



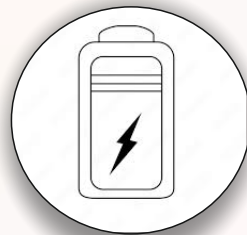
# HAND HELD SEARCH LIGHTS



**LIGHTWEIGHT**



**BRIGHT-LIGHT  
SOURCE**



**RECHARGEABLE  
BATTERY**



**FAST  
CHARGING**



# TYPES OF HAND HELD SEARCH LIGHTS(HHSL)



Superlight (Motorized)



Superlight (Manual)



Superlight 1



Lotus LED 10



Xenon Light



Halogen Light



LED Light



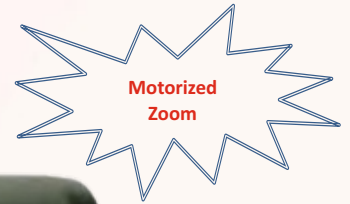
Police LED Torch Light



Bendable Light

# Superlight (Motorized Zoom)

[Emits IR & Visible Light]



**Master on/off :** Master switch to make the light off / ready for operations ( in sleep mode )

**3 Position Mode selector switch :** Press the switch for selecting the 3 modes of operations i.e IR / OFF/ visible light

**Motorized zoom :** zoom can be operated from the light ( if operated in hand held mode ) and or through wired remote ( if light mounted on weapon ) . It enables motorized adjustment of the light focus ( widespread / focus )



**Weapon Mount**

HA-III hard anodized Weapon / helmet mount made from aircraft grade aluminium Mount - military standard 1913 - Picatinny rails Has Adjustable 3 screws , one Allen Key for adjustments of screws.



**Li-ion Rechargeable Battery**

Li-ion Heavy duty Rechargeable batteries ( 18650 series ) Every light comes with total 2 batteries. Inbuilt battery protection from overcharging, deep discharge, reverse polarity.



**AC Battery Charger**

Smart AC Charger ( input 150V to 220 V AC , 50 Hz , non-spiked) Charging time : approx 5 hours. Do not charge on Generator. If using generator, charge through stabilizer If charger plugged to AC without battery : Green indication : AC supply If charger plugged to AC with battery :

**Red indication :** Low Charged  
**Green indication :** Full Charged

ON/OFF    FLASH PAD FOR ZOOM



## Wired Remote

Remote Dual switch On/ off to lock the operations of the touch pad Press touch pad for operating the motorized zoom / beam focus of the light ( beam focus / wide spread ) ( post connecting remote male connector with the light female connector)

## Other Features :

**Beam Range :** 50-100 Mtrs (IR) , White Light : 50-200 Mtrs

**Lumens:** minimum 600 Run time / battery (once fully charged) : minimum 3 hours ( IR mode ) , minimum 2 hrs ( white light )

**Operating Temperature:** -20 deg C to 55 deg C

**Material of light:** Ruggedized 6061 T6 Aluminium Alloy ( Aircraft Grade ) .

**Other features:** Shock Proof , Ruggedized, Water proof ( IP 65 )

# Superlight (Manual Zoom)

[Emits IR & Visible Light]

