

MR-16 SYNERGIE™ SERIES

- 80% Energy-Savings vs. Halogen MR-16
- Long Life 50,000 Hours Average Rated Life
- Replacement for Halogen MR-16
- Dimmable
- Low Voltage - 12 Volts
- Cool Beam – Cool Operation
- No UV, IR or Mercury
- Lead Free, RoHS Compliant

Please see Safety and Handling Instructions on page 90.

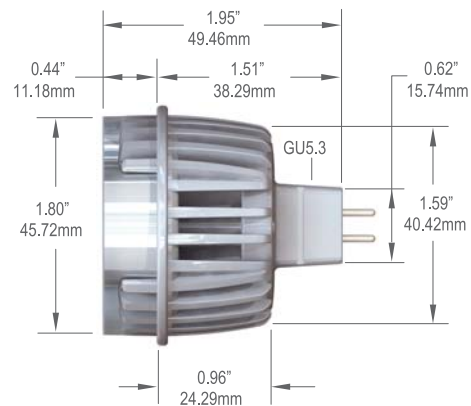
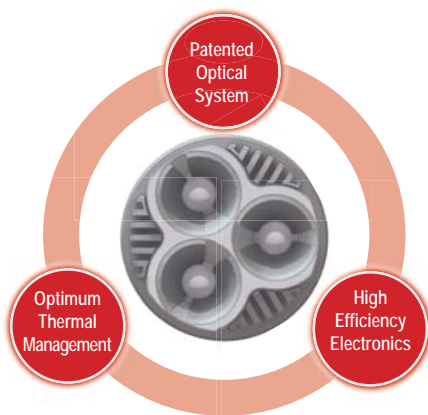
Watts	Ushio Ordering Code	Ushio Lamp Description	Dimension		Color Temp K	Beam		Avg Life h	Min Luminous Flux*	Burn Position	Case Qty
			MOL (A)	CRI		Angle	Spread				
SYNERGIE™, LED Reflector 2-Pin Base – GU5.3											
4	1003601	SYNERGIE LED MR16, SP12, DL	1.95	70	6500	12°	Spot	50000	230	Univ	24
4	1003602	SYNERGIE LED MR16, NFL24, DL	1.95	70	6500	24°	Narrow Flood	50000	240	Univ	24
4	1003603	SYNERGIE LED MR16, FL34, DL	1.95	70	6500	34°	Flood	50000	240	Univ	24
4	1003604	SYNERGIE LED MR16, WFL50, DL	1.95	70	6500	50°	Wide Flood	50000	250	Univ	24
4	1003609	SYNERGIE LED MR16, SP12, NW	1.95	80	4200	12°	Spot	50000	170	Univ	24
4	1003610	SYNERGIE LED MR16, NFL24, NW	1.95	80	4200	24°	Narrow Flood	50000	175	Univ	24
4	1003611	SYNERGIE LED MR16, FL34, NW	1.95	80	4200	34°	Flood	50000	175	Univ	24
4	1003612	SYNERGIE LED MR16, WFL50, NW	1.95	80	4200	50°	Wide Flood	50000	180	Univ	24
4	1003605	SYNERGIE LED MR16, SP12, WW	1.95	80	3100	12°	Spot	50000	150	Univ	24
4	1003606	SYNERGIE LED MR16, NFL24, WW	1.95	80	3100	24°	Narrow Flood	50000	160	Univ	24
4	1003607	SYNERGIE LED MR16, FL34, WW	1.95	80	3100	34°	Flood	50000	160	Univ	24
4	1003608	SYNERGIE LED MR16, WFL50, WW	1.95	80	3100	50°	Wide Flood	50000	170	Univ	24

All dimensions shown in inches unless otherwise noted.

*Minimum lumen output values as measured in an integrating sphere.

From the world leader in MR-16 lamp technology comes the world's most efficient solid state LED MR-16 lamp. **Synergie™** state-of-the-art technology allows this 4W LED MR-16 to directly replace 20-25W halogen MR-16s. No false claims, just outstanding performance that yields 80% energy-savings. In fact, Synergie™ is the first LED MR-16 lamp to meet the efficiency requirements of California's stringent Title 24 regulations.

