

Tender Specifications



Smart BatPlusNeo

60W Outdoor battery uplighter with
RGB+WW LED source

1. General

1. The luminaire shall be a Battery Powered LED RGB and Warm White fixture, with DMX control of intensity and colours, offering wireless control of DMX signal and fast-charge magnetic system.
2. The luminaire shall be CE, RCM, cTUVus, FCC compliant.
3. The luminaire shall comply with the USITT DMX-512 A protocol standards.
4. The luminaire shall be capable of delivering an extensive range of saturated and pastel colours.
5. The luminaire shall feature an LED source with a rated power of 66W.
6. The luminaire shall feature an LED source containing 7 pcs LED emitters, each with four (4) colours being R, G, B, Warm White.
7. The luminaire shall not infringe any Intellectual Property unless licensed by the owner.

2. Physical

1. The luminaire shall be constructed in sturdy die-cast aluminium body, conceived for long time durability.
2. Body colour shall be available in Chrome/Mirror finish to hide the luminaire from audience view, and Black.
3. The luminaire shall include a handle on top to simplify handing and transport.
4. The luminaire shall have an included half top-hat to hide the source and top handle.
5. The luminaire dimensions shall be:
 - a) W: 138 mm (5.43") H: 180 mm (7.09") D: 147 mm (5.79")
 - b) The luminaire shall weigh 3,4 kg (7.5 lbs).
6. The luminaire shall be able to be mounted or stand on a surface. Fixture shall be suitably designed for operation in any environmental conditions, not for long and permanent outdoor use.
7. The luminaire shall have an M12 threaded insert on the side for suspension and fixing hanging.
8. The luminaire- shall have an adjustable 0-20° foot support for tilt regulation.
9. Battery and driver electronics shall be integrated to the luminaire.

3. LED Emitters

1. The luminaire shall feature 7 RGB + Warm White LED emitters module manufactured and customized for Prolights, with a total Rated power of 70 Watt, and total Driven power of 66 Watt.
2. The luminaire shall feature an LED source consisting only of LED emitters from a known production batch and bin.
3. The luminaires shall feature only LED emitters rated for nominal 50'000-hours LED life.
4. The luminaire shall feature a minimum of 3 hours burn-In test during its manufacturing process.
5. The luminaire shall feature adjustable PWM frequency from 600 to 25'000 Hz.

4. Photometric documentation

1. The luminaire shall be supplied with a full and detailed photometric report measured by a calibrated two axis photogoniometer in a constant temperature environment of 25°C and with the luminaire in a stabilised condition with not more than 0.5% variation in output over a 15 minute period.
2. The photometric report supplied with the luminaire shall detail CRI, CQS, TM-30 and spectral distribution at full output.
3. The photometric report supplied with the luminaire shall detail the spectral distribution of LED source.
4. The photometric report supplied with the luminaire shall detail light level measured in lux and foot candles and beam diameter measured in meters and feet at 10 m, 20 m, 30 m 40 m, 50 m, 60 m, 70 m, 80 m, 90 m, 100 m, distance with the luminaire at the following beam angle: minimum beam angle, medium beam angle, maximum beam angle.
5. The photometric report supplied with the fixture shall include ISO LUX and candela diagrams, showing light distribution in both X and Y planes measured with the luminaire mounted at distance of 10 meters.

5. Photometric performance and Optical

1. The luminaire shall meet the following minimum photometric performance requirements which should be supported by the photometric documentation:
 - a) The luminaire shall have a lumen output of 2'927 lm at full on with standard lens.
 - b) The Red wavelength should be 638 ± 2.5 nm.
 - c) The Green wavelength should be 517 ± 2.5 nm.
 - d) The Blue wavelength should be 451 ± 2.5 nm.
 - e) The White Led shall be a colour temperature of $3000K \pm 100K$.
2. The luminaire shall provide, but not limited to:
 - a) Standard Lens optic 10 degree.
 - b) Optional lens available at 20, 35 and 60 degrees.
 - c) Range of filters available at 20, 40, 60, 10x60, 30x60 degrees.

