

ATLS

ADVANCED TACTICAL LIGHTING SYSTEM

FRONTLINE Lighting

Frontline's Advanced Tactical Light System (ATLS) is a patented lighting system which addresses the warfighters requirements for SWaP-C (Size, Weight, Power and Cost) flexibility and ease of operation. Unlike any other lighting system in the market today, ATLS will positively impact your deployment times.

Equipped with a user-friendly toggle switch, the ATLS seamlessly transitions between white and blackout lighting, allowing users to fine-tune brightness using the convenient dimmer control. Our patented Single Strand Flex integrates white and blackout lighting into a single string and is built to IP67 standards ensuring durability and reliability. The ATLS was designed to operate even if a section becomes damaged. Power will flow through the light bypassing the damaged section.

The ATLS is Berry-Amendment compliant and manufactured in the USA. It is an excellent, bright solution for new shelter lighting or a perfect replacement for existing LED or fluorescent lighting systems. ATLS is a lighting product that meets your warfighters needs.

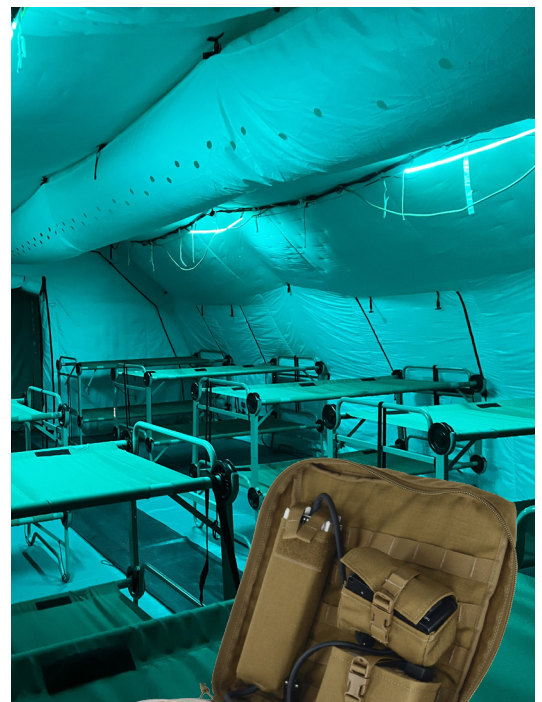
Berry-Amendment compliant and manufactured in the USA

ATLS White



Employing
the latest LED
technology
the ATLS
system is a
step ahead of
other lighting
products.

ATLS Blackout



**The patented Single Strand Flex (SSF)
integrates white and blackout lighting
into one single strand**



ATLS - MCB Features

ATLS Main Control Box (ATLS - MCB) integrates seamlessly with Frontline's patented Single Strand Flex (SSF).

The ATLS - MCB represents a pinnacle of innovative engineering and stringent testing protocols. It is equipped with several key features designed to enhance operational experience.

The ATLS - MCB can connect simultaneously to three distinct power sources:

1. Primary power supply
2. Vehicular power (utilizing the vehicle's NATO adapter cable)
3. BB-2590/U battery

In the event of a primary power failure, the ATLS - MCB automatically transitions to vehicular power, should it be available. If vehicular power is not accessible, the system will seamlessly switch to the BB-2590/U battery, ensuring that lighting remains operational throughout the mission.

Upon restoration of primary power, the ATLS - MCB initiates recharging of the BB-2590/U, thereby ensuring readiness for any future power disruptions. Indicator lights provide critical feedback for troubleshooting connectivity and power issues, while also informing the user of the battery status.

In summary, the ATLS system guarantees reliable and uninterrupted operation of the system, making it an essential asset for mission-critical lighting requirements.