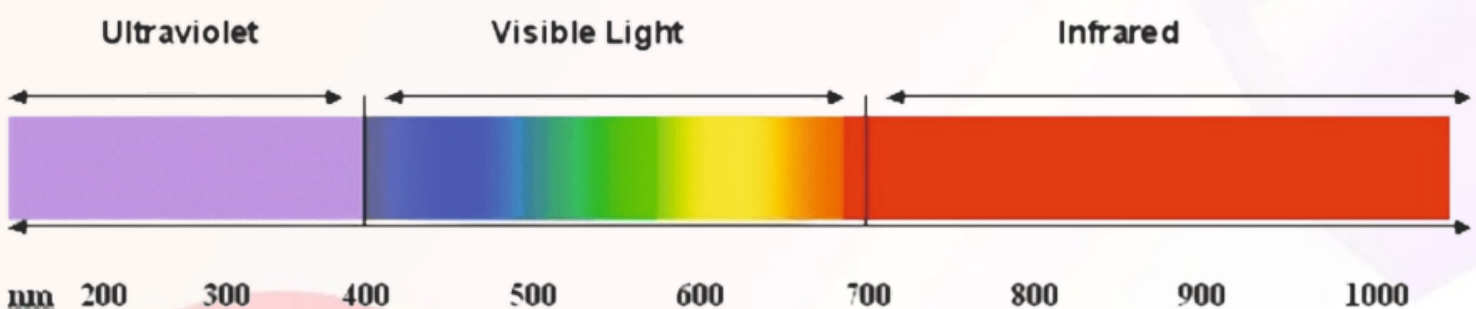


## FEATURES:

- Emits both White & Infrared ( IR ) Rays, IR 940 nm
- Both weapon / helmet mountable on standard 1913 Piccating Rail .
- Also hand held zooming system ( focussing system ) to make the beam focus / widespread . On / off through cable remote control
- Single 3 position selector switch for mode selection : IR / Off / Visible light
- Water Proof , Shock proof , Snow Proof
- 940 nm IR wavelength
- Weight : 235 grams
- Beam Range : 100 mtrs + ( at focus mode at full glow intensity ) for both IR & White modes
- Bulb source : LED of 5 watt rating of both IR & White
- Battery Charger : AC Charger for charging from 220V AC 50 Hz , 5 hours charging time
- Battery : Li-ion Rechargeable , Sealed Maintenance Free with inbuilt protection circuit 3.2Ah
- AC Charger : provided
- Run time : IR mode : 150 minutes + , White Light mode at full glow : 120 minutes +



## Wavelengths (nm) of Light



## Xenon Light



### FEATURES:

- Push to ON/OFF Switch.
- Bulb continuous glow.
- Inbuilt 12V Rechargeable Lead acid Battery -12v7.6 Ah(Optional Ni-mh/li-ion batteries also available)
- Bulb: 35/40/50 W HID Xenon.
- Front Dia: 135mm/160 mm(approx).
- Total weight:less than 4 kgs(lesser weight also available with Ni-mh/Li-ion batteries).
- Color of light: White
- External/Internal battery charger (as per user requirement)
- Heavy duty glass filled/ABS body with integrated handle of body thickness 3.5 mm.

### LIGHT PROPERTIES:

- Beam of light reaches approx. 1.5 km distance in clear weather conditions.
- Easily detects group of persons at 450 meters.
- Lux value at 350 meters distance of: 49 lux(approx)/5 million CP at 5 meters.

## Halogen Light



### FEATURES:

- Nylon Glass filled Heavy duty body with avg. wall thickness 2.5 mm.
- Option also available with ABS & Polycarbonate material.
- Halogen Bulb with Deep Parabolic reflector.
- Reflector front glass does not crack when droplets of water fall on it when lights is on.
- Standard rechargeable Sealed maintenance Free Lead Acid Battery.
- Optional Nimh, Li-on, Ni-cd battery also available.
- Integrated handle with Nylon Strap for shoulder resting.
- The HHSL is light in weight, easy to carry with multiple charging options.

### LIGHT PROPERTIES:

- Beam of light Reaches approx.1 Km distance in clear weather conditions.
- Easily detects group of persons at 350 metres.
- Lux value at 350 metres distance of :
- 55 watt bulb: 8 lux (approx )/1 million c.p. at 5 metres.
- 100 watt bulb: 16 lux (approx )/12 million c.p. at 5 metres.

# XENON HAND HELD SEARCH LIGHT

## COMPARISON CHART



### 35 watt HID Xenon Search Light

### 55 watt Halogen Search Light

3 times more light / powerful than 55 watt halogen bulb.

1/3 rd the light quantity / Lux in comparison

50% low power consumption: duration of glow above 100 minutes in continuous usage on 12V-7.6Ah lead acid battery

Higher power consumption: total duration of glow is around 70 minutes and beam quality & quantity reduces on operations

Constant glow / beam : The intensity of light is same throughout its operations. Does not decrease with usage / battery discharges and reaches low voltage.

