

Ultra Low Profile LED AC Combi Area Light

Technology Solution: Key operational requirements for high performance area lighting in mobile shelters and tents are high levels of durability, outstanding resistance to shock and vibration and a low profile to provide maximum headroom for personnel.

“EMI emissions are compliant with MIL-STD 461E, DEFSTAN 59-411 Land Class A and EN55015 Class A, the units are sealed to IP67 and qualified to MIL-STD 810 environmental requirements.”

Oxley has led the development of LED lighting as replacement for fluorescent units which are ill-suited to harsh military environments. The inherent advantages of LED lights in terms of lower energy consumption, long term reliability, superior lighting performance of up to 50,000 hours MTBF, energy saving and through-life cost effectiveness are universally accepted.

However, Oxley’s extensive experience of manufacturing to meet the needs of military customers worldwide has added still further to those compelling characteristics.

Innovative design of both the casing and the patented components enabled Oxley to produce the latest AC Combi light with an extraordinarily low profile of 20.5mm, specifically designed to meet the needs of mobile tents and shelters.

To achieve this Oxley’s team developed an original and innovative design of driver board. It had to be intelligent and configurable with a microprocessor to control dimming and different modes to offer tactical lighting as well as white lighting. Good EMC performance with high power factor correction along with highly effective thermal management were also essential.

A unique element in the unit’s success is the use of ceramic capacitors. Other LED drivers use aluminium electrolytic capacitors which dry out over time in high temperatures. The patent pending Oxley design removes this single point failure, and significantly increases product lifetime

The units are designed to operate without any significant drop off in performance within a range of power options from 110 volt to 230 volt AC supply, or using a DC supply in series from a DC 24V-40Vdc battery employing the same inputs, thereby providing complete operational flexibility. An integral battery pack provides 45 minutes emergency lighting using separate LEDs.



Quality Assured: An exhaustive in-house testing regime includes temperature cycling, vibration and powered burn prior to optical and functional testing on each unit.

