



New cap lamp AX-800 / AX-850
for mining, industry and firefighter

A new generation of miner's cap lamp with high quality, very high safety, high light output, convenient and flexible charging system was developed in

Germany by KLT Kiessler-LichtTechnik GmbH

We are specialized in LED lamps for many years.



Descriptions:

1. High Power CREE LED with lifespan >100.000 hours and 4 Low Power LED.
2. High-energy and more safety Lithium-Polymer battery with high capacity and long lifespan.
3. Explosive proof design with three ATEX permissions for group I (M1) and II (1G + 2G).
4. Water proof housing with IP67.
5. Very strong switch installed beside to avoid scratching and dust.
6. AX-800 with 2 steps: Emergency light, working light.
AX-850 with 3 light steps: Emergency light, working light and strong light.
7. Delivery with ribbon and flexible charging system.
8. Display of battery capacity and switch automatically to low light when the battery gets flat.
9. Convenient order of light steps: 1.Working light, 2.High light, 3.Emergency light.
10. Very strong external charging contacts are easy to clean.

dmather@protectorlamp.com

<http://www.protectorlamp.com/>

Specifications:

| | |
|--------------------------|--|
| LED | 1 × 3 Watt CREE LED as primary light 4 × SMD LED as emergency light |
| LED lifespan | ≥100,000 h |
| Battery | Lithium-Polymer 3.7V / 2.8Ah |
| Battery circulating time | ≈ 600times (Then the capacity is >70%) |
| Case protection grade | IP67 |
| Battery working time | AX-800: Working light 15h / Emergency light 30h AX-850: High light 5h / Working light 15h / Emergency light 30h |
| Battery charging time | ≈5h |
| Max. Lumen value | AX-800: 45 Lumen, AX-850: 110 Lumen |
| Illuminance at 1 meter | AX-800: Working light 2800Lux / Emergency light 700 Lux AX-850: High light 6700Lux / Working light 2800Lux / Emergency light 700 Lux |
| Weight | 130g |
| Warranty | 2 years |
| Case material | Polycarbonate |
| Light dissipation | Within 3% after 5000h working time |
| ATEX Permissions | E II 1G Ex ia IIB T4 Ga E II 2G Ex ia IIC T4 Gb E I M1 Ex ia I Ma |



The light output:

The lightbeam is very good focussed, pure white and without any colorful rings. Around the central spot, there is bright corona. Very comfortable for the close-up range.

The three white plates on the picture have a distance of 50m, 100m and 150m. The forest you can see in the light cone has a distance of more then 200m.



dmather@protectorlamp.com

<http://www.protectorlamp.com/>

New very flexible charging system for cap lamps

The charging system was developed by KLT Kiessler-LichtTechnik GmbH also for the cap lamps AX-800 and AX-850.

It can be used as single charger or up to 25 lamps with every amount with input Voltage of 230V AC and 12V – 36V DC. Please see examples on next page. No other system can offer so many options!



Charging cup, Type AZ-80



Connector, Type AZ-84



Charging cup with connector and car charger cable



power supply for 1 - 5 lamps, Type AZ-81



power supply for 6 - 25 lamps, Type AZ-83



car charger, Type AZ-82

Descriptions and advantage:

1. More convenient than traditional charger with charging boards and fixed amounts.
2. Easy to use and install in car or truck with our special cable.
3. The lamp can be fixed by lock on the charging board to prevent stealing if needed.
4. The charger is controlled by electronic and proof against short circuit.
5. Simple design makes it easy to clean.
6. Special connectors can be used to combine two and up to five chargers together. Also holder for five chargers can be combined to up to 25 chargers. All is possible.

dmather@protectorlamp.com

<http://www.protectorlamp.com/>

AZ-83 / AZ-85 Flexible charging system for bigger amounts

In order to realize central management, customers can assemble the chargers together as many as they need with special connectors and holder.



Holder for 1 to 5 charger, Type AZ-85



4 holder combined to connect with power supply Type AZ-83

Here you can find some examples for the very flexible use

| Customers need | Required material |
|---------------------------------|--|
| Single lamp, 230V AC charger | 1 Charging cup AZ-80, 1 Power supply AZ-81 |
| Single lamp, 12V-24V DC charger | 1 Charging cup AZ-80, 1 Car charger cable AZ-82 |
| 3 lamps, 230V AC charger | 3 Charging cup AZ-80, 1 Power supply AZ-81, 2 Connector AZ-84, 1 Holder AZ-85 |
| 3 lamps, 12V-24V DC charger | 3 Charging cup AZ-80, 1 Car charger cable AZ-82, 2 Connector AZ-84, 1 Holder AZ-85 |
| 5 lamps, 230V AC charger | 5 Charging cup AZ-80, 1 Power supply AZ-81, 4 Connector AZ-84, 1 Holder AZ-85 |
| 5 lamps, 12V-24V DC charger | 5 Charging cup AZ-80, 1 Car charger cable AZ-82, 4 Connector AZ-84, 1 Holder AZ-85 |
| 12 lamps, 230V AC charger | 12 Charging cup AZ-80, 1 Power supply AZ-83, 9 Connector AZ-84, 3 Holder AZ-85 |
| 12 lamps, 12V-24V DC charger | 12 Charging cup AZ-80, 3 Car charger cable AZ-82, 9 Connector AZ-84, 3 Holder AZ-85 |
| 25 lamps, 230V AC charger | 25 Charging cup AZ-80, 1 Power supply AZ-83, 20 Connector AZ-84, 5 Holder AZ-85 |
| 25 lamps, 12V-24V DC charger | 25 Charging cup AZ-80, 5 Car charger cable AZ-82, 20 Connector AZ-84, 5 Holder AZ-85 |
| 100 lamps, 230V AC charger | 100 Charging cup AZ-80, 4 Power supply AZ-83, 80 Connector AZ-84, 20 Holder AZ-85 |

As you can see, every amount of charging places is possible.

dmather@protectorlamp.com

<http://www.protectorlamp.com/>