Reducing glow / beam : The intensity of light decreases as battery voltage decreases on usage . Beam high in initial stages, and then gradually reduces to become a simple torch .

Longer Beam Range: above 1000 metres. Deeper penetration.High quantity of Lux reaches the target .

Shorter Beam Range : around 400 metres. Lesser penetration in comparison. lesser quantity of Lux reaches the target .

White light: Creates day in the night . More clearer, more visible, high quality light . Light is white in colour ( like tubelight / CFL )

Yellow light: Less clarity, less amount , less visibility in comparison .Colour of Light is yellow .

Longer life: above 5000 continous hours of operations .

Shorter life : around 300-500 hours of operations .

Cold Light : This emits lesser heat . Hand can be placed in front of it for longer duration.

Hot Light:This emits high heat and hand cannot be placed in front of it for longer duration.



POWERFUL



POWER CONSUMPTION



BEAM



BEAM RANGE



COLOR OF LIGHT



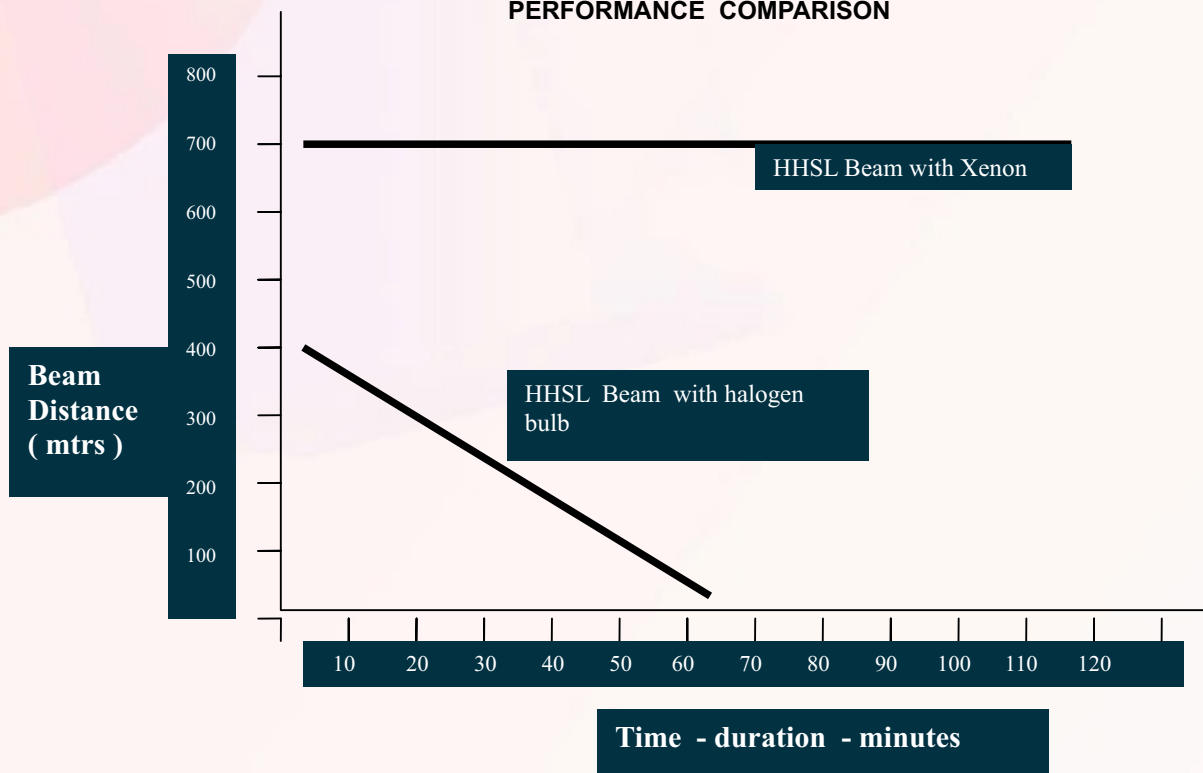
LIFE



LIGHT

S.no.	Aspect	Halogen HHSL	HID Xenon HHSL	Advantage
1	Beam distance	300-400 meters	600-800 meters	Double distance . Far off things can be seen as well
2	Beam light amount	X	3x	3 times more light , hence more clarity in visibility
3	Beam Duration	60-70 minutes	100-110 minutes	Almost 2 times more duration of light
4	Beam nature	Beam intensity reduces with time. 1 <sup>st</sup> 10 minutes- good, next 20-40 minutes- average , last 30 minutes poor	Continuous beam Does not drop	More light, more intensity, more penetration, continuous through out the run time
5	Weight of light	3.8 kgs	4.0 kgs	Same weight, superior performance

## PERFORMANCE COMPARISON



## LED Light



### FEATURES:

- Push to ON / off switch.
- High Bright white LED's light ( viewable from 2 miles).
- Beam range of LED's : above 100 meters.
- Inbuilt Rechargeable Battery.
- External / Internal AC charger.
- Light weight , water and fire resistant body.
- Can be customized as per buyers bulk requirements.
- Light visible from more than 10 Km.

### APPLICATIONS:

- Airforce for emergency landing strip / Landing Indications.
- Army / Paramilitary / Security forces (for border patrolling / signalling / compound security).
- Traffic Police (for VIP security / routine checking / Traffic Management )
- Railways (emergency operations / Signaling)
- Traffic management.
- Traffic safety / Ground staff / Forest officers / Remote areas / adventurous trips.

