

Rugged LED shelter lighting

Developed for soft and hard walled shelters and tent structures, the innovative Oxley rugged high impact resistance LED lighting uses the latest high intensity LEDs in low profile enclosures.

Oxley rugged area lighting is used for challenging military applications where durability, reliability, and space is critical.

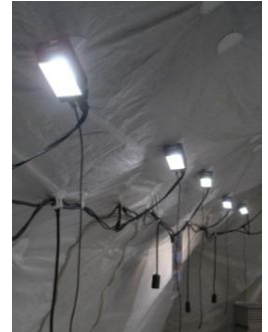
Oxley soft shelter lighting complies with MIL-PRF-44259E standards for lighting.

Benefits

- Eliminates maintenance due to its robust vibration and shock resistant design
- Light weight
- Long life, no need to replace tubes/bulbs or carry spares
- Instant on, no strike and no warm-up in cold conditions
- Low power consumption

Key features

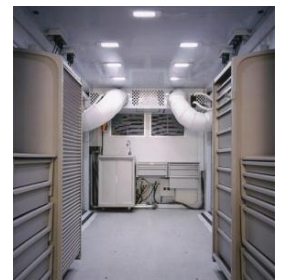
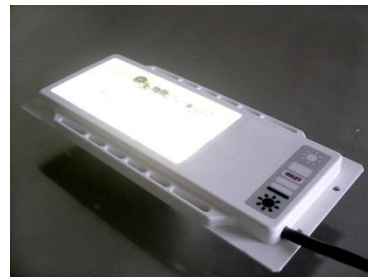
- Low profile lighting
- Integrated 'blackout' (red/blue/green) lighting
- Dimming option for individual brightness control
- Waterproof, sealed to IP 67
- Low energy light source
- Long life performance, 50,000 hours MTBF



Soft shelter LED lighting integrated into a mobile hospital 20x30 ft air-beam shelter



FD-series



Hard shelter LED lighting selected for mobile medical shelters where reliability matters.

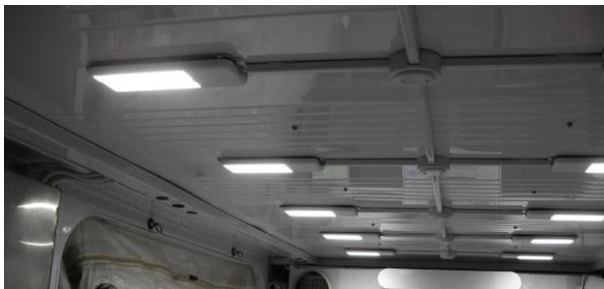
Photo: Courtesy of Mobile Medical International Corp.



FT-series

Applications

Used in military field hospitals and communication shelters, the rugged nature of Oxley LED lighting, with its ability to withstand shock and vibration make it suitable for command centers, portable tents, temporary work space lighting, and maintenance area lighting.



Oxley low profile LED lighting fixtures mounted in an ISO shelter

All Oxley lighting fixtures use LED technology to reduce the expense of maintenance, cost of disposal, and the cost associated with carrying spare replacements.

Integrated systems

In addition to our LED lighting products, Oxley is able to offer an integrated lighting system for either hard or soft shelter installations.

Our standard cable sets provide a simple and modular approach to the integration of blackout lighting.

Our engineering team is available to provide innovative solutions for the control of the shelter lighting to meet customer specific requirements.

Integrated 'blackout'

Oxley LED shelter lighting is available with a blackout mode, where the bright white is extinguished and a low level of lighting is instantly provided. A choice of blackout color and blackout intensity is available, including – green, blue, red, or white, at light levels to suit the user requirements. Blackout intensity can be configured to a 'normal' 0.5-2 candela intensity or a 'high brightness' intensity of 127 candela.



Integrated green LED for blackout IR secure operations

The use of LEDs in shelter lighting offer several additional benefits when operating in a blackout or IR secure mode.

Oxley LED lighting uses low infra-red signature LEDs so that the lighting both minimizes the effect on the Night Vision Goggles (NVG) and reduces the risk of detection, or visibility, by NVG technology.

In the 'green' blackout mode Oxley lights are invisible to NVGs. It has a very low 'IR signature' and is undetectable by NVGs providing a significant increase in personnel security.

