FS35 IR series

World's highest resolution and brightest LED projector for Night Vision Goggle Stimulation



Barco's FS35 IR series is the world's highest resolution and brightest LED projector range for unprecedented day, night and IR stimulated simulation. It is available in two models: the 4.1 Megapixel FS35 IR WQXGA (2560 x 1600 pixels) featuring the highest resolution NVG stimulated images available, and the FS35 IR WUXGA featuring dual IG input capability for simultaneous RGB + IR imagery thanks to its X-PORT™ DCC120 image processing system.

Common features

Benefitting from the 2nd Generation ReaLED illumination technology the FS35 IR is the brightest LED projector available for unprecedented daytime simulation. Its improved IR optics boosts up to 80% higher intensity in IR, and its optics are purpose designed for IR transmission up to 850nm. Adding to the projector's flexibility, the FS35 IR series can be calibrated for night-time and day-time vision with 0-100% adjustable visible RGB dimming properties. The brightness is fully adjustable on RGB and IR LEDs up to 1,000 lumens, featuring a seamless transition from day to night-time training.

Built-in Smear Reduction Processing

Like all F35 platform projectors, the FS35 IR series projectors feature flicker-free Smear Reduction Processing (SRPTM). It does not have to use external filters or shutters - all processing is internal, and user adjustable and configurable. This, combined with up to 120 Hz high frame rate, ensures a smear-free image at any resolution and with any fast-moving content.



FS35 IR series

World's highest resolution and brightest LED projector for Night Vision Goggle Stimulation





Because we make the world's highest resolution projectors, we also design and manufacture the world's highest resolution projection lenses. The optics are purpose designed for IR transmission up to 850nm, and it is all-glass designs using floating aspherical lens elements and ND glass to secure sharpness and focus. At the same time it ensures high ANSI system contrast, not just sequential contrast that is easy to display on sales literature.

Designed for 24/7 operation

We design our projectors for the most intensive use - including continuous operation. As the cooling fans are the only moving components within the projector, these are certified to run around the clock and, providing regular maintenance intervals are followed, we even warrant every model for up to five years of continuous operation. The 2nd Generation LED illumination technology has an operating time of up to 100.000 hours, giving you the freedom to use the projector as intensive as your application demands.



Product specifications

FS35 IR series

1 Toddet specifications	1355 IK Series
Technology	2nd Generation Solid State LED based single chip DLP® projector
Concept	ReaLED™ IR technology, all-glass optical design with lens shift
Resolution	WQXGA (2560 x 1600)WUXGA (1920 x 1200)
Brightness	Up to 1000 lumens (Infinitely adjustable)
Contrast	Up to 8000 : 1 (Infinite contrast and total black with Dynamic Black enabled)
Aspect Ratio	16:10 (WQXGA)16:10 (WUXGA)
Display colors	40-bit RGB + IR
Latency	~19 ms
Computer graphics formats	2560 x 1600 - 640 x 480
Horizontal scan frequencies	15 - 150 kHz (resolution dependant)
Vertical scan frequencies	48 - 190 Hz (resolution dependant)
Video formats	HDTV (1080p, 1080i, 720p)EDTV (576p, 480p)SDTV (576i, 480i)
Lens operation	Motorized zoom, Focus, Shift, Iris and Mechanical shutter
Image width	0.5 - 20 m
Light source	LED
Lamp lifetime	Up to 100.000 hours
Computer inputs	2 x DVI-D1 x VGA1 x HDMI 1.3a1 x XPort11 x XPort2
Video Input	2 x HDMI 1.3a1 x YPbPr1 x Component
Control possibilities	1 x RJ-45 TCP/IP1 x 9-pin D-SUB RS2322 x USB
Dimensions	510 x 223 x 376 mm (WxHxD)
Weight	12.6 kg
Shipping Dimensions	520 x 370 x 780 mm (WxHxD)
Shipping Weight from Factory	20 kg
Power requirements	Certified rating: 8.4A, ~100-240V, 50-60Hz Typical consumption: Max 325W@100V, ~2.7A, 50Hz; ~1.2A, 240V, 50Hz
Conformances	CE, FCC Class A and cCSAus
Operating temperature	10 - 40 °C
Storage temperature	-20 - 60 °C
Altitude	Up to 3000 m
Operating humidity	20 - 80% RH
Storage humidity	10 - 90% RH
Color	Black metallic
Warranty	Limited 3 years parts and labour. Up to 5 years total warranty available. Conditions apply.
24-7 documentation	This projector is designed and warranted for heavy duty 24/7 operation. Specific measures and design considerations have been made in order for it to comply with stringent requirements in challenging applications.
MTBF	59,542 hours
BTU per hour	



