

Tender Specifications



SunBlast FLX

IP65 modular and graphical LED Strobe with white string + RGB+WW panel, 1200W peak power

1. General

1. The luminaire shall be a Tool-free rigging system supporting both horizontal and vertical modular mounting, with multiple accessory options for versatile setups.
2. The luminaire shall be CE, RCM, FCC, cTUVus compliant.
3. The luminaire shall comply with the USITT DMX-512 A and ANSI RDM E 1.20, CRMX protocol standards.
4. The luminaire shall features advanced pixel mapping and offers precise control over 28 individual pixels (12 for the white LED strip and 16 for the RGB+WW panel) allowing dynamic effects.
5. The luminaire shall be capable of delivering a variable white output from 2'800 K to 10'000 K.
6. The luminaire shall be capable of making adjustment to the green and magenta value any point on the CCT range.
7. The luminaire shall feature several colour control systems: XY, CCT, RGBW, Gel, HSI, Source Emulation, colour macros, CTO on colours.
8. The luminaire shall feature an LED source a peak power output of 1200W when strobing and 400W for continuous floodlighting.
9. The luminaire shall not infringe any Intellectual Property unless licenced by the owner.

2. Physical

1. The luminaire shall be weatherproof (IP65) and constructed from durable die cast magnesium alloy, finished in black.
2. The luminaire shall feature on board fast anchor mechanics points for modular assembly of multiple fixtures.
3. The luminaire shall feature several brackets available for simply array mounting.
4. The luminaire shall feature a secure and graduated locking mechanism for the tilt axis.
5. The luminaire shall feature integral power and electronics on board of the fixture.
6. The hard light luminaire shall have the dimensions not exceeding 460 mm (18,11") in length, 170mm (6,69") in height, and 170 mm (6,69") in width.
7. The luminaire shall weigh no more than 11,6kg (25,57lbs).

8. The luminaire shall feature an active cooling system and low noise fan for quiet operation with multiple fan modes.

3. LED Emitters

1. The luminaire shall feature an LED source consisting of 1'024 RGB+WW LEDs of 1.2W power and 60 white LEDs of 12W power, both emitters customised for PROLIGHTS and driven at a maximum power of 400 watts in static mode.
2. The luminaire shall have a section control of the LED panel being 28 sections divided into two horizontal plates where each have 8 sections and a white strip consisting of 12 sections, which can be both controlled by the user, or enabled to perform the on-board section macros to reproduce the effects.
3. The luminaire shall feature an LED source consisting only of LED emitters from a known production batch and bin.
4. The luminaires shall feature only LED emitters rated for nominal 20'000-hours LED life.
5. The luminaire shall feature a minimum of three hours burn-In test during its manufacturing process.
6. The luminaire shall feature a flicker free adjustable PWM frequency selectable from 600Hz to 25'000 Hz.
7. The luminaire shall feature with an electronically adjustable strobe frequency from 1 to 30 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 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 each constituent LED colour 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 1 m, 2 m, 3 m 4 m, 5 m, 6 m, 7.5 m, 10 m, 15 m, 20 m, 25 m 30 m, 40 m distance.

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 height of 10 meters.

5. Photometric performance

1. The luminaire shall meet the following minimum photometric performance requirements which shall be supported by the photometric documentation:
 - The luminaire shall have a colour temperature within 100 K of the target colour temperature when set to a preset of 3'200 K or 5'600 K.
 - The luminaire must have a luminous flux of 40'507 lm when set to Full On with both Plate and Beam LEDs.
 - The luminaire shall have a luminous flux of 38'705 lm when set to a preset value of 3'200 K in HQ mode.
 - The luminaire shall have a luminous flux of 35'706 lm at a preset of 5'600 K in HQ mode.
 - The luminaire shall have a luminous flux of 108'526 lm when strobing both the Plate and the Beam LEDs.

10. Calibration

1. The luminaire shall be factory Spectra Calibration during its production process.
2. The luminaire shall permanently store calibration data on internal PCB.
3. The luminaire shall feature replacement LED source calibrated using the same method as the standard.
4. Fixtures not offering LED calibration shall not be acceptable.

11. Electrical

1. The luminaire shall feature an internal auto sensing power supply with an input range from 100 V to 240 V AC 50/60 Hz protect by on board fuse.
2. The luminaire shall feature a nominal power consumption of 400 W in static mode and 1.200 W (peak) in strobe mode.

