

# HD2 line Pro

made by  
**Penta** Studiotechnik

## PDP 21.5W - High Performance Broadcast LCD Monitor

HD2'ine Pro represents the newest generation of Broadcast LCD Monitors from Penta, utilizing state-of-the-art video and audio processing hardware combined with the most precise LC display technology available today.

A multi-format 3G/HD/SD-SDI input with an optional Fiber Optic Module supports data rates up to 3 Gb/s and accepts SD-SDI, HD-SDI, Dual-Link HD-SDI, and 3G-SDI. Accepted signal formats amongst others: 480i/29.97, 576i/25, 720p/50 and 720p/60, 10-bit/12-bit RGB 4:4:4, 1080psf/23.98, 1080p/23.98, 1080psf/24, 1080p/24, 1080psf/25, 1080p/25, 1080i/25, 1080psf/30, 1080p/30 and 1080i/30(29.97), 10-bit 4:2:2 1080p/50 and 1080p/60(59.94).

Multiple analog and digital audio I/O modules complement the range of available options, including discrete analog or digital inputs and de-embedded audio outputs.



## 21.5" Monitor

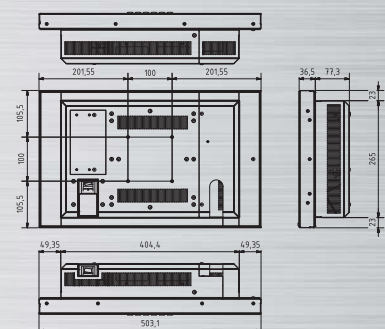
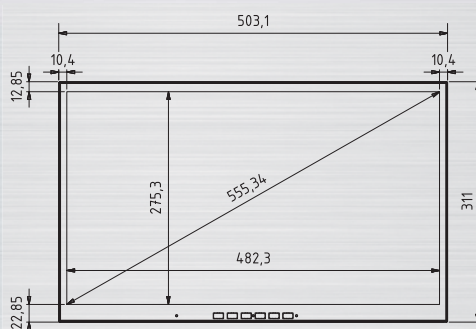


## PDP 21.5W - Product Highlights at a Glance

- Ultimate picture quality
- Outstanding gray scale and color depth through a 16 bit panel driver
- Number of colors displayed: 1.07 billion colors (RGB - 10 bits each)
- Perfect and repeatable color matching between monitors
- Multiple color gamuts
- Precise picture uniformity and stability
- Multi-format signal support – freedom to operate in whichever format you work
- Automatic aspect ratio and mode identification
- 1:1 pixel mapping
- Perfect motion interpolation for interlaced signals
- Wide range of input formats: analog and digital up to 3 Gb/s
- Fiber optic input
- VITC/ATC timecode display
- NTP (network time protocol) driven realtime display
- WSS/AFD indicator
- Closed Caption decoding (ITU-608/708)
- Dolby indicator
- 8 channel audio level meter
- Selectable color temperature 3200 K, 5400 K, 6504 K, 9300 K
- Color component display modes: all, red-, green-, blue-only, monochrome
- Dynamic and static IMD support
- Tally support via GPI and VGPI (network)
- Safe area and safe title
- DCS remote control software
- Centralized monitor wall control via Ethernet
- Ethernet-based remote control panel
- Programmable GPI control
- Multilingual on screen menu display
- Built-in screensaver to minimize sticking
- Built-in diagnostic and test pattern generator
- Rugged, durable design
- No fans - no noise
- Optional ND glass filter
- Optional 3D-Mixer

# Technical Specifications

<b>General</b>	
Model	PDP 21,5W
Type	Multiformat HDTV / SDTV LCD Monitor - 8 bit panel
Screen size	21.5" wide format
Aspect ratio	16:9
Native resolution	1920 x 1080 pixels
Effective screen size	267.30 mm (H) x 475.20 mm (W)
Display colors	16.67 million
brightness / max. brightness	85 cd/m <sup>2</sup> conforms to EBU Spec - 250 cd/m <sup>2</sup> max. brightness
Contrast ratio	1000:1
Response time	14 ms (gray to gray)
Viewing angle	H-178° / V-178°
H Frequency	31.400 kHz - 75.000 kHz
V Frequency	50 Hz / 60 Hz - max. 200 Hz
<b>Color Space / Gamma / Motion Adapt.</b>	
Color space	YCrCb BT.709 / YCrCb BT.601/ YPbPr / SMPTE240M / RGB / User
SDTV	ITU-R BT.601: PAL (576i), NTSC (480i)
HDTV	ITU-R BT.709: 720p, 1035i, 1080i, 1080p
Gamma correction	10 bit gamma correction 1.0, 1.5, 2.0, 2.2, 2.35, 2.5 conform to EBU spec.
Color temperature	3200 K / 5500 K / 6504 K / 9300 K
Scaling	Native / 4:3 / 16:9 / Full screen / User
Motion adaption	5-line superadaptive 2D comb filters
<b>Input / Output Terminals</b>	
Video 1	Composite Video / BNC / 1 Vss - 75 Ohm
DVI-I	DVI-I (single link) up to 1920x1200@60Hz including DDC1 EDID support
VGA	RGB / 15pin Sub-D, 0.7 Vss - 75 Ohm
3G/HD/SD-SDI (optional - up to 4 inputs)	SMPTE 424M (3 Gb/s) SMPTE 292M / ITU-R BT.656 / SMPTE 295M
Fiber optic modul (optional - up to 4 inputs)	SMPTE 297M - 1260-1620 nm, LC/PC (female), single mode, -23 dBm sensitivity
<b>External Control</b>	
Ethernet network	Remote control, color alignment, dyn. IMD and Tally / RJ-45 8pin
RS 232	Remote control / 9pin Sub-D (female)
GPI	Static IMD and Tally, function key / 15pin Sub-D (male)
<b>Mechanical</b>	
Operating temperature	5 °C - 45 °C
Power requirement	AC 100 - 240V, 50/60 Hz
Power consumption (± 5% tolerance)	45W
Power fuse	100 - 240V AC 50/60Hz 1,9A Slow-blow
Dimensions (Width x Height x Depth)	503.1 mm x 311.0 mm x 113.8 mm
Weight excluding ND Filter and Mounting (± 3% tolerance)	8.30 kg
Weight including ND Filter excluding Mounting (± 3% tolerance)	9.65 kg
Mounting	MIS-D, 100, M4 x 10, C
Color	RAL 9005 Black



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