# F22 series

High-performance single-chip DLP projector with 1080p, SXGA+ or WUXGA resolution up to 3,300 lumens



Thanks to their unmatched image quality, performance and reliability, the versatile F22 projectors are perfect for 24/7 operation in a wide variety of applications, from flight simulators to dark rides in theme parks. Featuring up to 3,300 ANSI lumens, the F22's brightness matches virtually any application. And thanks to its various optional configurations, it can be set to display any desired brightness. Moreover, Philip's VIDI technology enables digital control and lamp output management. Each F22 projector is meticulously calibrated during manufacturing and its unique optical design ensures perfect on-site calibration. With RealColor, you can easily match any number of projectors, and ensure they project the same primary colors and grey scales with a color accuracy down to 0.002. Thanks to its integrated Pixelworks dnx® (Digital Natural Expression) engine, the F22 provides 10-bit video processing, with an integral scaler and deinterlacer to

#### Wide choice in resolutions, aspect ratios and lenses

The F22 series covers various resolutions to perfectly meet your specific need. And the same is true for aspect ratios: 16:10 for new computer style displays, 4:3 for domes and curved displays, or 16:9 for video displays. You can also choose from three lenses with high-quality low dispersion glass: a standard zoom lens, a flexible 1:1 wide-angle lens, and an ultra-wide-angle with optical pincushion/barrel adjustement, designed for rear-projection and specialist setups.

#### Reliable and high-quality DLP images

Geared with single-chip DLP technology, the F22 generates stable, high-contrast images with saturated colors. Thanks to Texas Instruments' BrilliantColor™ technology, color performance and picture quality are greatly improved. Featuring six-color processing, BrilliantColor provides a wide color gamut, boosts secondary colors and delivers reliable and precise colors. The F22 offers full 10-bit per color signal processing and resolution on all digital and analog inputs, and displays smoothly rendered transitions and gradients. Unlike traditional 8-bit displays, where the image often is graded, the F22 diplays an accurate image.



## F22 series

High-performance single-chip DLP projector with 1080p, SXGA+ or WUXGA resolution up to 3,300 lumens





### Simple install and servicing

The lightweight and compact F22 can be installed in motion simulators without extra mounting hardware. And as there's no need to unmount the projector, lamp replacements for the F22 are really easy. You can simply take off the front panel of the projector so that mechanical and optical settings are left untouched. Thanks to the built-in real time clock and timer, the F22 can be set to perform a specific task - such as automatically starting and switching off, switching between various sources at set intervals. Up to 10 different programmes can be stored individually.

### Fully networkable and customizable to match your needs

Fully networkable, most projector settings and features can be set via the built-in web page, thus allowing for remote asset management. The F22 comes with a full fleet of options such as different color wheels to perfectly match your projection needs.



### Product specifications F22 series

Technology	single-chip DLP® projector
Concept	optical lens shift design
3D capability	INFITEC EX® 3D
Resolution	SXGA+ (1,400 x 1,050) / 1080p (1,920 x 1,080) / WUXGA (1,920 x 1,200)
Brightness	Up to 3,300 lumens
Contrast	Up to 2,500 : 1 (Nominal full field on/off)
Aspect Ratio	16:9 (720p) / 4:3 (SXGA+) / 16:9 (1080p) / 16:10 (WUXGA)
Display colors	Less than 1 Billion colours, 30-bit RGB
Latency	~22ms frame on graphics port
Computer graphics formats	1,920 x 1,200 - 640 x 480 pixel resolution (model dependent) / RGBHV, RGBS, RGsB
Horizontal scan frequencies	15 - 150 kHz (resolution dependant)
Vertical scan frequencies	48 - 190 Hz (resolution dependant)
Video formats	EDTV (576p, 480p) / SDTV (576i, 480i) / HDTV (1080p, 1080i, 720p) /NTSC, PAL, SECAM
Lens operation	Focus, shift and manual zoom
Lenses	<ul> <li>Wide Angle EN17 lens - throw ratios: 1.09: 1 (720p) / 1.00: 1 (SXGA+) / 0.92: 1 (1080p) / 0.92: 1 (WUXGA)</li> <li>Ultra Wide Angle EN19 lens - throw ratios: 0.88: 1 (720p) / 0.80: 1 (SXGA+) / 0.74: 1 (1080p) / 0.74: 1 (WUXGA)</li> <li>Short Tele Zoom EN32 lens - throw ratios: 2.96 - 4.62: 1 (720p) / 2.71 - 4.22: 1 (SXGA+) / 2.50 - 3.90: 1 (1080p) / 2.50 - 3.90: 1 (WUXGA)</li> <li>Standard projection lens EN35 - throw ratios: 1.89 - 2.62: 1 (720p) / 1.73 - 2.39: 1 (SXGA+) / 1.60 - 2.21: 1 (1080p) / 1.60 - 2.21: 1 (WUXGA)</li> </ul>
Image width	0.7 - 2.5 m
Light source	220W UHP lamp
Lamp lifetime	Up to 2,250 hours (full power) / up to 3,000 hours (Eco mode)
Computer inputs	1 x HDMI 1.3a, 1 x DVI-I, 1 x VGA
Video Input	1 x HDMI 1.3a, 1 x DVI-I, 1 x S-video, 1 x Composite, 1 x YPbPr
Control possibilities	1 x RJ-45 TCP/IP, 1 x 9-pin D-SUB RS232, 1 x USB
Dimensions	278 x 94 x 234 mm (WxHxD)
Weight	2.9 kg
Shipping Dimensions	440 x 440 x 31 mm (WxHxD)
Shipping Weight from Factory	7.4 kg
Power requirements	3.0-1.3A, ~100-240V, 50-60Hz
Conformances	CE, FCC Class A and cCSAus
Operating temperature	10 - 40 °C
Storage temperature	-20 - 60 °C
Operating humidity	20 - 80% RH
Storage humidity	10 - 90% RH
Color	Black metallic
Warranty	3 years standard warranty, 500 hours or 90 days on lamp (whichever comes first). Optional 2 years, 24/7 operation warranty. Conditions apply.
MTBF	27,838 hours