6. Electrical

1. The luminaire shall feature a nominal max power consumption of 66W.
2. The luminaire shall feature a nominal power consumption of 75W during the battery recharge time with Recharging Base.
3. The luminaire shall feature with 16,8V Lithium Battery.
4. The luminaire shall feature with a magnetic fast-charge connection in case.
5. The charge connector shall be placed in the center of the bottom plate, enabling the luminaire to be store and charged by any orientation.
6. The luminaire shall feature a selectable battery life setting at 3h, 6h, 8h, 12h, 18h.
7. The luminaire shall feature a re-charge time of 4h max.
8. The luminaire shall feature battery status in real time, in on board display.
9. The luminaire shall meet all requirements of the LVD (Low Voltage Directive) 2014/35EC and with the EMC (Electromagnetic Compatibility Directive) 2014/30/EU.
10. The luminaire shall meet all requirements of the MSDS normative for the storage and handling of batteries products

7. Environmental

1. The luminaire shall feature IP 65 rating (upper) for temporary outdoor application (not for fixed installations) and IP 54 (bottom).
2. The luminaire shall be capable of operating in ambient temperature range of 0°C (32°F) to + 45°C (113° F).
3. The luminaire shall be equipped with a passive and fanless cooling system.
4. Thermal management shall include LED array circuit board temperature sensors.
5. Users shall permit monitoring of temperature sensor via graphic display.
6. Fixtures that do not provide the active thermal monitoring of LED board, shall not be acceptable.

8. Control And User Interface

1. The luminaire shall be equipped with LumenRadio TimoFx providing DMX/RDM radio communication.
2. The luminaire shall offer WDMX + CRMX control protocols.
3. The luminaire shall be equipped with display for easy to read status reports and configurations changes.
4. The luminaire shall be equipped with a four touch button user interface.
5. The internal software shall include the following features:
 - a) Home screen shall visualize at least the following information:
 - luminaire address
 - Wdmx signal
 - battery info
 - temperature info
 - diagnostic
 - b) LED status indicator setting on LED side.
 - c) DMX lost setting functions.
 - d) Fixture info:
 - fixture and source hours
 - power cycles
 - maintenance cycles

- firmware info
 - device info
 - UID
 - e) Wireless signal monitoring section.
6. The luminaire shall offer seven (7) DMX mode with 1 / 3 / 4 / 5 / 10 / 11 / 17 channels of control.
 7. The luminaire shall offer additional user definable options using Display to including:
 - a) Static colour mode in Stand Alone, with selection of colours.
 - b) Several pre-built macros and effects with adjustable speed.
 - c) Legacy Mode that have same colour output of SMARTBATPLUS.
 - d) IR: infrared sensor controlled by remote commander.

9. Dimming

1. The luminaire shall feature continuous smooth and linear dimming of intensity from 0% to 100%.
2. The luminaire shall feature control of intensity in 8bit and 16 bit mode.
3. LED control shall be compatible with broadcast equipment in the following ways:
 - a) PWM control of LED levels guarantee flicker free to video cameras and related equipment.
4. The luminaire shall feature 4 options for dimming curves, selectable from the on board menu.
5. Dimming curves shall be optimized for smooth dimming over longer time fades.
6. The LED system shall be digitally driven using high-speed pulse width PWM modulation.
7. The luminaire shall feature a selectable PWM frequency from 600 to 25.000Hz.

10. Accessories

The following accessories shall be available as an optional:

1. Flight Case for 6 pcs with battery charger included.
2. ABS case for 1 pc (empty).

3. RGBWA IR Controller.
4. Wireless kit with TimoFX.
5. 10°, 20°, 35°, 60° Lens.
6. 20°, 40°, 60°, 10°x60°, 30°x60° Light Diffusion Filter.
7. Filter Frame.
8. Snoot.
9. Recharging Base.
10. Firmware upgrade Interface between UPBOX and SMARTBATPLUSNEO.
11. Firmware uploader UPBOXPRO.

Approved device shall be the PROLIGHTS SMARTBATPLUSNEO, no alternates or equals.