

# 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.

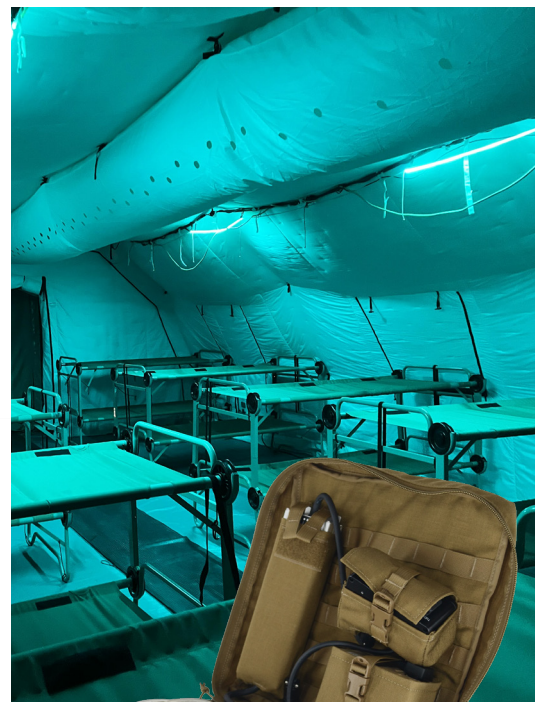
## Berry-Amendment compliant and manufactured in the USA

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



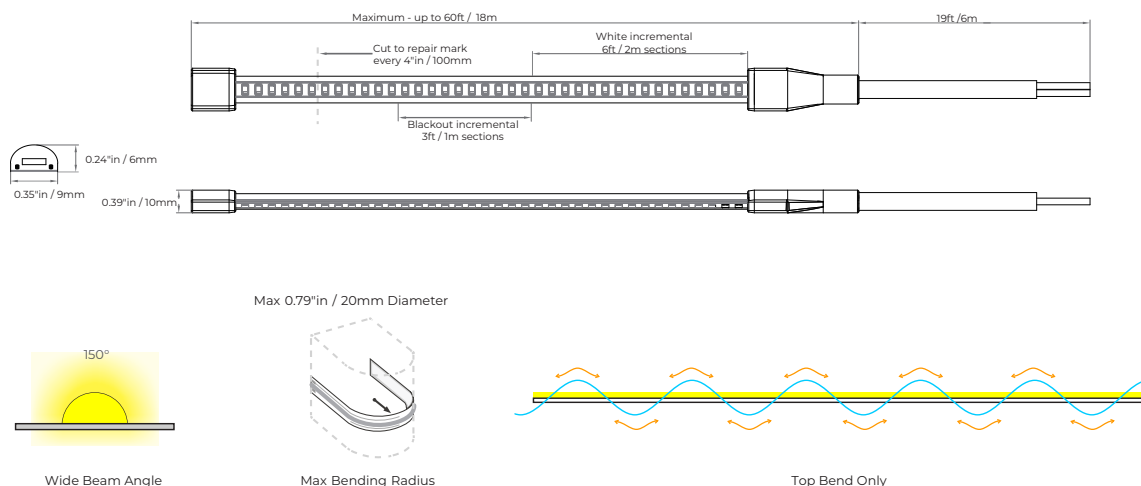
MASTER CONTROL BOX (MCB)

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	● ●

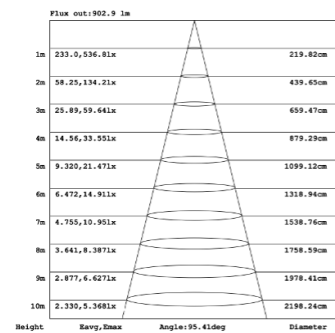
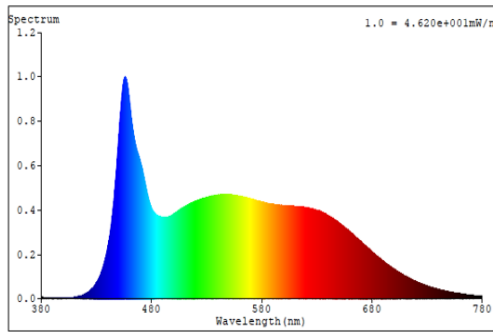
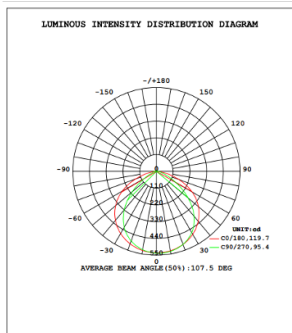
All systems are capable of expansion. Custom lengths are available. Total MAX length for all systems is 59ft / 18m

## Technical Specifications

Specifications	ATLS - 1 - 3M	ATLS - 2 - 6M	ATLS - 2 - 9M
	LIGHT: White - (W)   Blue-Green - (BG)		
Voltage	24VDC	24VDC	24VDC
Average	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