3. The luminaire shall feature a Seetronik® IP65 PowerCON TRUE1 IN/OUT connectors.
4. The luminaire shall feature an IP65 Seetronik® XLR 5p IN/OUT connectors.
5. The luminaire shall feature an IP65 RJ45 IN/OUT data connection with Ethernet pass through in the event of PSU or Master PCB failure.
6. The luminaire shall feature an on board 3,5" OLED graphic display.
7. The luminaire shall be compatible with the USITT DMX-512A RDM protocol.
8. The luminaire shall support firmware upgrades using a dedicated UP-LOADER device using a 5 pin XLR connector.
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, RoHS (Restriction of the use of certain hazardous substances) 2014/53/EU and with the RED (Radio Equipment Directive) 2014/53/EU.

12. Environmental

1. The luminaire shall feature IP 65 rating for temporary outdoor application, not for fixed installations.
2. The luminaire shall be capable of operating in ambient temperature range of -20°C (4°F) to +45°C (113°F).
3. The luminaire shall be equipped with a cooling fan.
4. Fan speed control via DMX channel shall be possible.
5. Fan speed software shall permit the fixture to override DMX fan speed setting to prevent heat damage.
6. Thermal management shall include LED board temperature sensor.
7. Users shall permit monitoring of temperature sensor via legible black OLED multi-line display.
8. Fixtures that do not provide the active thermal monitoring of LED board, shall not be acceptable.

13. Control And User Interface

1. The luminaire shall feature a temperature sensor which shall be accessible in real time via RDM.

2. The luminaire reports its internal temperature on its graphical display.
3. The luminaire shall feature local control using four touch buttons.
4. The luminaire shall feature a range of control modes including:
 - Control of colour: CCT, RGBW, HSI, colour macros.
 - Colour mixing with 4 colour custom LEDs source (red, green, blue, warm white).
 - CCT control, + / - green correction, tungsten emulation.
 - White presets range 2'800K-10'000K.
 - Pre-programmed dynamic and static patterns with speed and rotation control
 - Several pre-built effects with adjustable foreground/background colour, index, speed, direction.
5. The luminaire shall feature Silent operation with multiple fan modes.
6. The luminaire shall feature 28 section pixel control and built-in lighting effects.
7. The luminaire shall feature output management, linear crossfade from any white to any colour and virtual CTO on colours.
8. The luminaire shall feature with DMX512, RDM, ArtNet, sACN, CRMX protocols.
9. The luminaire shall feature with LumenRadio TimoFX DMX/RDM compatible with both CRMX, CRMX2 (Lumen Radio) and W-DMX (Wireless DMX).
10. The luminaire shall feature with a 3,5" display graphic user interface.
11. The luminaire shall feature to upgrade the firmware via DMX interface (UPBOXPRO/UPBOX1).

14. 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 16 bit mode.
3. The luminaire shall feature a minimum of 4 options for dimming curves, selectable from the on board menu.
4. LED control shall be compatible with broadcast equipment in the following ways:
 - PWM control of LED levels shall be imperceptible to video cameras and related equipment.
 - PWM rates shall be adjustable by the user at the fixture if necessary to avoid any visible interference on video camera and related equipment.
5. The LED system shall be digitally driven using high-speed pulse width PWM modulation.

15. Accessories

The following accessories shall be included in fixture supplied:

1. Bracket for horizontal mounting.
2. Quick-lock omega bracket with M12 hole.
3. 1x1,5 meters 3G1,5mmq power cable (BARE END - SEETRONIC POWERCON TRUE1 IP65 power connector)

The following accessories shall be available as an optional:

1. Flight case for 6 units.
2. Empty ABS case for 1 unit.
3. Bracket for horizontal mounting of 1 unit.
4. Bracket for horizontal mounting of 2 units.
5. Bracket for vertical mounting of 1 unit.
6. Bracket for vertical mounting of 2 units.
7. Front high diffusion filter.
8. Front medium diffusion filter.
9. Front black filter.
10. Spacer for filters mounting.
11. Vertical hanging bracket.
12. Horizontal hanging bracket.
13. Floor bracket.
14. Adapter plate for floor mounting.
15. Orientable hanging and floor bracket.
16. UPBOX 1 - Firmware uploader kit.
17. Up-loader tool (UPBOXPRO) and its PC software.

Approved device shall be the PROLiGHTS SunBlastFLX; no alternates or equals.