Micro Series

TOKISTAR LIGHTING
Tokistar's Micro Series features three uniquely designed systems to shed light on items and define Micro in a whole new way. All three systems are available in 2700, 3000, 4000 and 5000K. The optics package includes 16, 24 and 30 degree interchangeable lenses.

Micro Series fixtures are ETL Listed and CE marked. All systems operate from universal-input Class 2 power supplies and are dimmed with a PWM signal to ensure fluid and flicker-free operation at all light levels.

**Micro Spotlight™**

The quality of light and superior craftsmanship of Micro Spotlights make them ideal for highlighting fine jewelry and valuable artifacts in vitrines. Available in a silver or black finish, these slender fixtures discreetly blend into any setting.

Micro Spotlight stylishly blends into this display of fine jewelry.
**Micro Tracklight™**

Micro Tracklight is a unique miniaturized tracklight system. LED modules with pivoting eyeballs can be positioned at any location on the track. Modules are available in a black or silver finish and include a snoot to reduce glare.

Micro Tracklight is ideal for use in museums where objects are occasionally repositioned.

**Micro Downlight™**

Micro Downlights deliver powerful light from a very compact profile. They measure 1” tall and are installed in a 1-3/8” Ø hole. Downlights are available in a black, white or silver finish and include a snoot to reduce glare.

Lens options can spot light up close or flood light from a greater distance.
**Micro Spotlight™**

The quality of light and superior craftsmanship of Micro Spotlight Series make it ideal for highlighting fine jewelry and valuable artifacts in showcases and displays. Available in a silver or black finish, these slender fixtures discreetly blend into any setting and place the focus on the object being illuminated.

Focusing light precisely where desired is possible with an optics selection of 16, 24 and 30 degree interchangeable lenses. Standard fixture stem heights are 30, 150, 250 and 350 mm.

Color selections include 2700, 3000, 4000 and 5000K 1.2 watt LEDs. Fixtures are constructed of sturdy stainless steel and aluminum spinnings. The system is ETL Listed/CE Certified and operates from universal-input 5VDC Power Supplies.

**Specify by Catalog Number**

<table>
<thead>
<tr>
<th>LED Color Code</th>
<th>Lens Style Code</th>
<th>Fixture Color Code</th>
<th>Fixture Length (mm)</th>
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<tbody>
<tr>
<td>2700</td>
<td>16</td>
<td>S</td>
<td>30</td>
</tr>
<tr>
<td>3000</td>
<td>24</td>
<td>B</td>
<td>150</td>
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<tr>
<td>4000</td>
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<td>250</td>
</tr>
<tr>
<td>5000</td>
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<td>350</td>
</tr>
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</table>

**Socket Assembly**

Each socket assembly includes a 2 meter lead with connector. Finishes include black or silver. Caps are included in the event a fixture is removed from the assembly.

**Catalog #: MS-SKT-S**

**Catalog #: MS-SKT-B**

The unique RCA connector allows stems to rotate 360°.
System Diagram

Micro Spotlight System Components:
- Fixture including stem and LED head assembly
- Socket Assembly with 2 meter lead to connector
- Distribution Box for operating from 1 to 6 fixtures
- Optional Distribution Box with dimming
- Power Supply with universal-input voltage

Power Supply
Catalog #: MS-PS-6CH
Input: 100-240 VAC 47/63 Hz
Output Rating: 4A, 20W Max.

Distribution Box
Catalog #: LPS-350-6CH
Input: 5 VDC
Output: 350mA x 6 channel
Output Rating: Max. 10.5 Watt
Catalog #: LPSDM-350-6CH
Features Optional 0-10 VDC Dimming or Self-Dimming Dial

Socket Assembly

Power Supply

Top View
Fixure Can Rotate 360˚

Lens Options
16˚, 24˚, 30˚

Adjustability
Fixture Heads May be Tilted 135˚ on Their Axis

Standard Lengths
30, 150, 250 and 350 mm
Custom Lengths Available Upon Request

Socket Assembly
Drill 16 mm Ø Hole Through Mounting Surface and Secure Threaded Socket with Nut

2 Meter Lead

Connector
Micro Tracklight™

Tokistar’s LED Micro Tracklight sheds new light and defines Micro in a whole new way. The system is easily concealed behind ledges and the distinctive features look great even in full view.

Micro Tracklight dims fluidly to all levels from our dimming systems compatible for use with 0-10 VDC or DMX industry standard dimmers. Several sizes of 24 VDC LED Drivers are available to accommodate projects of any size.

Specify by Catalog Number

<table>
<thead>
<tr>
<th>LED Color Code</th>
<th>Color Code</th>
<th>Lens Style Code</th>
<th>Lens Style</th>
<th>Module Color Code</th>
<th>Color</th>
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<td>16˚</td>
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<td>Silver</td>
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<td>3000K</td>
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<tr>
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<td>30˚</td>
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<tr>
<td>5000</td>
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</table>

LED Modules with different Lens Styles can be used to light objects at various distances.