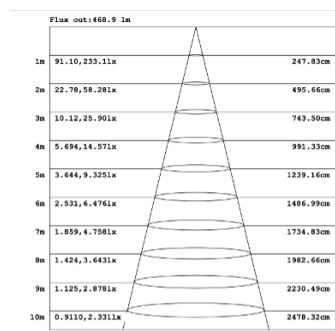
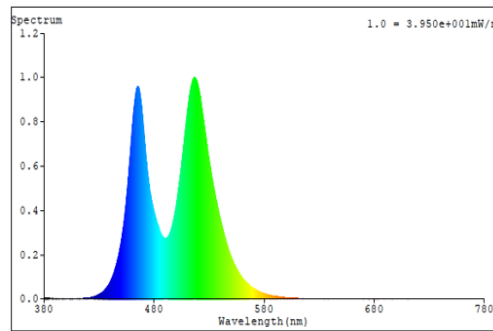
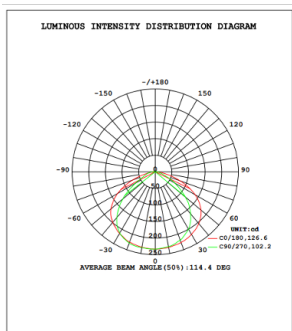
## Photometric & Radiometric Parameters

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

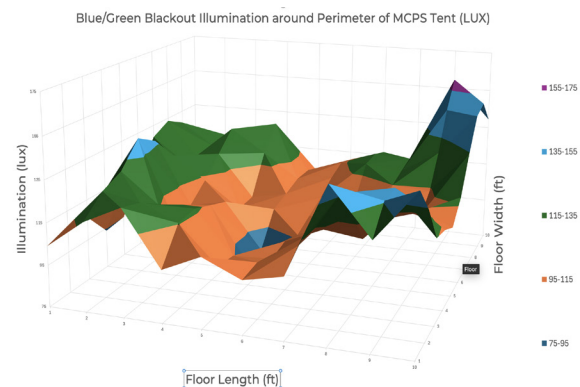
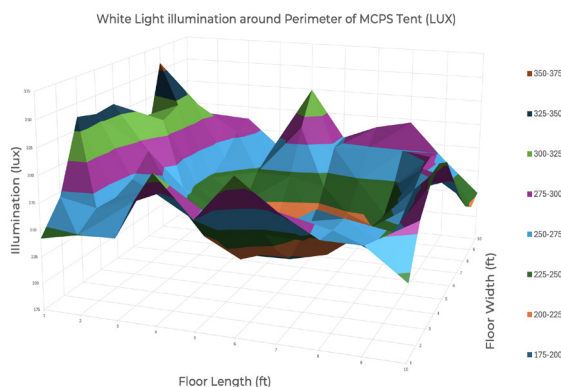
## Photometric & Radiometric Parameters

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

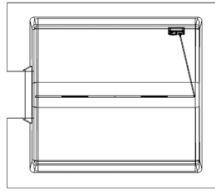
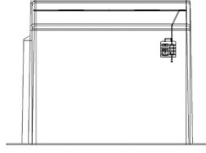
# Mapping



## Installation

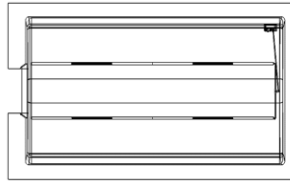
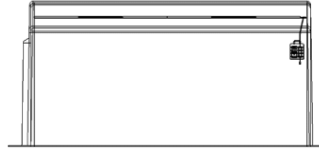
Installation is quick with pre-installed hangers and adjustable cord locks providing users the flexibility to customize the hanging distance from the ceiling. The single strand's adaptability allows for easy maneuverability, ensuring optimal positioning of light where needed. ATLS excels at providing exceptional light quality and eliminates bright spots or "dazzle effect"

### ATLS - 1 - 3M



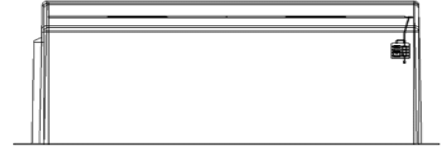
**Estimated Coverage**  
**11ft x 11ft / 3.3m x 3.3m**  
 Suitable for small to medium shelter sizes.

### ATLS - 2 - 6M



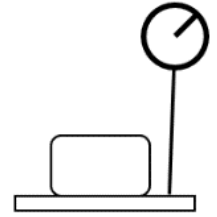
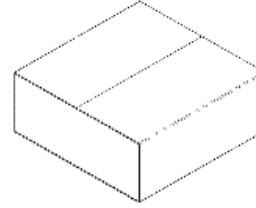
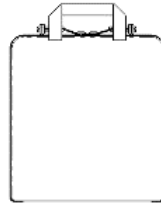
**Estimated Coverage**  
**20ft x 21ft / 6m x 6.5m**  
 Suitable for medium to large shelter sizes.

### 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