

# iFORTE® Fresnel

The most powerful Fresnel Wash of the Robe iSeries, the IP65-rated iFORTE® Fresnel delivers a far-reaching, beautifully soft beam with advanced beam control, designed for the harshest of weather!

**Light source**

iSE-TE™ 1000W XP White LED Engine  
(Patented)

**Light output**

40.500 lm (integrating sphere), 33.033 lm  
(goniophotometer)

**Zoom range**

6° - 61°

**Effects**

Patented RotaScrim™ internal Scrim module ,  
Cpulse™ - Flicker Free Management, L3™  
dimming system for ultra-smooth fade to  
black, AirLOC™ (Less Optical Cleaning),  
MagFrost™ - Magnetic paddle fast change  
system



From concert touring to classical ballet, the iFORTE® Fresnel combines subtlety and power, making it ideal for any outdoor show environment.

For task suitability, iFORTE® Fresnel is available with a choice of two patented data- capturing IP65-rated TRANSFERABLE ENGINES offering all the advantages of field exchange, cost-effective replacement, and the ability to keep up with LED development to ensure exceptionally long fixture life. The iSE-TE™ 1000W White XP (Xtra Performance) 6.700 K, 40.500 lm (Integrating sphere) with CRI70 for those wanting maximum output; and the iSE-TE™ 1000W White HCF (High Colour Fidelity) 6.000 K, 27.540 lm (Integrating sphere) with CRI 96 for exceptional colour rendition.

Its patented F2L™ two element smooth outer surface lens maintains a traditional Fresnel-style beam. The smooth front lens reduces outdoor detritus build-up, while the unique parCoat™ hydrophobic, oleophobic-resistant coating prevents build-up and facilitates easy cleaning without damage.

The motorised 10:1 zoom optical system, with a 6° to 61° zoom range, provides all the wash flexibility you need.

Colour generation is achieved via a CMY colour mixing system. With two colour wheels and a variable CTO of 3.000 – 6.700 K, you have all the tools to achieve everything from dense saturates to refined pastel shades. ChromaTint™ patented green content control technology allows fast adjustment, ideal for broadcast users.

In a departure from other Robe Fresnels to maximise flexible beam control, our patented PLANO4™ framing shutter module features four individual blades in separate planes with module rotation of +/- 60°.

Two MagFrost™ fast change 5° and 10° frosts provide additional beam softening. The internal patented RotaScrim™ module with graduated filter position control for asymmetrical style lighting of drapes and unwanted hotspot removal, capable of +/-180° rotation, provides another level of beam control.

Eliminating distracting pre-use pan and tilt calibration movement, our patented MAPS™ (Motionless Absolute Positioning System) allows the fixture to fully calibrate while remaining static, useful when fixtures are in confined spaces.

RAINS™ (Robe Automatic Ingress Protection System), a highly advanced patented technology, not only prevents ingress but actively manages the fixture's internal microclimate, removing moisture build-up from heating and cooling cycles to protect electronics. Simple maintenance procedures save preparation time.

The luminaire runs an ingenious Self Pressure Test to check internal pressure. Requiring no special tools and taking under 3 minutes, the test alerts you to incorrect gasket and cover placement or improperly tightened screws, ensuring maximum protection.

For operation in extreme cold, the iFORTE® Fresnel includes innovative patented POLAR+™ technology. This standby mode keeps sensors and communication channels active while greatly reducing power consumption. When activated, POLAR+™ automatically maintains an internal temperature for instant operability down to minus 50 degrees centigrade!

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

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

Keeping up with technological advances, we include Epass™ for maintaining network connectivity, and Cpulse™ for flicker-free management of the latest camera systems.

