

# iFORTE® LTX FS

Are you looking for the ultimate long throw, high output, all-environment LED WashBeam with an integral camera for RoboSpot™ use capable of true, stadium-level reach and outperforming all others? You have only one choice - The Robe iFORTE® LTX FS!

**Light source**

iSE-TE™ 1.000W White XP LED  
TRANSFERABLE ENGINE

**Light output**

up to 55.000 lm, 355.000 lx @ 5m, Cpulse™  
special flicker free management for HD and  
UHD cameras, ready for 8K and 16K

**Zoom range**

3.5° - 52° (standard optical range), 2° - 52°  
(using optical zoom + iris), 0.7° - 2° (long throw  
mode)

**Effects**

rotating gobo wheel, 2 color wheels, 2  
animation wheels, frost, iris, 6-facet circular  
and linear prisms, framing shutters



Redefining the boundaries of output, optical excellence, and performance while retaining all the subtleties of theatrical precision, the iSERIES IP65-rated Robe iFORTE® LTX FS is truly the next-generation unrivalled WashBeam luminaire with an integral camera for live concert touring, indoors or out!

The iFORTE® LTX FS FollowSpot is equipped with a full HD digital camera mounted on the head, with parCoat™ lens protection to ensure a clear picture in inclement weather. The IP65-rated camera features 32x optical and 32x digital zooms and is suitable for light levels down to 0.05 lux.

Our latest, most powerful, internally designed, developed, patented and manufactured iSE-TE™ 1.000W XP (Xtra Performance) IP65-rated White LED TRANSFERABLE ENGINE produces an incredible, industry leading 355.000 lx at 5 m. The iFORTE® LTX FS will never be wanting in terms of reach and impact!

Data capturing TRANSFERABLE ENGINE technology offers all the advantages of field exchange, cost-effective replacement, and the ability to keep up with LED development to ensure exceptionally long fixture life. With typical lumen maintenance of L70/B50 50.000 hours, the 4-year 20.000-hour warranty gives peace of mind, whatever the weather.

In line with its outstanding performance, the iFORTE® LTX FS creates an imposing visual statement with its domineering, solid beam from the 245mm front lens.

With innovative optics to attain absolute WashBeam functionality, the FORTE® LTX WB can operate in various ways. The standard Optical Range Mode permits the widest 3.5° - 52° coverage. Using the iris, you can narrow the beam for 2°-52° coverage. The Long Throw Mode, using xR7™ technology, provides an ultra-tight 0.7 - 2° beam to deliver crisp, incisive beams without any intensity loss usually found when engaging an iris over long distances.

Colour generation is via a CMY colour mixing system. With two colour wheels and a variable CTO of 3.000 - 6.700K, you have all the tools to cover everything from the densest saturates to the most refined pastel shades. ChromaTint™ patented green content control software allows fast adjustment, especially useful for broadcast users.

The PLANO4™ four individual plane blade system, with 120° module rotation, delivers precise, endlessly repeatable framing without shape restriction.

The iFORTE® LTX FS is not all about power. It's packed full of features and effects, including; One rotating, indexable gobo wheel with 5 replaceable gobos; Two aluminium animation wheels with variable speed and directional control; Two independently controlled stackable prisms-one 6-facet circular and one 6-facet linear; Two MagFrost™ interchangeable 1° and 5° frosts; 2° Beam Reducer for long throw follow spot operation.

In addition, the luminaire has our advanced L3™ 18-bit dimming system, Cpulse™ flicker-free management for the latest camera systems and Epass™ for automatically maintained network connectivity. EMS™ (Electronic Motion Stabiliser) technology for instant stop and hysteresis elimination makes the iFORTE® LTX FS the perfect RoboSpot partner.

