

ATEX LAMP

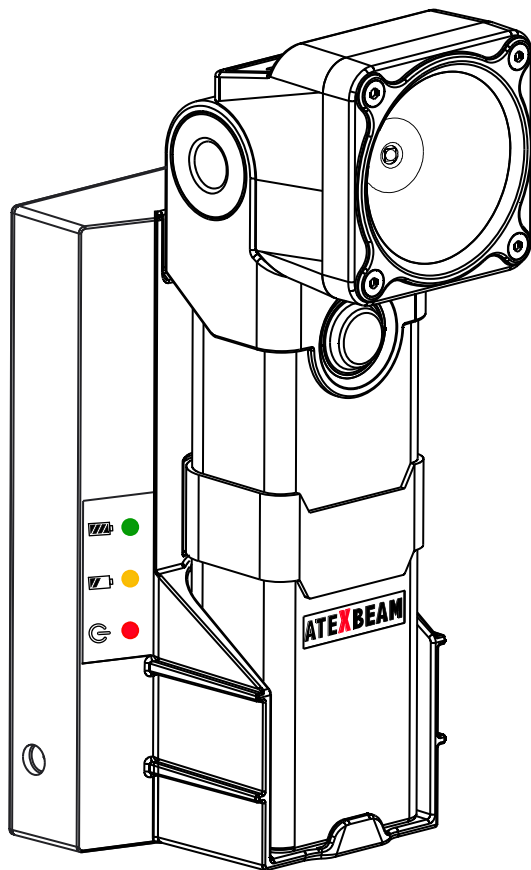


PL-AT803A

I M2 Ex ib I Mb

II 2 G Ex ib IIC T4 Gb

II 2 D Ex ib IIIC T135°C Db (Tamb:0 ~40°C)



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ATEXBEAM safety lamp is built in compliance with Directive 2014/34/EU (Ex-Protection Directive).

It is a self-contained lamp designed with LED technology for durable performance, power efficiency and structural robustness, and it is powered by wide thermal tolerant Lithium battery.

The portable rechargeable LED lamp type PL-AT803A, is in compliance with standards EN IEC 60079-0:2018 and EN 60079-11:2012.

The equipment to be intended use in mining with EPL Mb and zone 1 with gas group IIC and zone 21 with dust group IIIC.

ATEXBEAM is approved for use in the zones:



I M2 Ex ib I Mb



II 2 G Ex ib IIC T4 Gb



II 2 D Ex ib IIIC T135°C Db (Tamb:0 ~40°C)

ATEXBEAM Description

ATEXBEAM safety lamp is built for heavy duty industrial applications.

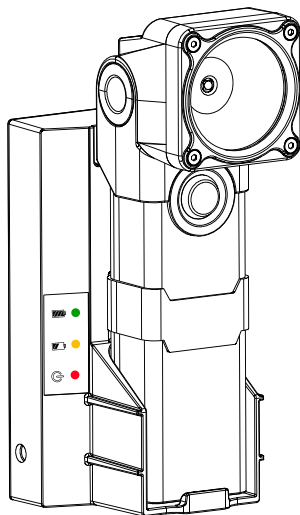
The enclosure of the lamp is made of industrial Polycarbonate resin with excellent impact strength. And it is anti-static, high heat resistance and has good structural stability. The strength and dimensional stability of polycarbonate resin are further enhanced with rugged design for tough work environment.

ATEXBEAM lamp is ergonomically operated with one switch that turns on/off light and adjust brightness. Lighting time can be increased when the power saving mode is activated.

The direction of light beam is adjustable at various angles to meet the users' need.

ATEXBEAM PL-AT803A Features and Benefits

- Lighting time span:
Up to 9 hours lighting time in high power mode
and up to 18 hours in power saving mode
- Equipped with light-weight wide thermal tolerant
high capacity Li-ion battery and it is capable
of being recharged for 300 cycles
- Robust plastic enclosure, made of anti-
static industrial resin, is capable of
withstanding knock and impact
- Power Failure Mode:
It has auto turn-on function in event of
power outage
- Adjustable light beam for user to meet
specific needs at various angles in
working environment
- Robust transparent industrial PC
- Low battery capacity warning indication



Anti-Static Body

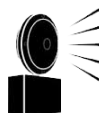


**High Impact
Strength
Industrial Resin**



Li-ion

**High Capacity
Li-ion Battery**



**Swivelable Light
Direction and
Auto-Turn on in
event of power failure**

ATEXBEAM PL-AT803A Enhanced Performance and Safety Features

Power Saving Mode

- The power saving feature is to reduce battery power consumption in order to maximise lighting time span.