**iFORTE® Fresnel - Robe reliability in all weathers.**

# Technical Specification

## Source

- Light source type: iSE-TE™ 1000W XP 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:
    - 40.500 lm (integrating sphere)
    - 33.033 lm (goniophotometer)
  - Colour temperature output: 6.700 K
  - CRI: 70, remotely selectable filters for CRI 80 and CRI 90
  - Illuminance: 41.000 lx @ 5 m
- Light source type: iSE-TE™ 1000W HCF White LED Engine (Patented):
  - HCF - High Colour Fidelity Engine for the best light quality and colour rendition
  - LED Engine output: 55.000 lm
  - Fixture total lumen output:
    - 27.540 lm (integrating sphere)
    - 22.462 lm (goniophotometer)
  - Colour temperature output: 6.000K
  - CRI: 96, TLCI: 97, TM-30-18 Rf: 92, TM-30-18 Rg: 99
  - Illuminance: 27.880 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: 10:1
- Zoom range: 6° - 61°
- Output lens diameter: 200 mm
- parCoat™ (particle resistant coating) unique hydrophobic and oleophobic coating helps prevent water, dirt, dust, haze and smoke from adhering to the output lens
- F2L™ Fresnel-lens system, comprising two lenses engineered with a smooth outer surface to eliminate the debris accumulation commonly found on outdoor Fresnel lenses

## 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°
- MagFrost™ - Magnetic paddle fast change system providing exchangeable frosts containing as standard light 5° and medium 10° frost filters
- RotaScrim™ - Internal Scrim module with graduated filter position control for asymmetrical style lighting of drapes and unwanted hotspot removal from scenery. The entire module can be rotated +/- 180°. (Patented)
- Motorised zoom
- Edge colour correction
- 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

## 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: 35
- Pan & Tilt resolution: 16 bit
- CMY & CTO: 8 bit
- + - Green correction: 8 bit
- Colour wheel positioning: 16 bit
- Framing shutters module movement & rotation: 16 bit
- Internal scrim module movement & rotation: 8 bit
- Iris: 16 bit
- Frost: 8 bit
- Zoom: 16 bit
- Edge colour correction: 8 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)

## Framing shutters system

- Patented Plano4™ framing shutters module
- Shutters: 4 Blades, each with separate movement and  $\pm 25^\circ$  rotation control
- Movement: Smooth with variable speed, ultra-fast for creating mid-air effects
- Rotation:  $\pm 60^\circ$  of the complete framing system

## Internal Scrim

- Patented RotaScrim™ internal Scrim module:
  - Graduated filter position control
  - Rotation:  $\pm 180^\circ$  of the entire module

## Thermal specification

- Maximum ambient temperature: 50°C (122°F)
- Maximum surface temperature: 80°C (176°F)
- Minimum operating temperature: -50°C (-58°F)
- Total heat dissipation: max. 3200 BTU/h (calculated)

## Noise Levels

- Sound pressure level:
  - 21 dB(A) at 1 m (Super quiet mode)
  - 33 dB(A) at 1 m (quiet mode)
  - 44 dB(A) at 1 m (auto mode)
- Sound power level:
  - 29 dB(A) (Super quiet mode)
  - 41 dB(A) (quiet mode)
  - 52 dB(A) (auto mode)

## Electrical specification and connections

- ApprovalsPower 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 5-pin XLR connectors
- Ethernet port in/out: IP65 RJ45, for Embedded Epass™ switch 10/100 Mbps

## Approvals

- CE Compliant
- cETLus Compliant

## Mechanical specification

- Height: 843 mm (33.2") - head in vertical position
- Width: 483.5 mm (19")
- Depth: 335 mm (13.1") - head in vertical position
- Weight: 41 kg (90.38 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: 10980033
- Power cord including powerCON TRUE1 In connector
- Top hat: 10980591
- Gel frame adaptor: 99016721

## Optional accessories

- iFORTE iSE-TE™ 1.000W XP White LED Engine: 14080091
- iFORTE iSE-TE™ 1.000W HCF White LED Engine: 14080082
- Gel frame: 10980561
- Doughty Trigger Clamp: 17030386
- Omega Adaptor Tall CL - 2 pcs in box: 10980501
- Safety wire 50 kg: 99011957
- Single Top Loader Case: 10120295-02
- Dual Top Loader Case: 10120296-02
- Foam Shell: 20020439-02

## Legal

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