At the heart of the protection is RAINS™ (Robe Automatic Ingress Protection System). This highly advanced patented technology not only prevents ingress. It actively manages the fixture's internal microclimate removing internal moisture build-up caused by constant heating and cooling to provide maximum protection for electronics. With simple maintenance procedures, Robe has revolutionised how outdoor fixtures are managed and protected.

Streamlined preparation saves time. The luminaire runs an ingenious Self Pressure Test to check internal pressure. Requiring no special tools and taking under 3 minutes, the test provides an error message where gaskets and covers were not replaced correctly or locking screws incorrectly tightened, ensuring maximum protection.

To maintain consistently high lumen output, even with the rigours of outdoor performance, water, dirt, dust, haze, and smoke are repelled from the front lens with our unique parCoat™ hydrophobic, oleophobic-resistant coating. Furthermore, it allows easy removal of deposits without scratching or damage.

For operation in extreme cold, the iFORTE® LTX FS contains our innovative POLAR+™ technology. This special standby mode maintains the fixtures sensors and communication channels remain active while greatly reducing power consumption. When activated, POLAR+™ will automatically maintain an internal temperature level, allowing instant operability down to minus 50 degrees centigrade!

Ideally suited for remote outdoor installations, REAP™, the Robe Ethernet Access Portal communication software, viewed as a web browser, shows real-time fixture monitoring of all parameters, including complete RAINS™ status information such as pressure and internal saturation levels.

Giving greater flexibility are both In and Out Epass™ signal maintaining ethernet ports, allowing the fixture to simultaneously receive and send ethernet communication separate to the camera. The camera signal being sent via a separate dedicated port.

By including NFC (Near-Field Communication) technology, you can access setup, diagnostic and performance features, even without power, directly from your mobile device using the Robe Com app.

The standard iFORTE® LTX WB may be easily upgraded to the FS version as they contain camFIT™, meaning they are pre-wired and pre-balanced, ready for adding the dedicated IP65-rated RoboSpot™ camera if required.

iFORTE® LTX FS adds up to a comprehensive single package of versatile high output LED WashBeam and long throw Follow spot specifically designed for indoor and outdoor use.

#### **iFORTE® LTX FS - Robe reliability in all weathers**

# Technical Specification

## Source

- Light source type: iSE-TE™ 1000W HP White LED Engine (Patented):
  - XP - Xtra Performance Engine for maximum light output and optimal colour characteristics
  - LED Engine output: 90.200 lm
  - Fixture total lumen output:
    - 55.000 lm (integrating sphere)
    - 43.800 lm (goniophotometer)
  - Colour temperature output: 6.700 K
  - CRI: 70, remotely selectable filters for CRI 80 and CRI 90
  - Illuminance: 355.000 lx @ 5 m
- LED life expectancy: min. 50.000 hours
- Typical lumen maintenance: L70/B50 @ 50.000 hours
- Light source warranty: 4 years or 20.000 hours

## Optical system

- Robe's proprietary optical design
- High-efficiency 13-lens zoom optical system, ratio: 15:1
- Zoom range:
  - 3.5° - 52° (standard optical zoom)
  - 2° - 52° (using optical zoom + iris)
  - 0.7° - 2° (long throw mode - using iris)
- Output lens diameter: 245 mm

## Dynamic Effects and Features

- Cyan: 0 - 100%
- Magenta: 0 - 100%
- Yellow: 0 - 100%
- Variable CTO: 3.000K - 6.700K
- ChromaTint™ - Patented plus / minus green correction function
- Colour Wheel 1: 5 fixed dichroic colours+ white
- Colour Wheel 2: 5 fixed dichroic colours + white
- Framing shutters: Patented Plano4™ framing shutters module with 4 individually positionable blades plus rotation of the complete frame system + - 60°