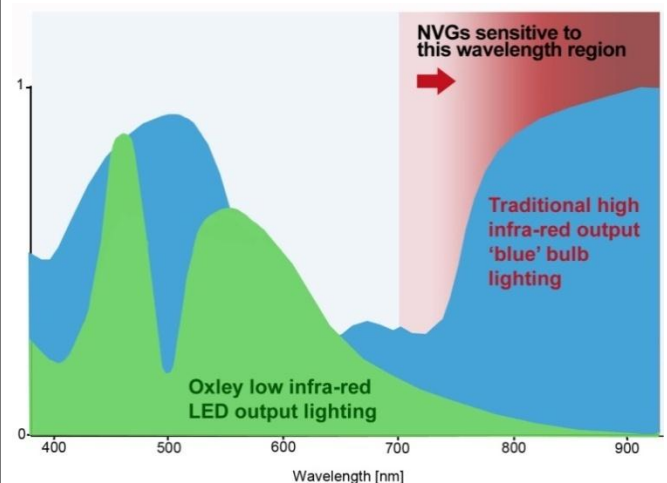


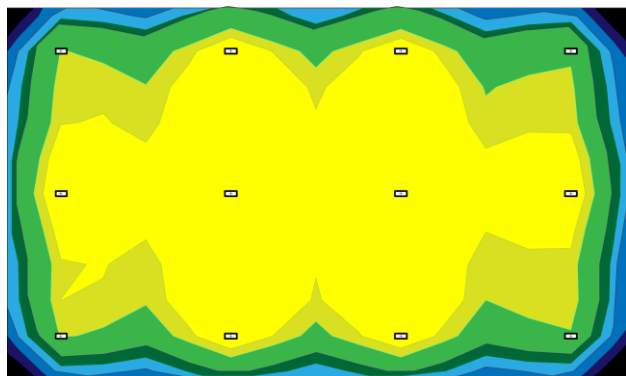
Diagram showing a comparison between the typical infra-red output of an incandescent bulb (blue curve), versus the IR secure LED lighting (green curve). NVGs are most sensitive to wavelengths above 700nm (red section). Note virtually no IR output from LED lighting.

LED vs Fluorescent lights

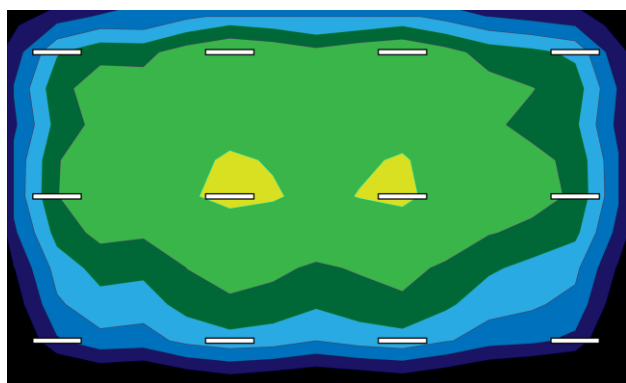
Equivalent to standard 2 ft fluorescent lighting fixtures (MIL-PRF-44259E), Oxley LED lighting offers users a high reliability, rugged and light weight alternative to fluorescent lighting and large storage boxes.

Oxley LED lighting uses advanced thermal management techniques to minimize the temperature of the lighting fixture and maximize the life of the LEDs.

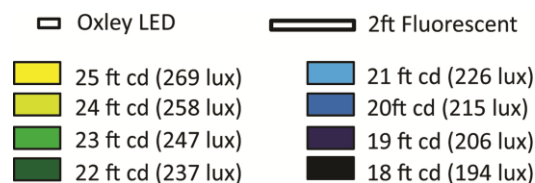
The following light patterns show a typical 20 x 32 ft shelter configuration. The lighting in the figures below is positioned 9 ft from the floor.



