

Technical specifications Philips Vidiwall™ DayPix

Optical	
Luminous Intensity	12 Cd per pixel
LED type	3 mm Nichia Oval LEDs' targeted for display use
Picture enhancement	ASP
LED lifetime	>70,000 h
White Point	6.500 K
Horizontal viewing angle	120° (L50)
Vertical viewing angle	50° (L50)
Pixels	
Pixel construction	Pixels on flexible string
Pixel pitch on the string	100 mm (other pixel pitches on request)
Minimum pitch for physical installation	60 mm
Recommended installed physical pitch for daylight use	60 ~ 75 mm
IP protection	IP66 rated housing and IP67 rated connectors
Pixel mounting	Quick fix snap for fast and easy thru hole mounting + track mounting
Contrast	High contrast by pixel louvers and black housing
Weight	35 gram per pixel
Pixel dimensions	40 mm diagonal x 30 mm deep. Cable entry and exit: 5 mm each
Energy efficiency	
Pixel composition	7 LEDs per Pixel (3R, 2B, 2G)
Power consumption	Only 0.7W per 12Cd pixel (!).
Power supply efficiency	Typ. 85%
Cable losses	Low current 24V distribution to keep cable losses to a minimum
Power conversion	DC to DC conversion in every pixel for optimal energy efficiency
System	
Real video gamma	
Up to 60 fps video refresh rate	
Flexible pixel mapping up to 196.000 pixels	
Control system can be up to 800 meters from the Screen location	
Silent, no fans	
Easy of use / installation / maintenance	
Easy replacing of pixel strings, by only releasing input and output connector (bayonet type)	
Replacing pixel strings without the need for re-addressing	
IP66 protected power supply with extreme long lifetime (typ. 50.000 h)	
No moving parts (fans) / no filters / no air inlets (no clutter of dust)	
Installation depth >10 cm from wall / facade	
Simple wiring scheme, up to 144 pixels daisy chained without the need for power	
Operating range -20° to +50° C	
Approvals	
CE approved	
RoHS compliant	



Add a daylight visible media screen to your building

Philips Vidiwall™ DayPix, daylight suitable LED Media screen technology

With this innovative technology it is now possible to create low to medium resolution displays. Because DayPix is visible at daytime, you can generate revenues by showing commercial content.

Until now low resolution video displays were not designed to be used during the day because of the limited number of pixels per m² which add to the overall brightness. DayPix solves this issue by extreme high pixel intensity and smart ways to enhance pixel contrast.

DayPix is a flexible string of pixels, suitable to create any shape of video capable display. This capability allows content managers and

creative media specialists to display video from any source or any format, ranging from animations up to live broadcasts. DayPix is very robust with no need for complex structures, allowing the final installation to remain transparent and lightweight. The design allows for free form layout and scalability, ranging from a few m² up to thousands of m². As all system components are fully weather proof there is no need for additional environmental protection.



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PHILIPS
sense and simplicity

Philips Vidiwall™ DayPix for creative LED display technology

- Compose any shape and size of medium resolution media display
- Daylight suitable by brightness and contrast
- Versatile mounting system
- Lightweight and slim to enable installation on almost any surface
- Long lifetime outdoor rated system components
- Green product due to high efficiency
- Front serviceable

Components



SP620 signal processor

Accepts a DVI input signal (1.024 x 768 @ 60 Hz) from any content PC, Media Server or the optional Philips VP520 video processor. Real time pixel mapping technology allows for mapping the incoming DVI pixels to any of the attached DayPix pixels, using accurate 1:1 mapping. This gives the installer unlimited freedom in how to arrange the DayPix in the screen, both from the orientation as the wiring point of view.

The SP620 drives up to 196.000 pixels.

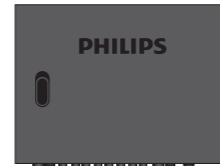
The SP620 outputs via multi mode fiber, to allow the signal to travel up to 800 meters to the DD620 data distributor.

Box contents:

- 1x SP620 Signal processor
- 1x Fiber cable 50/125 um MultiMode ST-ST, 3 m
- 1x Power Cable
- 1x DVI cable 1.5 m
- 1x USB cable 1.5 m
- 1x CD with control software

Size: 19" rack mount, height 2U Distance to the DayPix screen: max. 800 m

Type: VWU212 01 – 12NC 91500000453



SU620 scanboard unit

Processes the incoming signal from the DD620 down to 8 outputs of maximum 600 pixels each.

The SU620 is IP55 rated and can be installed in an outdoor environment, without the need for additional protection.

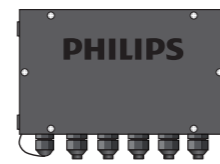
Box contents:

- 1x Scanboard unit SU620
- 2x Coaxial cable, 20 m, RG6, 75Ω

Size: 46 x 36 x 12 cm

Distance to the DayPix screen: max. 15 m

Type: VWU304 01 – 12NC 915000001231



BB600 bufferboard box

Combines data and power. One BB600 drives up to 416 pixels (250W). This unit is IP55 rated for outdoor use.