ATLS - MCB



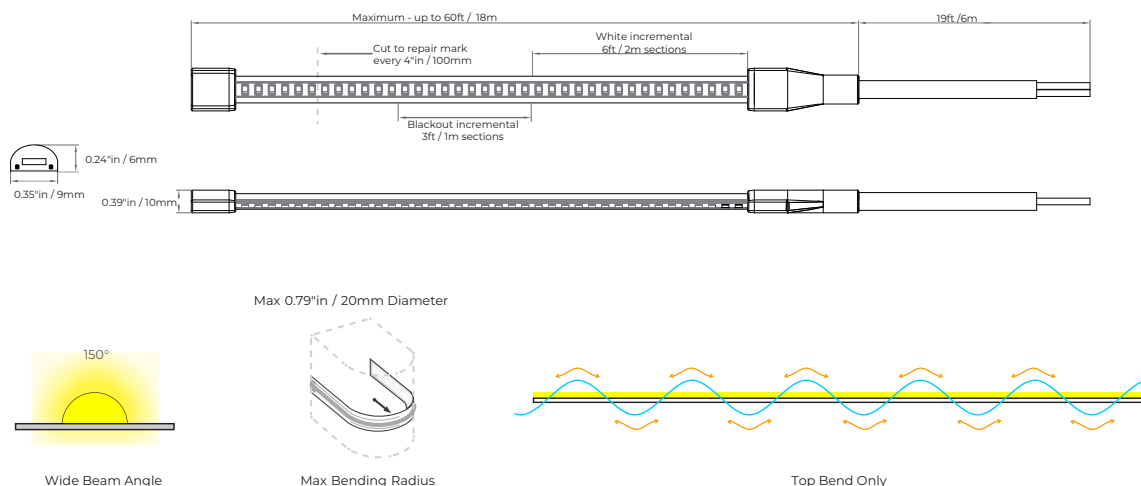
MASTER CONTROL BOX (MCB)

The MCB is the culmination of 18 months of intensive research and development.

The ATLS - MCB automatically transitions to available power sources

- Multiple power option provides versatility (power supply, vehicle, battery)
- Automatic switching between power sources when prime power is lost
- Ensures uninterrupted operation
- Charges the BB-2590/U battery when plugged into the Main Control Box
- Capable of being powered by a vehicle with a NATO connector
- Seamlessly integrates with the BB-2590/U battery
- Charges the BB-2590/U battery directly through the ATLS - MCB
- Indicator lights show battery charge status

Dimension / Diagram



Variations

Model No.	Number and Length of SSF	Total	Available in
	SYSTEM LIGHT DESCRIPTION	TOTAL LENGTH	White W+Blue-Green
ATLS - 1 - 3M	1 length of 3m ATLS light	10ft / 3m	● ●
ATLS - 2 - 6M	2 lengths of 6m ATLS light	39ft / 12m	● ●
ATLS - 2 - 9M	2 lengths of 9m ATLS light	59ft / 18m	● ●

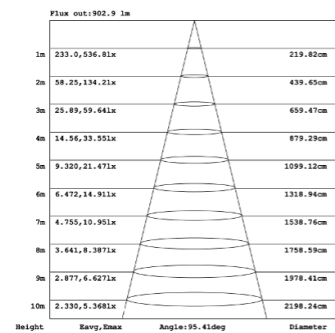
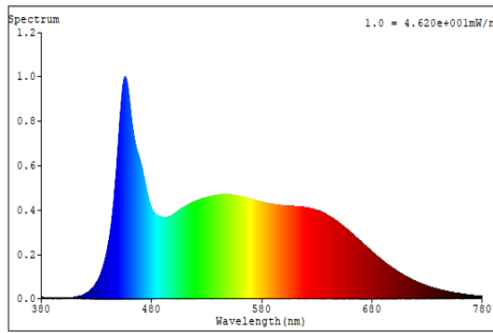
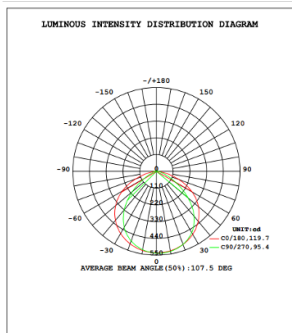
All systems are capable of expansion. Custom lengths are available. Total MAX length for all systems is 59ft / 18m