Oxley LED illumination



MIL-PRF-44259E 2 ft Fluorescent tube lighting



Specifications

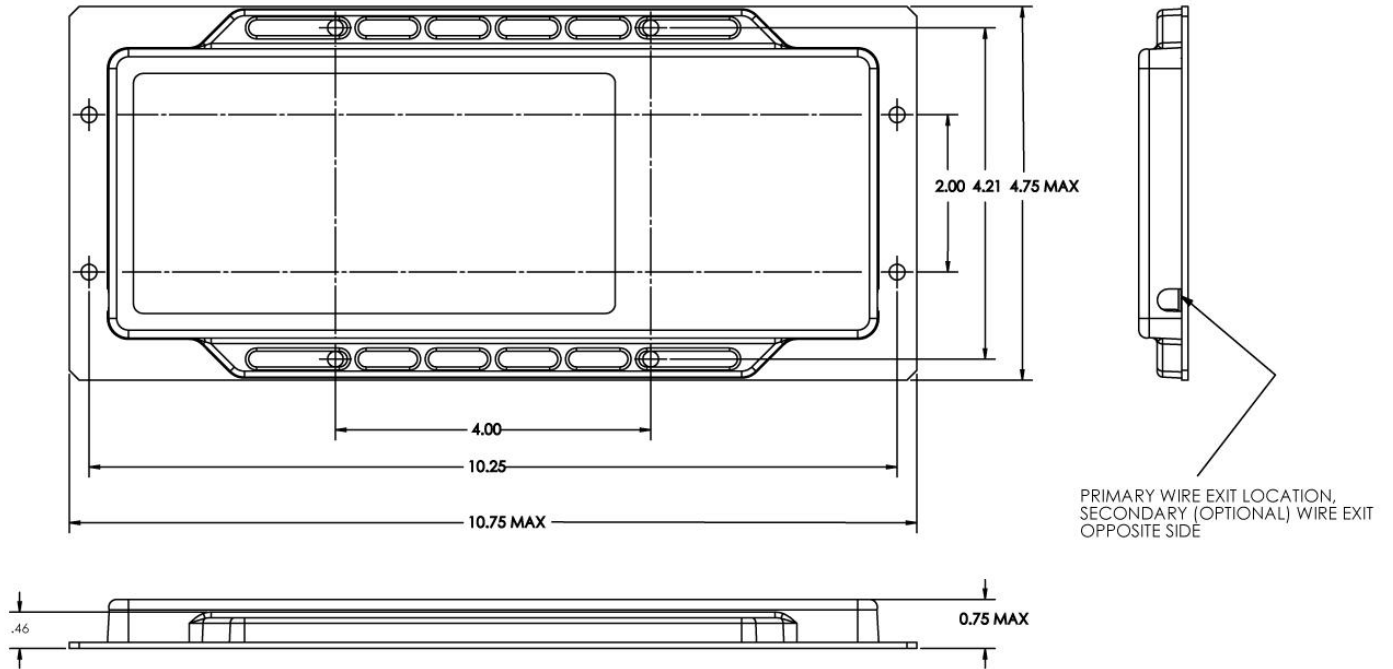
Electrical/Optical	
Input Voltage	AC: 90-285VAC – 50-400Hz DC: 15-80VDC
Blackout Mode	Separate input line, voltage requirements as above
Current	Approx. 0.5A @ 120V 60 Hz (AC) 1.5A max @ 28V (DC)
Light Output (white)	1250 lumens of total luminous flux, peak intensity of 540 candela
Light Output (Blackout)	Normal Blackout mode – 0.5 to 2 candela High Brightness – 129 candela
EMI	Complies with MIL-STD-461E, RE102 and CE102

Mechanical	
Dimensions	See diagram over
Weight (FD-series)	2.0 lbs (cord/connector not included)
Weight (FT-series)	1.0 lbs (cord/connector not included)

