing procedures. In accordance with TM-21-11, Reported values represent the interpolated value based on six times the LM-80-08 total test duration (in hours). Calculated values represent time durations that exceed six times the total test duration.

## Physical

Dimensions <small>(Height x Width x Depth)</small>	19 x 16 x 16 mm (0.75 x 0.63 x 0.63 in)
Weight	1.5 kg (3.3 lb) 50-node strand
Housing Material	White polycarbonate
Lens	Translucent UV-protected polycarbonate
Luminaire Connections	Integrated watertight 3-pin connector

## Temperature Ranges

-40 to 50 °C (-40 to 122 °F) Operating
> 0 °C (> 32 °F) Handling
-20 to 50 °C (-4 to 122 °F) Startup
-30 to 85 °C (-22 to 185 °F) Storage

## Corrosion Resistance

Not suitable for salt spray or harsh chemical environments. Please refer to [www.colorkinetics.com/KB/corrosion-resistance](http://www.colorkinetics.com/KB/corrosion-resistance) for more information.

Humidity	0 to 95%, non-condensing
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## Maximum Luminaires Per Power/Data Supply

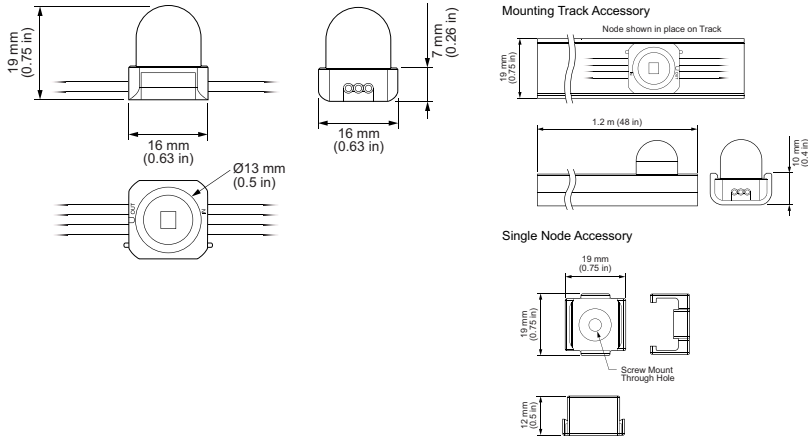
sPDS-480ca 7.5V: 16 strands
PDS-60ca 7.5V: 2 strands

## Certification and Safety

Approbation	UL/cUL, FCC Class A, CE
Environment	Dry/Damp/Wet Location, IP66



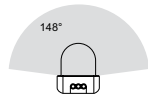
# Dimensions



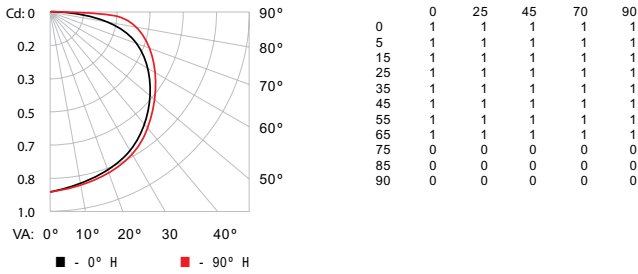
# Photometrics Translucent Dome Lens

Photometric data is based on test results from an independent NIST traceable testing lab. IES data is available at [www.colorkinetics.com/global/support/ies](http://www.colorkinetics.com/global/support/ies).

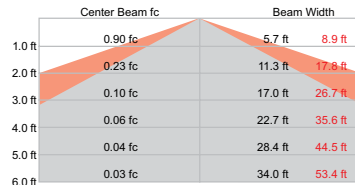
Viewing Angle	148°
LED	RGB
Lumens per node	3.8
Efficacy (lm/W) per node	9.2



## Polar Candela Distribution



## Illuminance at Distance



## Zonal Lumen

Zone	Lumens	% Luminaire
0-30	0.7	19%
0-40	1.2	31.50%
0-60	2.3	60.60%
60-90	1.4	36.10%
70-100	0.9	24.60%
90-120	0.1	3.20%
0-90	3.7	96.70%
90-180	0.1	3.30%
0-180	3.8	100%

0.3 m (1 ft)  
1 ft maximum distance  
 ■ Vert. Spread: 141.2°  
 ■ Horiz. Spread: 154.6°

