



DL16, AL16 & AE16
CORDED CAPLAMP

The power
that preserves

Oldham personal safety lighting systems, for applications where failure is not an option.

With quality and reliability at the core of Denchi’s business ethos, and the “without compromise” philosophy of Oldham, the DL16, AL16 and AE16 caplamps deliver the perfect light performance needed by the miner for maximum productivity in a safety controlled working environment.

High-performance lamps and leading technology chargers, designed without compromise. Experience has proven worldwide that the rugged construction of all Oldham lamps make them the “lowest cost of ownership” caplamps in the world.

OLDHAM
BY DENCHI

PART NUMBERS:	
DL16	200011
AL16	200015
AE16 CAPLAMP COMPLETE (STANDARD)	200014
AE16 CAPLAMP COMPLETE (SUPER-BRIGHT)	20001X
E16 BATTERY PACK	203011
A-TYPE LAMPTOP (STANDARD)	204024
A-TYPE LAMPTOP (SUPER-BRIGHT)	204025
1600MM STANDARD CABLE	201540
1700MM LONG CABLE	201543

A complete repair parts list is available in the maintenance manual

FEATURES & BENEFITS

- Maintenance-free battery and headpiece for minimised repair costs.
- Advanced Li-ion technology control for safety and optimised performance.
- Battery BMS protection for inrush current, overcharge, low voltage and temperature control
- Brightest light penetration for safety and visibility
- Reliable lighting performance
- Complete availability of parts for maintenance repairs.
- Lowest total cost of life ownership
- Longest lighting performance in emergency situations

SPECIFICATION

STANDARD CAPLAMP

Light performance	6,000 LUX / 180 Lumen across 6.5° arc / 50 Lumen across 130° arc
Colour temperature	Natural white ~4500K
Auxiliary LED	35 Lumen across 120° arc

SUPER-BRIGHT CAPLAMP

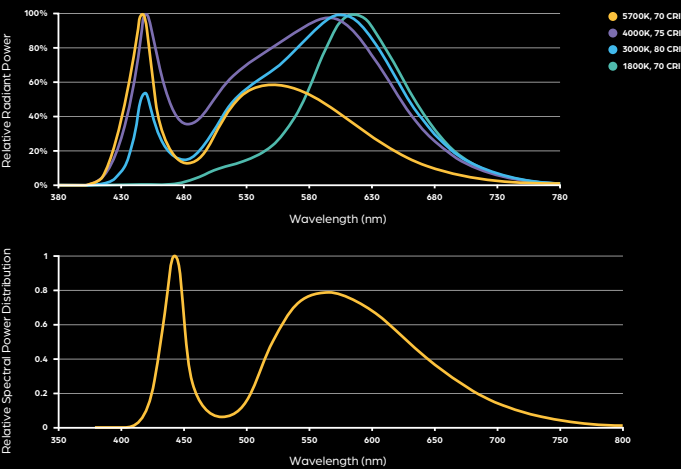
Light performance	9000 LUX / 275 Lumen across a 5.7° arc / 50 Lumen across 130° arc
Colour temperature	Cool white ~5300K
Auxiliary LED	35 Lumen across 120° arc

OPTIMISED LIGHTING

The light distribution of the Oldham main light source has been engineered to provide the optimal working light. Optimised with research undertaken by the Australian University of New South Wales on the behaviour of the human eye.

The standard Oldham caplamp achieves a spot of 6000 lux / 180 Lumen across a 6.5° arc (the normal area of focused sight for the human eye) and more than 50 lumen over 130° for peripheral vision illumination to avoid snag and trip hazards. The LED is specifically selected to match natural (warm) light for optimal visibility and perception underground.

The Super-Bright caplamp version provides a spot of 9000 lux / 275 Lumen across a narrower 5.7° arc with a slightly cooler LED spectrum. These factors combine to produce a beam that penetrates through dust and spray to give a clear contrast on rock surfaces.



SPECIFICATION CONTINUED

Charger connection	Standard keyhole
Main & Auxiliary LED Life	30,000 hours
Battery Life	>1200 cycles
Weight	960g
Battery case & cover material	Polycarbonate
Headpiece Dimensions	67 x 67 x 70 mm
Battery Dimensions	152 x 125 x 55 mm
Operating Temp	Ta = 0°C – +40°C

CERTIFICATION

The AE16 caplamp is certified with Ex ia approvals for use in gassy coal mine applications:

- IECEX_ITS_22.0019
- ITS-I 22 ATEX 34123X

APPLICATIONS

- Mining
- Quarries
- Tunnelling
- Construction
- Military
- Emergency Services
- Confined-Access
- Civil Engineering

MODEL AVAILABILITY AND FEATURES

Product Specification	DL16 (Production ends 2024)	AL16 (Replaces DL16)	AE16
	Good ✓	Better ✓✓	Best ✓✓✓
Run time (main LED)	>20 hours		
Battery Charge time (after 12hr shift)	5–8 hours (>8hr recommended)	5–8 hours (>8hr recommended)	8–10 hours (>10hr recommended)
Battery Cover	Standard cover fitted, option available for clear hi-top cover to suit tracking TAG	Standard cover fitted, option available for clear hi-top cover to suit tracking TAG	Standard cover fitted (Option for clear hi-top cover to suit tracking TAG pending IECEx approval)
Life cycle expectancy	> 4.5 years (@10hr, 5 day week)		
Battery / Cover IP Rating	IP67 / IP54		
Emergency Situation – Light duration from 100% full charge	>24 hours main LED / >100 hours auxiliary LED		
Approvals	None – hard rock applications only	None – hard rock applications only	ITS-1-22 ATEX 34123X IECEX ITS 22.0019X (ANZEx pending)
STANDARD VERSION	✓	✓	✓
SUPER-BRIGHT VERSION	✗	✓	✓