Pressing the switch twice from off position to activate power saving function (Dim mode).



- User may select the power saving mode to gain longer lighting time span when the battery capacity is running low and when the user prefers less brightness.

- **Maximising Battery Performance**
The built-in charging circuit monitors the charging processes and protects the battery from being overcharged and over-discharged. The regulated charging and discharging improves battery lifetime.



Maximum Performance

Battery Safety Thermal Cut-Off

In event where battery temperature exceeds abnormal limit, the battery pack is safely disconnected and isolated by thermal cut-off.



Thermal Cut-Off

The lamp shuts down for safety precaution.

Getting Started with Operating Instructions

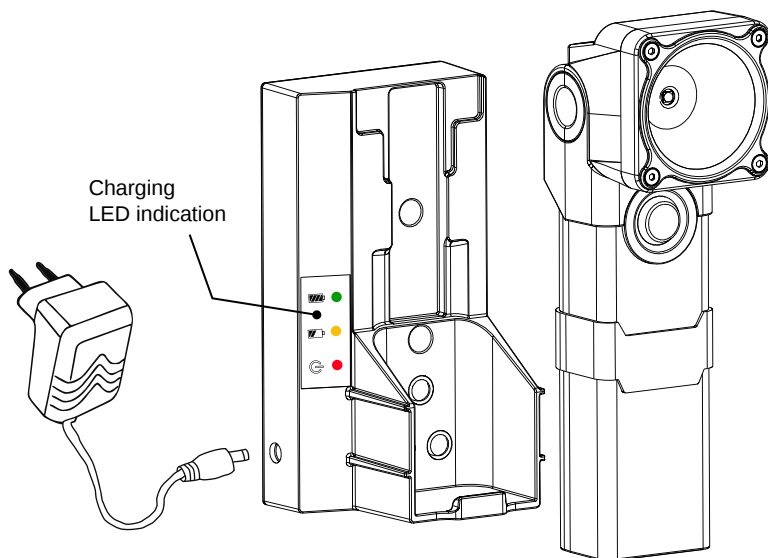
Charging ATEXBEAM PL-AT803A Instruction:

Charging ATEXBEAM PL-AT803A must be carried out with the designated charging station and only in areas away from potential explosive atmosphere.

Plug the universal power adaptor into a 110Vac (US) or 230Vac (Europe) power outlet.

Connect the DC plug from the power adaptor to the DC socket of the charging station. The power on LED on front panel of charging station will light up. Place the lamp into the charging station, LED lights blink as charging process begins.

When all three LEDs light up and blinking stops, the lamp is fully charged.



Lamp Operating Instructions:

ATEXBEAM PL-AT803A is operated with one soft silicon power switch located in the front of the lamp.

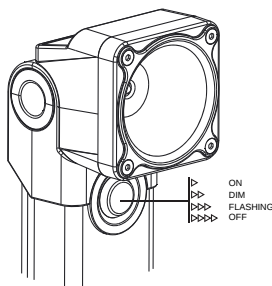
By pressing the switch, switching sequence cycles through four lighting modes as shown below:

Press the switch once: Light is on in Full Brightness Mode

Press the switch twice: Light is in Energy Saving Mode (Dimmed Light)

Press the switch thrice: Flashing mode

Press the switch fourth: Light is off



Power Failure



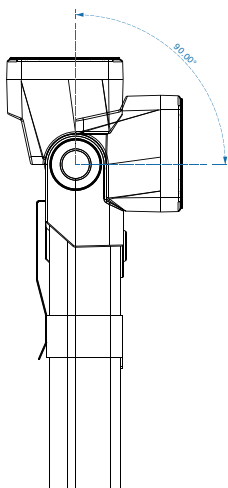
Power Failure Mode:

Place ATEXBEAM PL-AT803A in the charging station.