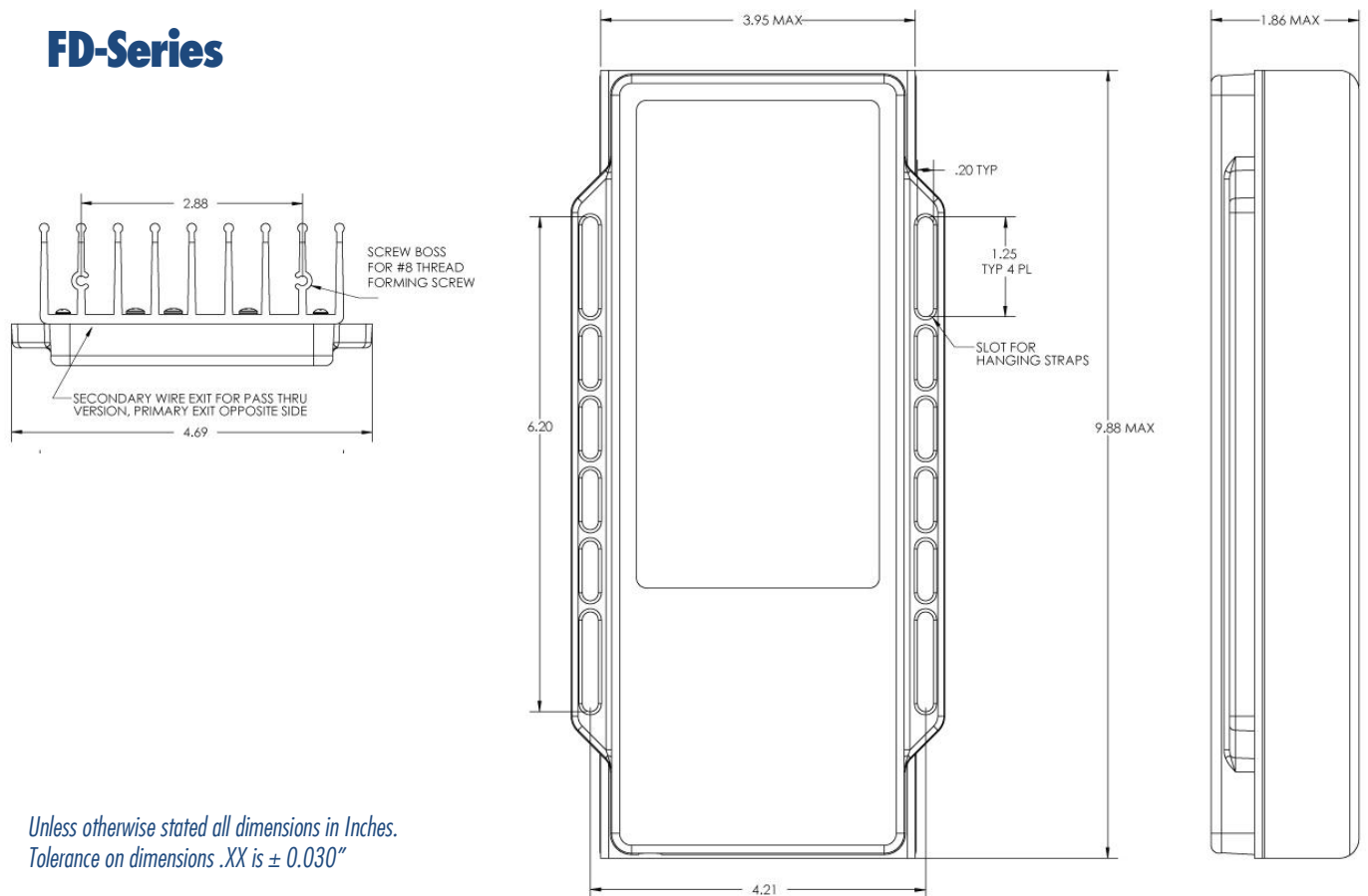
Materials	
Lens assembly	Polycarbonate
Heat sink assembly	Aluminum

Environmental	
Waterproof design	IP67
Operating temperature	-50 °F to +176 °F (-40 °C to +80 °C)
Storage Temperature	-60 °F to +176 °F (-50 °C to +80 °C)
Shock and Vibration	MIL-810F, Method 516.5, Proc. V and Method 514 Cat 3.

FT-Series



FD-Series



Unless otherwise stated all dimensions in Inches.
Tolerance on dimensions .XX is ± 0.030 "

Ordering information

When ordering, please specify the Part # designating the blackout color and voltage configuration required e.g. OX39708-4.

Table 1 – FD/FT-Series blackout color and voltage configuration

Part #	Soft shelter (FD-Series)	Electrical Configuration
OX39708	FD-Series A/C GREEN B/O	INPUT: 90-285VAC, 0.5A @ 120VAC
OX39708-1	FD-Series D/C GREEN B/O	INPUT: 15-80VDC, 1.5A MAX @28VDC
OX39708-2	FD-Series A/C RED B/O	INPUT: 90-285VAC, 0.5A @ 120VAC
OX39708-3	FD-Series D/C RED B/O	INPUT: 15-80VDC, 1.5A MAX @28VDC
OX39708-4	FD-Series A/C HIGH BRIGHT BLUE B/O	INPUT: 90-285VAC, 0.5A @ 120VAC
OX39708-5	FD-Series D/C HIGH BRIGHT BLUE B/O	INPUT: 15-80VDC, 1.5A MAX @28VDC
OX39708-6	FD-Series A/C WHITE ONLY	INPUT: 90-285VAC, 0.5A @ 120VAC
OX39708-7	FD-Series D/C WHITE ONLY	INPUT: 15-80VDC, 1.5A MAX @28VDC
OX39708-8	FD-Series A/C HIGH BRIGHT GREEN B/O	INPUT: 90-285VAC, 0.5A @ 120VAC
OX39708-9	FD-Series D/C HIGH BRIGHT GREEN B/O	INPUT: 15-80VDC, 1.5A MAX @28VDC
OX39708-10	FD-Series D/C WHITE B/O	INPUT: 90-285VAC, 0.5A @ 120VAC
OX39708-11	FD-Series A/C WHITE B/O	INPUT: 15-80VDC, 1.5A MAX @28VDC
OX39708-12	FD-Series A/C BLUE B/O	INPUT: 90-285VAC, 0.5A @ 120VAC
OX39708-13	FD-Series D/C BLUE B/O	INPUT: 15-80VDC, 1.5A MAX @28VDC
OX39708-14	FD-Series A/C HIGH BRIGHT RED B/O	INPUT: 90-285VAC, 0.5A @ 120VAC
OX39708-15	FD-Series D/C HIGH BRIGHT RED B/O	INPUT: 15-80VDC, 1.5A MAX @28VDC