Box contents:

- 1x Bufferboard box
- 3x T connector to connect to tubes
- 1x RS422 cable to connect to 2nd BB600

Size: 30 x 16 x 8 cm

Distance to the DayPix screen: max. 1.2 m

Type: VWU302 01 – 12NC 915000001041



DD620 data distributor

This unit is located near to the DayPix screen, and receives the digital information stream from the SP620 located in the control room.

The DD620 divides the incoming data into 6 output channels, each able to drive up to 6 cascaded SU620 scan board boxes.

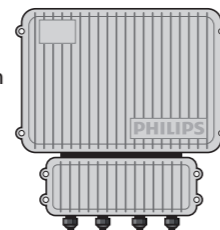
Box contents:

- 1x DD620 Data distributor
- 1x Power Cable

Size: 19" rack mount, height 1U

Distance to the DayPix screen: max. 100 m

Type: VWU314 01 – 12NC 915000001221



LP500 Powersupply

Provides 24V DC system power to DayPix, BB600 and SU620. IP66 enclosed cabinet for outdoor use.

Long life design (up to 50.000 hours). Green product due to high efficiency (typ. 85%).

Box contents:

- 1x LP500 powersupply

Size: 36 x 36 x 9 cm

Distance to the DayPix screen: max. 15 m

Type: VWP101 01 – 12NC 915000001031



Isolators

Pass data but block 24V DC power to allow for separate power segments.

Type: VWAC02 01 – 12NC 915000001081



RS422 cabling

Provide a data connection between the SU620 and BB600.


Available in 5, 10 or 20 m

(12NC 915000001051, 915000001061, 915000001071)

ASP™
Anti-solarisation processing uses Philips' proprietary 48 bit color processing to completely eliminate disturbing solarization effects commonly seen in dark picture areas of typical LED displays.

High Efficiency
The combination of extremely efficient LEDs, Local DC to DC conversion per pixel and high efficient power supplies, the DayPix system is one of the most efficient systems available on the market. DayPix can be up to twice as energy efficient than comparable systems on the market.

Versatile mounting
DayPix uses a unique way to mount pixels to any carrier (frames / strips / bars / etc.). The sunshade louver will act as a mounting ring, supporting carriers from 1 to 3 mm thickness. The pixel can be mounted to the carrier by a simple push to the sunshade louver. It will snap in place and is so strong that it can only be removed by breaking it (spare rings will be provided). A rubber ring will take care of any tolerances in thickness of the carrier.




Available Philips Vidiwall™ DayPix string, 100 mm pitch models

Model	Descriptor	Commercial designation	12NC	
DayPix H15/100	15 pixels Horizontal Mounting	12Cd, Black, Shader	VWS141 015 001 3H BK SHD	915000001301
DayPix H16/100	16 pixels Horizontal Mounting	12Cd, Black, Shader	VWS141 016 001 3H BK SHD	915000001311
DayPix H17/100	17 pixels Horizontal Mounting	12Cd, Black, Shader	VWS141 017 001 3H BK SHD	915000001321
DayPix H18/100	18 pixels Horizontal Mounting	12Cd, Black, Shader	VWS141 018 001 3H BK SHD	915000001331
DayPix H19/100	19 pixels Horizontal Mounting	12Cd, Black, Shader	VWS141 019 001 3H BK SHD	915000001341
DayPix H20/100	20 pixels Horizontal Mounting	12Cd, Black, Shader	VWS141 020 001 3H BK SHD	915000001351
DayPix H24/100	24 pixels Horizontal Mounting	12Cd, Black, Shader	VWS141 024 001 3H BK SHD	915000001361
DayPix H32/100	32 pixels Horizontal Mounting	12Cd, Black, Shader	VWS141 032 001 3H BK SHD	915000001371
DayPix V15/100	15 pixels Vertical Mounting	12Cd, Black, Shader	VWS141 001 015 3H BK SHD	915000001381
DayPix V16/100	16 pixels Vertical Mounting	12Cd, Black, Shader	VWS141 001 016 3H BK SHD	915000001391
DayPix V17/100	17 pixels Vertical Mounting	12Cd, Black, Shader	VWS141 001 017 3H BK SHD	915000001401
DayPix V18/100	18 pixels Vertical Mounting	12Cd, Black, Shader	VWS141 001 018 3H BK SHD	915000001411
DayPix V19/100	19 pixels Vertical Mounting	12Cd, Black, Shader	VWS141 001 019 3H BK SHD	915000001421
DayPix V20/100	20 pixels Vertical Mounting	12Cd, Black, Shader	VWS141 001 020 3H BK SHD	915000001431
DayPix V24/100	24 pixels Vertical Mounting	12Cd, Black, Shader	VWS141 001 024 3H BK SHD	915000001441
DayPix V32/100	32 pixels Vertical Mounting	12Cd, Black, Shader	VWS141 001 032 3H BK SHD	915000001451