Light turns on in event of power outage (light on when power fails during charging).

Adjusting Angle And Direction Of Light Beam:

To adjust light beam at a desired angle, the lamp head can be swivelled at continuous angles from vertical 0° to 90° in the front.



Operating Status Indications

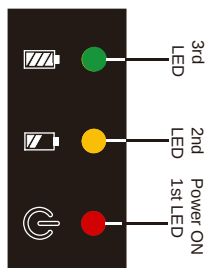
Light Indication Of Charging Station:

1) Power ON LED (1st LED) :

The charging station is on when it is connected to the power-source. The 1st LED turns on.

2) LEDs Blink (1st, 2nd, 3rd LEDs):

The battery is being charged. Blinking LEDs indicate battery capacity level.



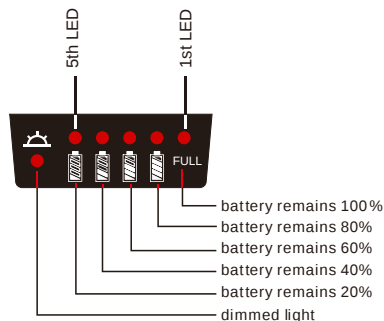
3) All LEDs ON (1st, 2nd, 3rd LEDs) :

The battery is fully charged

The LED Indication Of ATEXBEAM PL-AT803A Lamp:

(LEDs on the lamp head shows the function status of lamp)

During charging process: The LED indication remains off.



User Note:

If the battery is fully discharged, the LED light may not turn on.

Charge the lamp at regular interval to ensure optimum battery performance.

ATEXBEAM PL-AT803A Maintenance:

- Built-in battery is factory charged up to 30% in capacity when you buy ATEXBEAM PL-AT803A lamp.
- Keeping the lamp charged over continuous period of time, i.e. overnight, does not damage the battery or the lamp itself.
- When the lamp is not in use, always keep it in the charging station under charging.
- Clean the lamp with wet cloth. Only use diluted non-caustic detergent to clean the lamp.
Do not use chemical solvent and oil based detergents.
- Do not clean the lamp in water.
- Always keep the lamp away from hazardous area.



30% charged in capacity

Electronic Module Replacement

- Step 1:
Remove rubber pad ① from the bottom housing ⑤
- Step 2:
Remove two screws ②
- Step 3:
Remove two screws ③, the clip holder ④, and then the bottom housing ⑤
- Step 4:
Pull out the electronic module and unplug the connections of step ①/②/③ (figure 3-3)

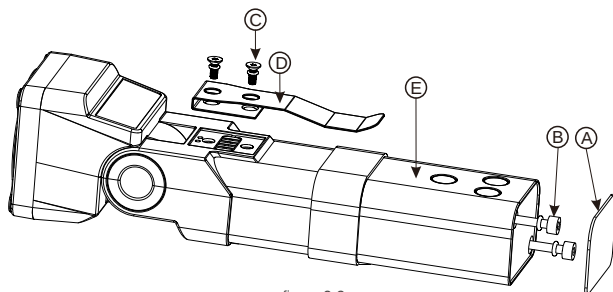


figure 2-3

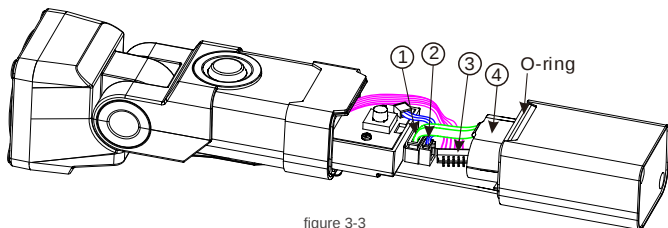


figure 3-3

Battery Pack Replacement

Before replacing battery pack, refer to and observe strictly the precautions and warnings.