For lux multiply fc by 10.7

## Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance: 20%

RCC %:	80	70	50	30	10	0												
RW %:	70	50	30	0	50	30	20	50	30	20	0							
RCR:	0	1	2	3	4	5	6	7	8	9	10							
0	1.18	1.18	1.18	1.15	1.15	1.15	0.97	1.09	1.09	1.04	1.04	1.04	0.99	0.99	0.99			
1	1.04	0.97	0.91	0.86	1.00	0.95	0.89	0.73	0.89	0.85	0.81	0.85	0.81	0.78	0.81	0.78	0.75	0.72
2	0.93	0.82	0.74	0.67	0.89	0.80	0.72	0.59	0.76	0.69	0.63	0.72	0.66	0.61	0.68	0.64	0.60	0.57
3	0.84	0.71	0.61	0.54	0.81	0.69	0.60	0.48	0.65	0.58	0.51	0.62	0.56	0.50	0.59	0.53	0.49	0.46
4	0.76	0.62	0.52	0.44	0.73	0.60	0.51	0.40	0.57	0.49	0.43	0.55	0.47	0.42	0.52	0.46	0.41	0.38
5	0.69	0.55	0.45	0.37	0.67	0.54	0.44	0.34	0.51	0.43	0.36	0.49	0.41	0.35	0.46	0.40	0.35	0.32
6	0.64	0.49	0.39	0.32	0.62	0.48	0.39	0.30	0.46	0.37	0.31	0.44	0.36	0.31	0.42	0.35	0.30	0.28
7	0.59	0.44	0.35	0.28	0.57	0.43	0.34	0.26	0.41	0.33	0.27	0.40	0.32	0.27	0.38	0.31	0.26	0.24
8	0.55	0.40	0.31	0.25	0.53	0.39	0.31	0.23	0.38	0.30	0.24	0.36	0.29	0.24	0.35	0.28	0.23	0.21
9	0.51	0.37	0.28	0.22	0.50	0.36	0.28	0.21	0.35	0.27	0.22	0.33	0.26	0.21	0.32	0.26	0.21	0.19
10	0.48	0.34	0.26	0.20	0.46	0.33	0.25	0.19	0.32	0.25	0.20	0.31	0.24	0.19	0.30	0.23	0.19	0.17

# Luminaire and Accessories

Use Item Number when ordering in North America

Luminaire	Item Number	Item 12NC
Flex Micro gen3, RGB, Translucent Dome Lens, Black Housing, 12 in On-Center Node Spacing <i>50 node strand</i>	101-000078-04	912400137445
<b>Accessories</b>		
Leader Cable, 7.6 m (25 ft), Black (for use with Power/Data Supplies)	108-000045-00	910503700696
Leader Cable, 15.2 m (50 ft), Black (for use with Power/Data Supplies)	108-000045-01	910503700697
Leader Cable, 30.5 m (100 ft), Black (for use with Power/Data Supplies)	108-000045-02	910503700698
Leader Cable, 4-Wire, 15.2 m (50 ft) (for use with CM-150 CA Item # 109-000033-01)	108-000080-01	912400135907
Leader Cable, 4-Wire, 30.5 m (100 ft) (for use with CM-150 CA Item # 109-000033-01)	108-000080-02	912400135908
Flex SLX Adapter, 3-Wire, 305 mm (1 ft) (for use with CM-150 CA Item # 109-000033-03)	108-000084-00	912400135913
Leader Cable, 3-Wire, 305 mm (1 ft) (for use with CM-150 CA Item # 109-000033-03)	108-000081-01	912400136051
Leader Cable, 3-Wire, 7.6 m (25 ft) (for use with CM-150 CA Item # 109-000033-03)	108-000081-00	912400135909
Leader Cable, 4-Wire, 15.2 m (50 ft) (for use with CM-150 CA Item # 109-000034-01)	108-000082-01	912400135910
Leader Cable, 4-Wire, 30.5 m (100 ft) (for use with CM-150 CA Item # 109-000034-01)	108-000082-02	912400135911
Leader Cable, 3-Wire, 7.6 m (25 ft) (for use with CM-150 CA Item # 109-000034-03)	108-000083-00	912400135912
Mounting Track, 1.2 m (4 ft), White	101-000024-00	910503700015
Mounting Track, 1.2 m (4 ft), Black	101-000024-01	910503700016
Spacers, Quantity 50, 305 mm (12 in), White	101-000048-00	910503700032
Spacers, Quantity 50, 305 mm (12 in), Black	101-000048-01	910503700033
Single-Node Mounts, Quantity 50, White	101-000039-00	910503700025
Single-Node Mounts, Quantity 50, Black	101-000039-01	910503700026
<b>Power Supplies</b>		
PDS-60ca 7.5v, Pre-programmed	109-000015-00	910503700093
PDS-60ca 7.5v, DMX/Ethernet	109-000015-03	910503700094
sPDS-480ca 7.5v, Ethernet	109-000022-00	910503700107
CM-150 CA, DIN Rail Mount, Four-Wire Terminal, 7.5/12V, Control Module	109-000033-01	912400135767
CM-150 CA, DIN Rail Mount, Three-Wire Terminal, 7.5/12V, Control Module	109-000033-03	912400135769
CM-150 CA, Surface Mount, Four-Wire Terminal, 7.5/12V, Control Module	109-000034-01	912400135771
CM-150 CA, Surface Mount, Three-Wire Terminal, 7.5/12V, Control Module	109-000034-03	912400135773



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