



# XCHM3 LED Challenger® Medium Area Light and XCHM3K Retrofit Kit



## Marketing Positioning Statement

XCHM3 is the perfect blend of performance and style for your parking lot lighting - exceptional uniformity. Utilizing a sleek, radiused aerodynamically designed housing, the XCHM3 has lower EPAs enabling the usage of lighter gauge poles, lowering initial costs. With more lumens, greater performance and better energy-saving features, the XCHM3 replaces up to 400W MH with 9,600-15,400 lumens, new XCHM3K retrofit kit enables you to upgrade your existing HID Challenger Medium fixture with a one-piece kit to start saving energy immediately.

## Leading Selling Features

- SmartTec™ Control Technology - "Industry First"
- Low Total Cost of Ownership
- Outstanding Uniformity & Visual Comfort
- Leading Selection of Light Output Options
- Unparalleled Speed & Ease of Installation
- Exceptional Reliability in an LED Area Light
- Provides Architectural Styling for any Site

# SmartTec™ Control Technology - "Industry First"

## Thermal Management

LSI proprietary "SmartTec" heat dissipation system  
Fixture temperature lowered automatically when needed in imperceptible 5% increments until safe operating temperature is reached  
Sensors in optical unit and/or driver initiate temperature correction  
Finless heat sink design to more effectively dissipate heat over time

## Annual Energy & Maintenance Savings

### Low Total Cost of Ownership - Quick Payback

\$1,926 savings for (20) XCHM3 350mA fixtures replacing (20) 250W MH fixtures  
\$2,960 savings for (20) XCHM3 450mA fixtures replacing (20) 400W MH fixtures  
Based upon 12 hour daily operation at \$.10kwh

## Clear Flat Optical Grade Tempered Glass Lens

### Outstanding Uniformity & Visual Comfort

Superior performance & value through sealed lens, precision reflectors and industry's best LEDs  
5 times more impact resistant than standard glass  
Won't discolor, craze or cloud up like acrylic lenses  
Cleans easily

## Lumen Output

Wide range of lumen outputs available by varying the reflector types and drive currents  
Wide lumen range of 9600 to 15400 available, providing a choice of lumen outputs for the customer's specific requirements Creates a brighter environment at lower light levels

LIGHT OUTPUT - XCHM3					
	# of LEDs	Lumens (Nominal)			
		Type 3	Type 5	Type FT	
Cool White	350 mA	128	12800	12100	13000
	450 mA	128	15200	14300	15500
Neutral White	350 mA	128	11700	11100	11700
	450 mA	128	13400	12200	14000

LIGHT OUTPUT - XCHM3K					
	# of LEDs	Lumens (Nominal)			
		Type 3	Type 5	Type FT	
Cool White	350 mA	128	12800	12100	13000
	450 mA	128	15200	14300	15500
Neutral White	350 mA	128	11700	11100	11700
	450 mA	128	13400	12200	14000

## Multitude of Distribution Patterns

### Leading Selection of Light Output Options

Choices of type 3, 5 or FT  
By increasing drive currents from 350mA to 450mA, light distribution patterns are enhanced with greater lumen output  
Exceptional uniformity creates bright environment at lower light levels  
Improved backlight cutoff minimizes light trespass  
House side shield available for even more backlight cutoff  
Application staff available to determine best distribution pattern  
LM79 & LM80 reports available

## 128 LED Array

137 or 180 watt choice  
137 watt (350mA) is ideal replacement for 250W MH  
180 watt (450mA) is ideal replacement for 400W MH

Color Rendering Index	CRI of 70 facilitates recognition of specific colors of various objects to meet industry standards
Color Temperature	Cool white provides bright and pleasing area lighting at reduced foot candle levels Neutral white for a warmer color temperature
Temperature Range	-40°C to +50°C (-40°F to 122°F) Suitable for use in a wide range of ambient temperatures
Two Drive Currents	350mA and 450mA available Expands available solutions for customer specific applications 350mA is the most energy efficient, while higher drive current can be utilized to drive for greater lumen output
Input Voltage	Universal voltage 120V thru 277V (50/60hz input): 347V-480V also available

## Unparalleled Speed & Ease of Installation

XCHM3 Mounting	Use with 5" traditional drilling pattern Extruded radius 8" arm shipped standard and is compatible with all fixture mounting configurations Also mountable to 3"-5" round poles using round pole plate adaptor
XCHM3K Mounting	One-piece gasketed, hinged optical assembly with driver Simply remove existing door, HID ballast and reflector assembly Easily and quickly install new hinged LED optic/door assembly Results in immediate dramatically improved lighting & energy savings
Maintenance-Free	Once installed, the XCHM3 is virtually maintenance free

## Exceptional Reliability in an LED Area Light

Environmentally Responsible	With exceptional "green" technology, XCHM3 and XCHM3K are RoHS compliant Greater than 80% recyclable by weight
Housing	Superior durability in a radiused aluminum housing Utilizes stainless steel or electro-zinc plated mounting hardware Excellent surface finishing and dimensional consistency
Gasketing	Luminaire optical assembly permanently sealed with robotically applied polyurethane All external seals for additional fasteners, options, etc. are EPDM or silicone rubber for robustness to pressure and temperature changes and environmental, aging and UV resistance Redundant fail-safe seals used in most areas for additional luminaire protection

## Finish

LSI's DuraGrip polyester powder coat - resists corrosion and is scratch and ding resistant  
Withstands extreme weather changes without cracking or peeling.  
Exhibits excellent durability and resistance to ultraviolet rays  
Meets ASTM B117 1000-hour salt fog & ASTM G155 1000-hour Xenon ARC UV tests

## Long-Life

Up to 100,000 hours of expected life  
5X the lamp life expectancy of HID Once installed, virtually maintenance free

## Pressure Stabilizing Vent/Breather

Equalizes pressure in fixture optical unit preventing pressure buildup due to ambient temperature changes, protecting gaskets and seals over the life of the fixture

## Protection

Driver components fully encased in potting material for IP65 moisture resistance.  
Optical unit rated IP67  
Driver complies with IEC and FCC standards

## Warranty

Limited 5-year warranty

## Surge Protector

Two-stage surge protection including separate surge protection built into electronic driver  
Meets IEEE C62.41.2-2002, Location Category C  
Prevents damage to fixture due to unexpected "surge" or "swell" in AC Line Voltage

## Options/Accessories

PCR twist-lock photoelectric control receptacle and twist-lock photocells  
House side shield  
Round pole mounting plate adaptor  
Decorative radius arm and upsweep bracket

## Attractive/Clean Styling

## Provides Architectural Styling for any Site

Performance, energy efficiency and maintenance benefits of LED in a conventional housing design  
Sleek, radiused aerodynamically designed housing with lower EPA requirements



10000 Alliance Rd.  
Cincinnati, OH 45242  
(513)793-3200  
FAX (513)984-1335  
[www.lsi-industries.com](http://www.lsi-industries.com)