# Bendable/Angular Light



Fire fighting light/ Hand Held Search Light (HHSL) for the field forces or can be mounted on vehicle or can be clipped to the armour of the user to be used for fire fighters search rescue lighting surveillance and signalling application.

## PARTS & ACCESSORIES

The light comprise of the following :-

- Light including rechargeable Li-ion battery , clip and magnetic base.
- 1 external charger.
- Strap/arrangement to enable easy carriage on person.

## Length of the Beam:

It has a cutting penetrating beam of white LED light as well as Red & Green LED indication light for signalling.



Green LED  
Light



Red LED  
Light



White LED  
Light

## Dimmer & Flasher:

The white LED light has minimum 2 step dimmer and fast flasher.

## Red & Green LED:

The light has on the reflector side, red and green LED's for continuous and flashing operations.

## Tactical Switch:

Single tactical switch for all operations with inbuilt LED indication of the battery status ( red / green)

## Strap for Carriage:

A strap of minimum 6 inch loop is provided.



## Weight:

The weight of light with battery is 180 grams, without battery 130 grams.



**Rotating Head:**

The light has an articulated head from 0 to 90 degree angle and the light is operational for all features in all angles. The user can easily adjust the light easily manually without using any tools.

**Magnetic Base:**

The light has a magnetic base to enable static usage on metal.



↙ **Magnetic Base**

↘ **Aircraft Grade Aluminum Alloy Material**



**Body of Light:**

Should be made of super tough Aircraft grade Aluminum alloy material. There will be no major damage/crack to the body during the Mechanical shock.

**Battery:**

It has an In-built 18650 x 1 Rechargeable Li-ion battery cell of minimum 2.6Ah capacity. Inbuilt charger,through micro-usb / micro-switch to enable battery charging without taking out the battery with a provision to easily take out the battery if desired by user.

**Battery Charger:**

Battery charge from AC 220 V within 4 hours. It has an auto cut off to prevent overcharging of the battery after it is fully charged.

**Physical Features / Dimensions:**

The front diameter: 28 mm, overall length: 158 mm.

**Ruggedized:**

- Water Resistant: The HHSL is able to resist rain water.
- Operating Temperature: 20 C to +65 .
- Mechanical Shock Resistant: The HHSL can sustain a drop from a height of 3 feet

**IPR Violation:**

No Indian IPR violation.



**Angular 90 Degree**

## Quality Control Certifications



## Product Features



Lightweight



STRONG



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