- Rotating gobo wheel 1: 5 rotating, indexable and replaceable breakup and aerial gobos + open, patented slot & lock system
- Animation wheel: 2 Aluminium animation wheels, used alone or in combination with gobos, rotating in both directions at variable speed
- Prism 1: Independent 6 facet linear prism rotating in both directions at variable speed
- Prism 2: Independent 6 facet circular prism rotating in both directions at variable speed
- Frosts: MagFrost™ - magnetic paddle fast change system providing exchangeable frosts containing as standard a very light 1° for instant softening of the projected gobo or framing shutters, and 5° for even wash, both specifically selected for theatre and TV use
- Iris: Motorized, stepless, pulse effects up to 3 Hz
- XR7™ eXtreme Reach Follow Spot technology enables you to achieve unprecedented light levels, even the narrowest beam angle of 0.7 degrees
- Motorized zoom and focus
- Electronic strobe effect with variable speed up to 20 Hz, pre-programmed random strobe & pulse effects
- High resolution electronic dimming: 0 - 100%
- L3™ - (Low Light Linearity) Imperceptible 18 bit dimming for ultra smooth fade to black
- Extremely quiet operation suitable for all types of production in Theatre and TV
- Cpulse™ special flicker-free management for HD and UHD cameras, ready for 8K and 16K
- AirLOC™ (Less Optical Cleaning) technology greatly reduces the level of airborne particles drawn over the optical elements. This increases the overall performance, light quality and time between routine cleaning and maintenance.
- POLAR+™ for power saving and instant operation in extremely cold weather conditions
- CamFit™ Prewired for later camera installation

## Control and programming

- Setting & Addressing: ROBE Navigation System 2 (RNS2)
- Display: QVGA Robe touch screen with battery backup, gravitation sensor for auto screen positioning, operation memory service log with RTC, stand-alone operation with 3 editable programs (each up to 100 steps), built-in analyser for easy fault finding, NFC app controller
- Protocols: USITT DMX-512, RDM, ArtNet, MA Net, MA Net2, sACN
- REAP™ - Robe Ethernet Access Portal
- Wireless CRMX™ technology from Lumen Radio
- Epass™: Ethernet pass through switch which sustains Ethernet integrity, when the fixture has no power, to automatically maintain network connectivity
- RAINS™ (Robe Automatic Ingress Neutralization System) manages humidity, temperature and pressure control using an active monitoring system to automatically remove any moisture detected within the fixture and provides constant monitoring to ensure peak performance
- DMX Protocol modes: 1
- Control channels: 54
- Pan & Tilt resolution: 16 bit
- CMY & CTO: 8 bit
- Colour wheel positioning: 16 bit
- Framing shutters module movement & rotation: 8 bit
- Rotating gobo wheel positioning: 8 bit
- Gobo indexing & rotation: 16 bit

- Animation wheel: 8 bit
- Animation wheel rotation: 8 bit
- Iris: 16 bit
- Frost: 8 bit
- Zoom: 16 bit
- Focus: 16 bit
- Dimmer: 16 bit (internal 18 bit)

## **Movement**

- Pan movement: 540°
- Tilt movement: 270°
- Movement control: Standard and Speed
- Controllable speed of Pan & Tilt movement
- EMS™: Electronic Motion Stabilizer system for Pan & Tilt reducing beam deviation caused by truss movement or vibration (Patented)
- Automatic Pan & Tilt position correction
- MAPS™ - Motionless absolute positioning system for Pan and Tilt (Patented)

## **Rotating gobos**

- 5x rotating glass gobos
- Outside diameter: 30.8 mm
- Image diameter: 25.0 mm
- Thickness: 1.1 mm
- Max. thickness: 3.5 mm
- High temperature borofloat or better glass
- Patented slot & lock system for easy replacement of gobos

## **Effect wheel**

- dual animation wheel
- Material: Aluminium
- Diameter: 112 mm
- Can be used alone or in combination with rotating gobos
- Rotating in both directions at variable speed

## **Framing shutters system**

- Shutters: 4 Blades, each with separate movement and +- 25° rotation control
- Movement: Smooth with variable speed, ultra-fast for creating mid-air effects
- Rotation: +- 60° of the complete framing system