Technical Specifications

Specifications	ATLS - 1 - 3M	ATLS - 2 - 6M	ATLS - 2 - 9M
	LIGHT: White - (W) Blue-Green - (BG)		
Voltage	24VDC	24VDC	24VDC
Amerage	1A (W) 0.5A (BG)	4.0A (W) 2.0A (BG)	6.0A (W) 3.0A (BG)
Lumens	2665lm (W) 630lm (BG)	10660lm (W) 2519lm (BG)	15990lm (W) 3778lm (BG)
Bag Dimensions			
Inches (L x W x H)	12" x 13" x 5" in	12" x 13" x 5" in	12" x 13" x 5" in
Metric (L x W x H)	305 x 330 x 127mm	305 x 330 x 127mm	305 x 330 x 127mm
System Weight	11lbs 5kgs	12lbs 5.44kgs	14lbs 6.35kgs
Operating Temp°			
Fahrenheit	(UL 62) -40° ~ 120° F	(UL 62) -40° ~ 120° F	(UL 62) -40° ~ 120° F
Celsius	(UL 62) -40° ~ 49° C	(UL 62) -40° ~ 49° C	(UL 62) -40° ~ 49° C
Storage Temp°			
Fahrenheit	-50° ~ 160° F	-50° ~ 160° F	-50° ~ 160° F
Celsius	-45° ~ 71° C	-45° ~ 71° C	-45° ~ 71° C
Rated Life Hrs.	Light life ~ 50,000hrs	Light life ~ 50,000hrs	Light life ~ 50,000hrs
Warranty Period	1 Year	1 Year	1 Year

Testing conducted at US Army Combat Capabilities Development Command Soldier Center, Natick Massachusetts

White LED Characteristics



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.3217$ $y = 0.3351$ / $u' = 0.2018$ $v' = (duv=1.87e-03)$ $Dx, Dy: -0.0003, 0.0033$

CCT= 6002K Prcp WL: Ld=493.6nm Purity=3.8%

Peak WL: Lp=456nm FWHM: =28.5nm Ratio: R=16.0% G=77.1% B=7.0%

Render Index: Ra = 93.6 AvgR = 92.3 TM30:Rf=90 Rg=98

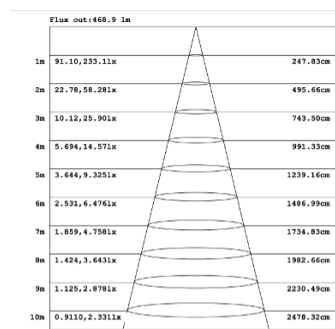
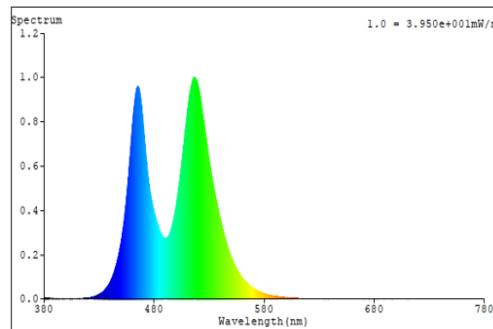
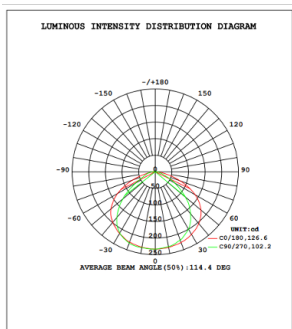
Photometric & Radiometric Parameters

Flux = 1484.5 lm Eff.: 126.40 lm/W Fe = 5.3618W

Electrical Parameters

V = 24.00 V I = 0.4894 A P = 11.74 W PF = 1.000 F = 0.00 Hz

Blackout LED Characteristics



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.1411$ $y = 0.3651$ / $u' = 0.0795$ $v' = (duv=1.09e-01)$ $Dx, Dy: -0.1211, 0.0997$