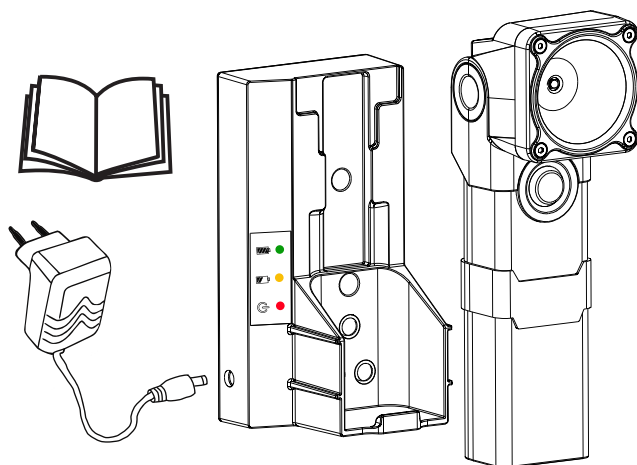
- Step 1:
Remove rubber pad ① from the bottom housing ⑤
- Step 2:
Remove two screws ② (x2 pcs)
- Step 3:
Remove two screws ③ (x2 pcs), the clip holder ④, and then the bottom housing ⑤
- step 4:
Pull out the electronic module and unplug the connector ① to remove the battery ③, and then replace with a new battery (figure 3-3).

Product Specifications

Product Model	ATEX BEAM PL-AT803A
ATEX Certification number	TÜV 21 ATEX 8751 X
Approval	 I M2 Ex ib I Mb II 2 G Ex ib IIC T4 Gb II 2 D Ex ib IIIC T135°C Db (Tamb:0~40°C)
Equipment Category	M2, Group II/III Category 2
Protection Type	ib intrinsic safety
Classification Area	Zone 1,2 / Gas Group IIC/Mining M2 Zone 21,22 / Dust Group IIIC
Temperature Classification	T4(Gas)/T135°C(Dust)
Ambient Temperature	0°C to +40°C
Enclosure Material	Industrial PC
Lens	Industrial PC
Beam Type	Spot light
Light Source	1 X 3W High Power LED
Brightness	Approx. 220 Lumens
LED Lifetime	30000 hours
Power Source	3.6V 6700mAh Li-ion Rechargeable Battery
Charging Cycle	300 cycles
Lighting Time	9 hours in full brightness / 18 hours in power-saving mode
Weight	350g(without charging base)
Power Adapter	12V 1A
Recharge Time(Empty to Full)	15 hours
IP standard	IP65 according to IEC 60529 only

In the package

- PL-AT803A ATEXBEAM LAMP
- CHARGING STATION
- UNIVERSAL POWER ADAPTOR
- USER MANUAL
- DECLARATION OF CONFORMITY



PRECAUTIONS AND WARNINGS

Safety use consideration:

1. This lamp shall be used with 12V approved adaptor.
2. Do not rub on the plastic enclosure of this lamp.
3. This lamp must be protected from mechanical impacts. If damages occurred, the lamp must be removed from the hazardous area.

WARNING - DO NOT MAKE MODIFICATION ON THE LAMP AND REPLACE PARTS NOT SPECIFIED FOR POWERLINE LAMP.

WARNING - DO NOT CHARGE WITHIN POTENTIALLY EXPLOSIVE ENVIRONMENT.

WARNING - AVOID STRONG ALKALINE SUBSTANCES AND SOLUTION.

WARNING - DO NOT DISMANTLE THE LAMP IN ANY CIRCUMSTANCES. RETURN THE LAMP TO AUTHORISED SERVICE CENTER.

WARNING - ONLY AUTHORISED PERSONEL IS ALLOWED TO OPEN THE LAMP.

WARNING - DO NOT SUBMERGE THE LAMP IN WATER.

WARNING - DO NOT OPEN WHEN ENERGIZED.

WARNING - DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT.

WARNING - DO NOT CHARGE THE BATTERY IN HAZARDOUS LOCATION.

WARNING - USE ONLY MICA JBL-206-1S2P-18650 6700mAh 3,6V BATTERIES

WARNING - ONLY USE SPECIFIED ATEXBEAM CHARGER ADAPTOR AND CHARGING STATION FOR CHARGING POWERLINE LAMP.

ATEXBEAM is a trademark belongs to Powerline.

Manufacturer / After service

Powerline Industrial Ltd.

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