## Camera

- Type: XNZ-L6320A
- Resolution: 1920 x 1080, 16:9 Full HD (1080p) resolution support
- Zoom:
  - 32x optical zoom
  - 32x digital zoom
- Vision: Day & Night (ICR), WDR (120dB), Defog
- Streaming: H.265, H.264, MJPEG Codec, Multiple streaming
- Minimum illumination: 0.05 Lux
- parCoat™ (particle resistant coating) unique hydrophobic and oleophobic coating helps prevent water, dirt, dust, haze and smoke from adhering to the output lens

## Thermal specification

- Maximum ambient temperature: 50°C (122°F)
- Maximum surface temperature: 100°C (212°F)
- Minimum operating temperature: -50°C (-58°F)
- Total heat dissipation: max. 3200 BTU/h (calculated)

## Electrical specification and connections

- Power supply: Electronic auto-ranging
- Input voltage range: 100-240 V, 50/60 Hz
- Power consumption: max. 1250 W
- Power connector in: IP65 Neutrik powerCON TRUE1
- DMX and RDM data in/out: IP65 Locking 3-pin & 5-pin XLR connectors
- Ethernet port out: RJ45 - camera video output
- Ethernet port in/out: IP65 RJ45, for Embedded Epass™ switch 10/100 Mbps

## Approvals

- CE Compliant
- cETLus Compliant

## Mechanical specification

- Height: 904 mm (35.6") - head in vertical position
- Width: 480 mm (18.89")
- Depth: 335 mm (13.1") - head in vertical position
- Weight: 49 kg (108.0 lbs)
- Ingress protection rating: IP65

## Rigging

- Mounting positions: 0°, 32°, 90°
- Universal operating position
- Mounting points: 5 pairs of 1/4-turn locking points
- 2x Omega adaptors with 1/4-turn quick locks
- Safety cable attachment point
- Pan & Tilt transport locks

## Included items

- User Manual
- Omega Adaptor CL-regular 2 pcs
- Power cord including powerCON TRUE1 In connector:
  - US: 13052277-01
  - EU: 13052276-01
- 2° Beam reductor for long throw follow spot operation
- RoboSpot Camera
- Balancing Weight Cover for CamFit: 10981009

## Optional accessories

- Frost 0.5° (exchange) assembled: 10980581
- Frost 1° (exchange) assembled: 10980564
- Frost 3.5° (exchange) assembled: 10981037
- Frost 5° (exchange) assembled: 10980565
- Frost 10° (exchange) assembled: 10980556
- Frost 20° (exchange) assembled: 10980577
- Frost 30° (exchange) assembled: 10980582
- Doughty Trigger Clamp: 17030386
- Safety wire 50 kg: 99011957
- Single Top Loader Case: 10120326
- Dual Top Loader Case: 10120327
- Foam Shell: 20020475

## Legal

- iFORTE® LTX FS is Registered Trademark of Robe lighting s. r. o.
- iFORTE® LTX FS is patented by Robe lighting s. r. o. and is protected by one or more pending or issued patents



## Gobos&Colours

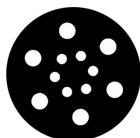
### Rotating Gobo Wheel



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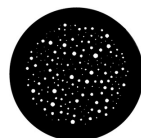
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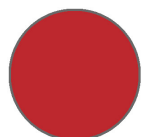


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### Colour Wheel 1



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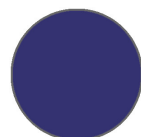
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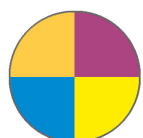


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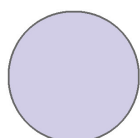
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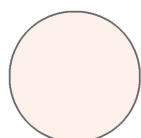
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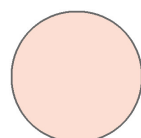
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### Animation Wheels