Fixture heads are available in black or silver finish and fitted with powerful 1.6 watt LEDs. Color temperatures are 2700K, 3000K, 4000K and 5000K. The optics package includes 16, 24 and 30 degree lenses.

Micro Tracklight is fitted with a snoot to reduce glare.
Micro Tracklight fixtures come with 1.6 watt LED Modules inserted into a track. The Modules measure 2.26” wide, and may be positioned at any location on the track. An individual track may be up to 96” long. An individual fixture may accommodate up to 60 LED modules on a 4 amp circuit.

**System Overview**

- **Feed Connector**  
  **Part#: MTK-CON**  
  One Feed Connector can power up to 60 Micro Tracklight Modules.

- **Flex Connector**  
  **Part#: MTK-FLC-2 / MTK-FLC-8**  
  Flex Connectors with either 2” or 8” wires are used to turn corners and enable smaller sections of fixture to conform to curves.

- **Mounting Clamp**  
  **Part#: MTK-CP**  
  Micro Tracklight is installed with Mounting Clamps. Recommended spacing is every 12”.

- **End Cap**  
  **Part#: MTK-ED**  
  An End Cap is required at the end of a fixture run.

**Specifications**

- **Light Sources** are 1.6 watt LED Modules
- **LED Modules** are aluminum
- **Track** is rigid polycarbonate up to 96” (2.4 M) long
- **Spacer** between modules is PVC
Tokistar’s Micro Downlights are tiny fixtures but deliver powerful light to accent objects from all angles. Each downlight consumes 1.6 watts and operates from 24 VDC Class 2 power supplies. The LED pivots in the downlight housing and is available in color temperatures of 2700K, 3000K, 4000K and 5000K. The optics package includes 16°, 24° and 30° interchangeable lenses.

Micro Downlights dim perfectly from our dimmer packs compatible with DMX or 0-10 VDC dimming equipment.

**Specify by Catalog Number**

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<tr>
<td>B</td>
<td></td>
<td>30</td>
<td>30°</td>
<td>W White</td>
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Micro Spotlights focus light on the countertop and bottles in this cocktail lounge.
Photometrics

Micro Spotlight

**2700K & 3000K LED**
- Power: 1.2 watts
- Voltage: 5 VDC
- CRI: 85
- Output: 97 Lm / 16° Lens
  - 97 Lm / 24° Lens
  - 80 Lm / 30° Lens

**4000K & 5000K LED**
- Power: 1.2 watts
- Voltage: 5 VDC
- CRI: 85
- Output: 105 Lm / 16° Lens
  - 105 Lm / 24° Lens
  - 85 Lm / 30° Lens

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Micro Downlight and Tracklight

**2700K & 3000K LED**
- Power: 1.6 watts
- Voltage: 24 VDC
- CRI: 85
- Output: 97 Lm / 16° Lens
  - 97 Lm / 24° Lens
  - 80 Lm / 30° Lens

**4000K & 5000K LED**
- Power: 1.6 watts
- Voltage: 24 VDC
- CRI: 85
- Output: 105 Lm / 16° Lens
  - 105 Lm / 24° Lens
  - 85 Lm / 30° Lens
Micro Tracklight and Downlight

24 VDC LED Drivers

Micro Tracklight and Micro Downlight are ETL Listed when operated from our selection of 24 VDC LED Drivers. These Class 2 power supplies range from 16 to 192 watts. The input is universal ranging from 100 to 277 VAC 50/60 Hz.

**LDR24-96**
Tokistar’s LDR24-96 has a single 96 Watt output.

**LDR24-192**
Tokistar’s LDR24-192 has two independent 96 watt outputs. If the system is dimmed, each of the outputs requires an independent dimmer pack. This unit has wiring compartments for splicing on input and output leads, and can be connected directly to conduit.

**LDR24-16**
Specifications
- Max. Output Current: 0.67A
- Max. Output Power: 16W
- Protection: Overload, Over Voltage, Short Circuit, Over Temperature
- Working Temperature: -30ºC~+50ºC
- Mechanical Specifications
  - Dimensions: W 1.6” x L 5.9” x H 1.3”
  - Weight: 210g / .47 lbs
- Enclosure Rating: Suitable for use in Dry and Damp Locations/IP30 Rated
- Mounting: Flange Mount
- LED Module Capacity
  - 1.6 Watt LED Modules: 10 each

**LDR24-25**
Specifications
- Max. Output Current: 1.05A
- Max. Output Power: 25W
- Protection: Overload, Over Voltage, Short Circuit, Over Temperature
- Working Temperature: -30ºC~+50ºC
- Mechanical Specifications
  - Dimensions: W 1.6” x L 5.9” x H 1.3”
  - Weight: 360g / .80 lbs
- Enclosure Rating: Suitable for use in Dry, Damp and Wet Locations/IP67 Rated
- Mounting: Flange Mount
- LED Module Capacity
  - 1.6 Watt LED Modules: 15 each