CCT= 15817K Prcp WL: Ld=493.8nm Purity=63.0%

Peak WL: Lp=517nm FWHM: =32.3nm Ratio: R=0.2% G=89.3% B=10.5%

Render Index: Ra = 24.2 AvgR = 17.9 TM30:Rf=10 Rg=24

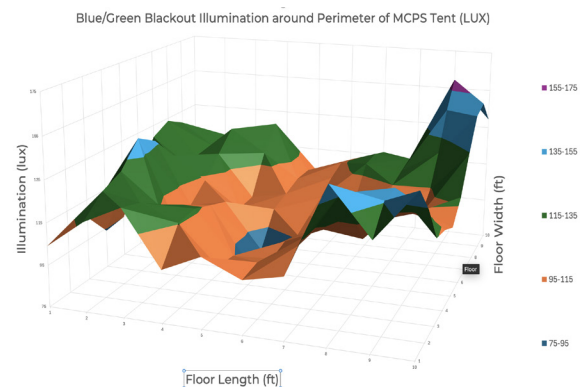
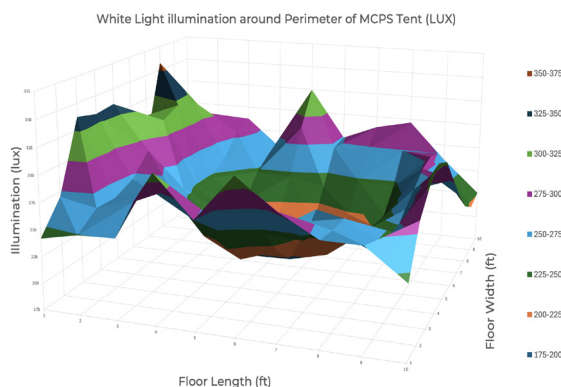
Photometric & Radiometric Parameters

Flux = 746.70 lm Eff.: 63.67 lm/W Fe = 2.4655W

Electrical Parameters

V = 24.00 V I = 0.4887 A P = 11.73 W PF = 1.000 F = 0.00 Hz

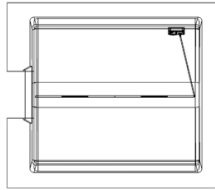
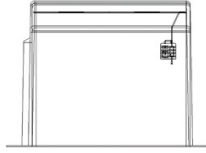
Mapping



Installation

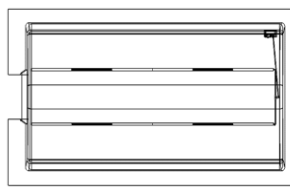
The single strand's adaptability allows for easy maneuverability, ensuring optimal positioning of light where needed. ATLS excels at providing exceptional light quality and eliminates bright spots or "dazzle effect"

ATLS - 1 - 3M



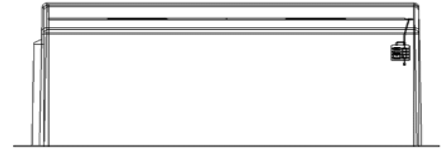
Estimated Coverage
11ft x 11ft / 3.3m x 3.3m
 Suitable for small to medium shelter sizes.

ATLS - 2 - 6M



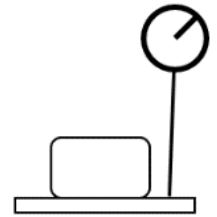
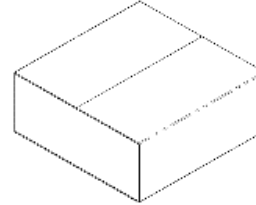
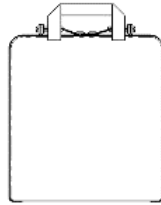
Estimated Coverage
20ft x 21ft / 6m x 6.5m
 Suitable for medium to large shelter sizes.

ATLS - 2 - 9M



Estimated Coverage
32ft x 30ft / 9.5m x 9m
 Suitable for Large shelter sizes.

Packaging



ATLS

Model No.	Light Length	Bag Size (in / mm)	Package Dimensions	Shipping Weight
ATLS - 1 - 3M	1 x 3 Meters	12 x 13 x 5" in	12 x 13 x 5" in	12lbs / 5.44kg
ATLS - 2 - 6M	2 x 6 Meters	305 x 330 x 127mm	305 x 330 x 127mm	13lbs / 5.9kg
ATLS - 2 - 9M	2 x 9 Meters			15lbs / 6.8kg