

## dnp optical rear

projection screens

The new GWA TV Studio Screen produces sharp, highcontrast images over a broad viewing area. Furthermore it has a matt surface to avoid reflection of light.

Typical TV studios operate in light levels well above 1000 lux, which completely "washes out" the image on front projection screens. This unique optical rearpro screen generates enhanced black levels, which will create an image with a high contrast level.

The screen offers you large high-quality projected images in TV studios - either as part of the studio setting or as an audience display.

The GWA TV Studio Screen is a single element optical system with two active lens surfaces. Due to its optical lens design, the

The TV studio version of the dnp Giant Wide Angle Screen (GWA) is a large optical rear projection screen, specially designed to meet the requirements in brightly lit TV studios. With sizes up to 200", the screen offers a seamless image area of $4 \times 3$ metres.
dnp GWA Screen offers super-enhanced brightness uniformity and contrast levels.
> High contrast anti-reflective surface
> Optical Fresnel lens system
> Screen sizes from 140" - 200"
$>$ Available in 16:9 wide screen format up to 180 "
> Compatible with all standard projectors

| Application suitability |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Auditorium/sports arena |  | $\star$ | $\star$ | $\star$ |  | $\star$ |
| Conference room |  | $\star$ | * | $\star$ |  |  |
| Control room |  | $\star$ | * | $\star$ |  |  |
| TV studio |  | $\star$ | $\star$ | $\star$ |  | $\star$ |
| Advertising - in-store |  | $\star$ | $\star$ | $\star$ |  |  |
| Advertising - window display |  | $\star$ | $\star$ | $\star$ |  |  |
| Home entertainment - bright living room |  | $\star$ |  |  |  |  |
| Home entertainment - darkened home theatre | $\star$ | $\star$ |  |  |  |  |

## dnp GWA Screen™

## TV studio version

| Product details |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Giant Wide Angle Screen Type Screen size |  | GWA TV $\begin{array}{r}3500 \\ 140^{\prime \prime}\end{array}$ | GWA TV $\begin{array}{r}3500 \\ 150^{\prime \prime}\end{array}$ | GWA TV $\begin{array}{r}3500 \\ 160^{\prime \prime}\end{array}$ | GWA TV $\begin{array}{r}\text { 4800 } \\ 180^{\prime \prime}\end{array}$ | GWA TV $\underset{2000}{800}$ |
| Dimensions |  |  |  |  |  |  |
| Width | mm | $2878+1-2$ | $3081+/-2$ | 3284 +/-2 | 3684+/-3 | 4064 +/-3 |
| Height | mm | 2168 +/- 2 | $2321+/-2$ | 2473 +/- 2 | 2774 +/-3 | 3048 +/- 3 |
| Thickness | mm | $7.5+/-1$ | $7.5+1-1$ | $7.5+/-1$ | $7.5+/-1$ | $7.5+1-1$ |
| Weight | kg | $55.9+/-10 \%$ | $64.1+\mid-10 \%$ | $72.8+$ - 10\% | $92+/-10 \%$ | 111. $5+$ /- $10 \%$ |
| Width | inch | $113.3+/-0.08$ | $121.3+1-0.08$ | $129.3+/-0.08$ | $145+/-0.12$ | $160+1-0.12$ |
| Height | inch | $85.4+$ - 0.08 | $91.4+$ +- 0.08 | $97.4+$ - 0.08 | $109.2+/-0.12$ | $120+$ - 0.12 |
| Thickness | inch | $0.3+/-0.04$ | $0.3+/-0.04$ | $0.3+/-0.04$ | $0.3+/-0.04$ | $0.3+/-0.04$ |
| Weight | lbs | 123 +/-10\% | 141+/-10\% | 160 +/-10\% | 202.4 +/-10\% | 245.3+/-10\% |
| Image area |  |  |  |  |  |  |
| Width | mm | 2845 | 3048 | 3251 | 3658 | 4038 |
| Height | mm | 2134 | 2286 | 2438 | 2743 | 3017 |
| Width | inch | 112 | 120 | 128 | 144 | 159 |
| Height | inch | 84 | 90 | 96 | 108 | 119 |


| Projection information |  |  |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| Rec. lens throw ratio | Itr | $1.1-1.5: 1$ | $1.0-1.4: 1$ | $1.0-1.3: 1$ | $1.1 .2-1.6: 1$ | $4.1 .5: 1$ |
| Rec. projection distance* | mm | $3150-4375$ | $3150-4375$ | $3150-4375$ | $4320-6000$ | $4320-6000$ |
|  | inch | $124-172$ | $124-172$ | $124-172$ | $170-236$ | $170-236$ |


| Optical specifications |  |  |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| Focal length | mm | 3500 | 3500 | 3500 | 4800 | 4800 |
| Focal length | 138 | 138 | 138 | 189 | 189 |  |

Outer frame dimensions

| Width | mm | $3738+/-3$ | $4118+/-3$ |
| :---: | :---: | :---: | :---: |
| Height | mm | $2823+/-3$ | $3097+/-3$ |
| Weight | kg | 14 | 15.3 |
| Width | inch | $147.2+/-0.12$ | $162.1+/-0.12$ |
| Height | inch | 111.1+/-0.12 | $121.9+/-0.12$ |
| Weight | lbs | 30.8 | 33.7 |

*General tolerance $=-10 /+25 \%$, related to the actual screen focal length. The tolerance only applies to individual installations
Subject to change without notice. Please check specification at time of ordering.

## Screen profile (horizontal section)

The high precision Fresnel lens on the projector side redirects the projected light and sends it forwards at right angles through the screen. The diffusion material in the acrylic screen controls the vertical light distribution. The fine pitch lenticular lenses on the front side of the screen distribute the image through a $180^{\circ}$ horizontal viewing area. The matt surface prevents reflections from light sources in the studio environment.


## Special options

The TV studio version of the GWA Screen is available in sizes from 140 "-200" in 4:3 format. On request the screens can be cut down to $16: 9$ widescreen format up to $180 "$. Screens in sizes from $140 "-160 "$ can be ordered ready-mounted in the dnp frame system to make installation easier. A special rigid $40 \times 40$ mm square aluminium frame is available for screens in size range $161 "-200 "$. The screen is pre-fitted with the frame's top section for easy removal from the crate. This special framing system is supplied as standard with all screens from $161^{\prime \prime}-200^{\prime \prime}$.

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General specifications
Optical specifications

| Peak gain |  |  |
| :--- | :--- | :--- |
| Lenticular pitch |  |  |
|  |  | $3.0+/-0.5$ <br> 0.50 |
| Operating environment |  |  |
| Temperature | ${ }^{\circ} \mathrm{C}$ | $5-35$ |
| Humidity (non-condensing) | $\% \mathrm{RH}$ | $41-95$ |
|  |  | $30-70$ |

Included in the package
Gloves, quality certificate

Certificates
(®) $\begin{gathered}\text { RoHS } \\ 2002 / 95 / E C\end{gathered}$

## Gain chart



Horizontal
$\stackrel{+}{\text { Vertical }}$

Half gain angles
Horizontal: $32^{\circ}$
Vertical: $8^{\circ}$

