

LIGHT SOURCES

LO50

50-Watt
LED Light Source

A medically approved LED light engine 4x brighter than halogen!

Independent on/off switch to maintain intensity setting.



An adapter in the Bezel accepts all major medical device manufacturer's cables;

High temperature shut-off indicator.



4 Port Turret option. (ACMI option is shielded in this view).

Analog dimmer controls output intensity from 10% to 100% output.

OPTIONS

- 4 port turret accepts Storz, Olympus, Wolf ACMI
- OEM color and label program

POWER SUPPLY SPECIFICATIONS	US and Canada	Europe	Japan
Input Power	90 Watts	90 Watts	90 Watts
Input voltage	90-240 V AC 45/65Hz	90-240 V AC 45/65Hz	90-240 V AC 45/65Hz
Output Voltage	0-4 Volts	0-4 Volts	0-4 Volts
Fuse type (Schurter or Equiv)	IEC60127-2 250VAC 3 Amp quick acting F	IEC60127-2 250VAC 3 Amp quick acting F	IEC60127-2 250VAC 3 Amp quick acting F
Temperature Range: Operating Storage	0° to 40° C -40° to 85°C	0° to 40° C -40° to 85°C	0° to 40° C -40° to 85°C
Relative humidity, Non Condensing	10% to 95%	10% to 95%	10% to 95%
Vibration: IEC68-2-6 to the levels of IEC721-3-2			

* -Specifications subject to change without notice



LO50 is the first LED light source more powerful than Halogen.

FEATURES

- Patent pending collection optics and cutting edge LED technology combine to outperform 150-W halogen units in power, life, and color temperature.
- Long life (60,000 hours) solid state device eliminates lamp change for up to 24 years!
- Daylight white 6500K color temperature.
- Uses 40% less power to produce more than 4X output power. No wasted IR component.
- Less than 15% decline in output over the usable life.
- Universal power supply. Very small footprint.
- Individual adapters permit the use of all fiber optic brands.
- Optional 4 port turret accepts Storz, Olympus, Wolf and ACMI inputs.
- Thermal protection via on-board sensor.
- OEM configurations available.
- IEC 60601-1, IEC60601-1-2, IEC61000-3-2, IEC61000-3-3, UL60601-1; 510K listed.

Overall Height: 5" (127 mm)
Overall Width: 7.625" (194 mm)
Overall Depth: 7.75" (197 mm)
Unit Weight: 6lbs. (2.72 kg) including cord.

FTI offers a family of fiberoptic illuminators unsurpassed in quality and performance. Exceptional value, proprietary features, and a large selection of customizing options and accessories make the product family adaptable to any need.

P/N	Description	Maximum Aperture	Voltage/Cycles	Color Temperature
FTIII21249	Medical LED Light source	.196" (5mm)	Universal	6500K
FTIII22025	Medical LED Light source w/Turret	.196" (5mm)	Universal	6500K
FTIII21222	Light engine only (For OEM)	.196" (5mm)	Universal	6500K



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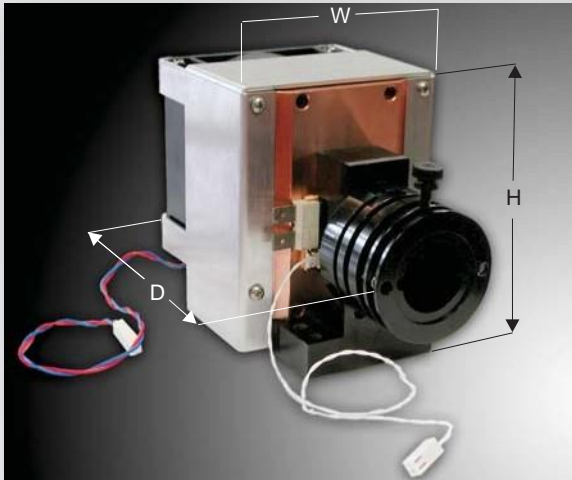
<https://www.tem-inc.co.jp/>



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DATA, COMPONENTS and ACCESSORIES



If you're an OEM manufacturer, this LED technology can be incorporated into your equipment as a module.

You supply the driver, power supply and dimmer, we'll supply the engine!

The OEM module features:

- Patent pending collection optics in your choice of NA - produces a 5mm aperture at the coupling point
- 4.13"(105mm)H x 3.30"(84mm)W x 5.60"(142mm)D
- 2.7lbs (1.22KG)
- Replaceable chip - designed for field replacement and retrofit.
- Built in thermistor.
- Choice of standard or custom adapter.
- Heat sink, fan and mounting components included.
- Ask about different LED color and power types.
- Additional technical specification/configuration data is available.

Medical Adapters

Adapters are integral to the LO50 and light engine module

They are designed to position the light guide for maximum coupling efficiency, regardless of light guide manufacturer or style.



Part Number	Description
FTIII21249-01	Storz adapter
FTIII21249-02	ACMI adapter
FTIII21249-03	Wolf adapter
FTIII21249-04	Olympus adapter
FTIII21249-05	Pilling adapter

Relative Power

We measured the photonic power (visible light) of the LO50 and compared the result to traditional lighting units. The test used an 8ft long, 5mm diameter light guide, inserted into the following light source types: LO50, 120W MH, 300-W Xenon, 150-W Halogen. The results are published below:

Light source type	Power at the light source	Power at the end of light guide	Ratio
LO50	2.40 Watts	1.00 Watts	52%
150W Halogen	0.60 Watts	0.32 Watts	16%
120W MH	1.60 Watts	0.70 Watts	43%
300W Xenon	2.90 Watts	1.40 Watts	31%

In the visible area of the spectrum, LO50 output is more than 3x brighter than a halogen (EKE) when the output is measured through a 5mm light guide. If the measured output increases to 11mm, the power increases to 5W at the light source, and 2.6W at the end of a 12mm diameter light guide. The added active area makes the unit a great alternative for microscopy applications.

When considering the rapid degradation of Xenon and MH HID lamps over their useful life, the LO50 output will be very close in power to these traditional sources after 1000hrs and 500hrs respectively, while the difference in cost of ownership immediately favors LO50.



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