Rated at 50,000 hours, Synergie™ has a true life rating of more than 10 times that of standard MR-16 lamps on the market today. Synergie™ is the premium choice for those applications where frequency of lamp changes and cost of ownership are significant factors.



H (ft)		E (fc)		
∅ (ft)		DL	NW	WW
0.66	3.3	399	344	309
Maximum Intensity (Cd) 4,229 3,646 3,275				

H (ft)		E (fc)		
∅ (ft)		DL	NW	WW
1.31	3.3	136	105	97
Maximum Intensity (Cd) 1,442 1,113 1,028				

H (ft)		E (fc)		
∅ (ft)		DL	NW	WW
2.00	3.3	62	49	41
Maximum Intensity (Cd) 657 519 435				

H (ft)		E (fc)		
∅ (ft)		DL	NW	WW
3.06	3.3	40	28	25
Maximum Intensity (Cd) 424 297 265				

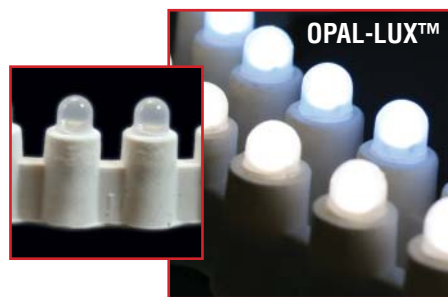
PEARL-LUX™ & OPAL-LUX™ SERIES

- Architectural Grade
- Silicone Coated – IP67 Rated
- Flexible
- Easy to Install
- Cool Operations
- Energy Efficient
- No UV, IR or Mercury
- Long Life Up to 50,000 Hours Average Life
- Lead Free, RoHS Compliant

Please see Safety and Handling Instructions on page 90.

Watts	Ushio Ordering Code	Ushio Lamp Description	Dimensions				Viewing Angle degree	Approx Lumens lm	Color Temp K	Commercial Life h
			Volts (V)	Height (mm)	Length (mm)	Width (mm)				
PEARL-LUX™ LED STRINGS										
6	1003620	6W PEARL-LUX / WARM WHITE	12	16.51	999.99	7.87	45°	83	2700	50,000
6	1003621	6W PEARL-LUX / WHITE	12	16.51	999.99	7.87	45°	180	6500	50,000
N/A	1003622	PEARL-LUX STRAIGHT CHANNEL	N/A	10.92	999.99	20.01	N/A	N/A	N/A	N/A
N/A	1003623	PEARL-LUX FLEXIBLE CHANNEL	N/A	10.92	999.99	20.01	N/A	N/A	N/A	N/A
N/A	1003643	PEARL-LUX STR. ALUM. CHANNEL	N/A	10.92	999.99	20.01	N/A	N/A	N/A	N/A
N/A	1003644	PEARL-LUX FLEX ALUM. CHANNEL	N/A	10.92	999.99	20.01	N/A	N/A	N/A	N/A
OPAL-LUX™ LED STRINGS										
6.6	1003720	6W OPAL-LUX/WARM WHITE	12	16.51	999.99	7.11	100°	74	3200	35,000
6.6	1003719	6W OPAL-LUX/WHITE	12	16.51	999.99	7.11	100°	198	7000	35,000

All dimensions shown in inches unless otherwise noted.



INSTALLATION INFORMATION:

Power Supply Information

1. The LED strings contain no protection against short circuits, overload or overheating. Therefore, it is absolutely necessary to operate the strings on an electrically stable power supply with protection against the above mentioned safety risks.
2. The LED strings require a 12V DC power supply. Each LED string has a maximum load rating of 6 watts for Pearl-Lux™ and 7 watts for Opal-Lux™.
3. Never operate an LED load in excess of the capacity of the power supply.

Electrical Connection

1. The LED strings are equipped with polarized wires. To ensure correct electrical polarity, connect the low voltage load side of the power supply to the LED strings. When finished you may use silicone, shrink tubing, electrical tape or a wire nut to properly manage and protect the contact. Incorrect electrical polarity may destroy the strings.
2. Up to 3 LED strings can be connected in series to a single power supply connection. For large installations you may connect multiple (3 string sets) in parallel.

