F-Series  F110/F120/F140 FLUORESCENCE MICROSCOPE ILLUMINATORS

OVERVIEW

ScopeLED's F-Series LED based Fluorescence Microscope Illuminators are designed to replace conventional metal halide and mercury arc lamp sources for fluorescence microscopy applications. The heart of the F-Series illuminator is our high performance LED light engine with our advanced thermal design, yielding very high intensity and optically stable light output. The F-Series design offers the most compact illumination source in the industry, directly coupled to the microscope's epi-fluorescence illumination port. ScopeLED offers wavelengths from 390nm to 740nm in single, dual, or quadruple wavelength models. With over 30,000 hours of LED lifetime and low power consumption, ScopeLED is the bright, affordable, efficient, and environmentally friendly solution for wide-field fluorescence applications.

FEATURES

- High Efficiency Dense Matrix LED™ Array Light Source
- Brilliant Fluorescence Images
- Easy Ergonomic Controls
- Instant On/Off (No Warm-up Time)
- Manual, TTL, and Software Control
- Variable Intensity
- 30,000 Hours of LED Lifetime
- Direct Coupling to Microscope
- Optional Foot Switch for Shuttering
- Extremely Cost Effective
- Collector Lens with Adjustable Focus
- Custom Wavelengths Available
- No Hazardous Material in the Laboratory
- No Fiber Guide Replacement
- No Bulb Replacement
- No Maintenance
- No Alignment

COMPATIBLE MICROSCOPE BRANDS

AccuScope, Leica, Motic, Nikon, Olympus, Zeiss, and others

"The ScopeLED F-Series LED light source is a fantastic alternative light source for fluorescence microscopy. The DAPI and GFP channels are breathtakingly bright; easily twice as bright as any other source I have in the Facility."

- Dr. Steven Ruzin, Director, Biological Imaging Facility, University of California, Berkeley
## TYPICAL FIXTURE OPTICAL PERFORMANCE @ 1000mA, 25°C, SCAN AT STABLE

<table>
<thead>
<tr>
<th>Nominal Wp</th>
<th>390±5</th>
<th>420±5</th>
<th>440±5</th>
<th>470±10/−0</th>
<th>525±5</th>
<th>540±6/−7</th>
<th>560±5</th>
<th>595±5</th>
<th>640±5</th>
<th>660±5</th>
<th>740±5</th>
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</thead>
<tbody>
<tr>
<td>Measured Wp</td>
<td>392</td>
<td>422</td>
<td>440</td>
<td>474</td>
<td>523</td>
<td>538</td>
<td>558</td>
<td>596</td>
<td>642</td>
<td>658</td>
<td>744</td>
</tr>
</tbody>
</table>

## SPECIFICATIONS/RATINGS

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply Voltage</td>
<td>24VDC</td>
</tr>
<tr>
<td>Input Current</td>
<td>1.25A max</td>
</tr>
<tr>
<td>Maximum Power Consumption (F110)</td>
<td>10W</td>
</tr>
<tr>
<td>Maximum Power Consumption (F120)</td>
<td>24W</td>
</tr>
<tr>
<td>Maximum Power Consumption (F140)</td>
<td>30W</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>0°C to 40°C</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-20°C to 75°C</td>
</tr>
<tr>
<td>Humidity</td>
<td>10% to 90%</td>
</tr>
<tr>
<td>Model Weight: F110</td>
<td>1.35 lbs</td>
</tr>
<tr>
<td>Model Weight: F120</td>
<td>2.45 lbs</td>
</tr>
<tr>
<td>Model Weight: F140</td>
<td>2.56 lbs</td>
</tr>
</tbody>
</table>

## ORDERING INFORMATION

### Device
- **SLF** - Fluorescence Illuminator

### Control
- **110** - Single Labeling (No Movement)
- **120** - Dual Labeling (Single Axis)
- **140** - Quadruple Labeling (Dual Axes)

### Wavelength Specification*
- **LX** - L1 through LC for F110
- **PX** - P1 through PC for F120
- **GX** - G1 through GC for F140

### Accessories (Optional)
- **SLAF-FOOT** - Foot Switch Shutter Control
- **SLAF-2BNC** - Analog to Digital Communication Cable: 4-Pin to 2-BNC Male Cable
- **SLAF-EXT15** - Extends Warranty on Item for One Additional Year

Adapters available for most brands of microscope models - please specify your microscope model for the appropriate adapter.

* Please contact ScopeLED for customized wavelengths or spectrums.

## MECHANICAL DIMENSIONS

**F110**

- **85.0 (3.35)**
- **60.0 (2.36)**
- **96.0 (3.78)**

**F120 and F140**

- **85.0 (3.35)**
- **42.1 (1.67)**
- **17.3 (0.68)**
- **42.0 (1.66)**
- **17.3 (0.68)**
- **74.0 (2.91)**
- **106.0 (4.17)**

Specifications subject to change. Copyright © 2015 ScopeLED all rights reserved.