**LDR24-40**
Specifications
- Max. Output Current: 1.67A
- Max. Output Power: 40W
- Protection: Overload, Over Voltage, Short Circuit, Over Temperature
- Working Temperature: -30ºC~+50ºC
- Mechanical Specifications
  - Dimensions: W 1.7” x L 6.4” x H 1.3”
  - Weight: 110g / .24 lbs
- Enclosure Rating: Suitable for use in Dry, Damp and Wet Locations/IP67 Rated
- Mounting: Flange Mount
- LED Module Capacity
  - 1.6 Watt LED Modules: 25 each

**LDR24-96 Specifications**
- Input Range: 100~277 VAC
- Frequency Range: 50/60 Hz
- Output: 24VDC (+/- 3%)
- Max. Output Current: 4.0A
- Max. Output Power: 96W
- Protection: Overload, Over voltage, Short Circuit, Over Temperature
- Working Temperature: -30ºC~+50ºC

**Mechanical Specifications**
- Dimensions: 2.7” x 8.8” x 1.6”
- Weight: 998g / 2.20 lbs
- Enclosure Rating: Suitable for use in Dry, Damp and Wet Locations/IP67 Rated
- Mounting: Flange Mount

**Safety Standards**
UL 879, UL 8750, UL 1310 Class 2, TUV EN60950-1, EN61347-1, EN61347-2-3 ind.
CAN/CSA C22.2 No. 223-M91, IP67 Rated

**LED Module Capacity**
1.6 Watt LED Modules: 60 each

**LDR24-192 Specifications**
- Input Range: 100~277 VAC
- Frequency Range: 50/60 Hz
- Output: 24VDC (Adjustable +5% / -30%)
- Max. Output Current: 8.0A (2 @ 4.0A)
- Max. Output Power: 192W (2 @ 96W)
- Protection: Overload, Overcurrent, Short Circuit
- Operating Temperature: -25ºC to +60ºC

**Mechanical Specifications**
- Dimensions: 4.5” x 12.3” x 2.4”
- Weight: 2.55Kg / 6 lbs
- Enclosure Rating: Suitable for use in Dry, Damp and Wet Locations/IP67 Rated
- Mounting: Flange Mount
- Connection: Knockouts for 1/2” Conduit

**Safety Standards**
UL 879, UL 8750, CSA C22.2 No. 250.0-08, EN61347-1, EN61347-2-13 independent, EN62384, J61347-1, J61347-2-13 approved

**LED Module Capacity**
1.6 Watt LED Modules: 120 each (60 per output)
LC-1CH-MULTI Dimming System/24 VDC

Tokistar’s LC-1CH-MULTI Dimmer Pack is compatible with industry-standard dimmers working on DMX or 0-10 VDC protocol. In the manual mode, a preset light level can be set without the use of an external dimmer.

**Part #: LC-1CH-MULTI**

Technical Specifications:
- Max. Load: 96 watts @ 24 VDC
- Environmental Rating: Dry Location/IP20
- Dimensions: 3/4" x 1-3/4" x 3-1/2"
- Weight: 50g / 0.11 lbs
- Listing: ETL Listed/CE Certified
- Operating Temperature: 0~+50ºC

**DMX Mode**

In this mode, dimmer packs are addressable and may be used with any controller working on DMX protocol. Up to 36 dimmer packs may be connected in series. For applications exceeding 36 dimmer packs, a splitter is required. Consult factory on details of DMX Splitters.

**Analog Mode 0-10 VDC**

For operation from devices using 0-10 VDC protocol, up to 10 dimmer packs may be connected in series. For applications exceeding 10 dimmer packs, an additional feed from the analog dimming device is required.

**Manual Mode**

You may select a light intensity at which the fixtures operate. In this case, no external dimming device is required.

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LC Dimming System/24 VDC

This proprietary dimming system provides full-range dimming of LEDs from our LED Drivers. The system components connect with CAT5 cable. Up to 25 dimmer packs may be connected in series if the total length of all CAT5 cable does not exceed 165 feet from the wall dimmer to the last dimmer pack. CAT5 cables are included with units.

**Part #: LC-DMR**

The remote wall dimmer has a rotary dial and on/off switch. Power to the wall dimmer is provided from the LED Driver powering the first dimmer pack. The unit installs in a single-gang box.

**Part #: LC-1CH-DP**

Each dimmer pack receives a 24 VDC input from an LED Driver and sends a PWM output to the fixture. Logic input and output is communicated through CAT5 cable. Max. Load: 96 watts @ 24 VDC
- Dimensions: 1-1/2" x 3-1/2" x 4-1/16"