Part #	Hard Shelter (FT- Series)	Electrical Configuration
OX39703	FT-Series A/C GREEN B/O	INPUT: 90-285VAC, 0.5A @ 120VAC
OX39703-1	FT-Series D/C GREEN B/O	INPUT: 15-80VDC, 1.5A MAX @28VDC
OX39703-2	FT-Series A/C RED B/O	INPUT: 90-285VAC, 0.5A @ 120VAC
OX39703-3	FT-Series D/C RED B/O	INPUT: 15-80VDC, 1.5A MAX @28VDC
OX39703-4	FT-Series A/C HIGH BRIGHT BLUE B/O	INPUT: 90-285VAC, 0.5A @ 120VAC
OX39703-5	FT-Series D/C HIGH BRIGHT BLUE B/O	INPUT: 15-80VDC, 1.5A MAX @28VDC
OX39703-6	FT-Series A/C WHITE ONLY	INPUT: 90-285VAC, 0.5A @ 120VAC
OX39703-7	FT-Series D/C WHITE ONLY	INPUT: 15-80VDC, 1.5A MAX @28VDC
OX39703-8	FT-Series A/C HIGH BRIGHT GREEN B/O	INPUT: 90-285VAC, 0.5A @ 120VAC
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OX39703-11	FT-Series D/C WHITE B/O	INPUT: 15-80VDC, 1.5A MAX @28VDC
OX39703-12	FT-Series A/C BLUE B/O	INPUT: 90-285VAC, 0.5A @ 120VAC
OX39703-13	FT-Series D/C BLUE B/O	INPUT: 15-80VDC, 1.5A MAX @28VDC
OX39703-14	FT-Series A/C H.B. RED B/O	INPUT: 90-285VAC, 0.5A @ 120VAC
OX39703-15	FT-Series D/C H.B. RED B/O	INPUT: 15-80VDC, 1.5A MAX @28VDC

Cable interface

In addition to the blackout color and voltage options, there are a wide range of cable configurations available. When ordering, please also specify the letter designation to identify the cable configuration e.g. OX39708-4A.

Oxley can provide other specific cable configurations and lengths on request.

Cord Designator	Cord Configuration
A	5.5' CORD WITH NEMA 5-15 PLUG, NOT FOR B/O VERSIONS
B	2' CORD WITH FLYING LEADS
C	117" CORD, PASSED THRU , NEMA 5-15 PLUG AND SOCKET (NOT FOR BLACKOUT VERSION)
D	117" PASS THRU CORDSET, WATER RESISTANT FOUR CONDUCTOR PLUG AND SOCKET (BLACKOUT VERSION)
E	36" LEADS, SHRINKTUBED, MOLEX 03-09-2049 AND 03-09-1049 HOUSINGS
F	4.5" LEADS, SHRINKTUBED, MOLEX 03-06-2044 HOUSING
G	10' CORDSET WITH FOUR-CONDUCTOR PLUG, NOT FOR PASS THRU APPLICATIONS
H	2.75" LEADS, SHRINKTUBED, MOLEX 03-06-2044 HOUSING
I	10' CORD WITH NEMA 5-15 PLUG,(NOT FOR BLACKOUT VERSIONS)
J	10' M24643/43-12UO, MARINE GRADE, LOW SMOKE CABLE
K	48" CABLE WITH FLYING LEADS
L	10" CABLE WITH AS 3112 (NEW ZEALAND/AUSTRALIA) PLUG AND SOCKET

Dimming option

To request a dimmable light option please add -DIM to the end of the part number e.g. OX39708-2A-DIM.