MIRACLEWALL

Project / Screen

MiracleWall COB FHD 600 nit P1,25

Environment

Indoor

LED Screen

MiracleWALL P0.938 mm

Size / Area

1.82m² (81.3")

Note: This document was generated as a initial reference and may contain inaccuracies. Details may change upon final project.

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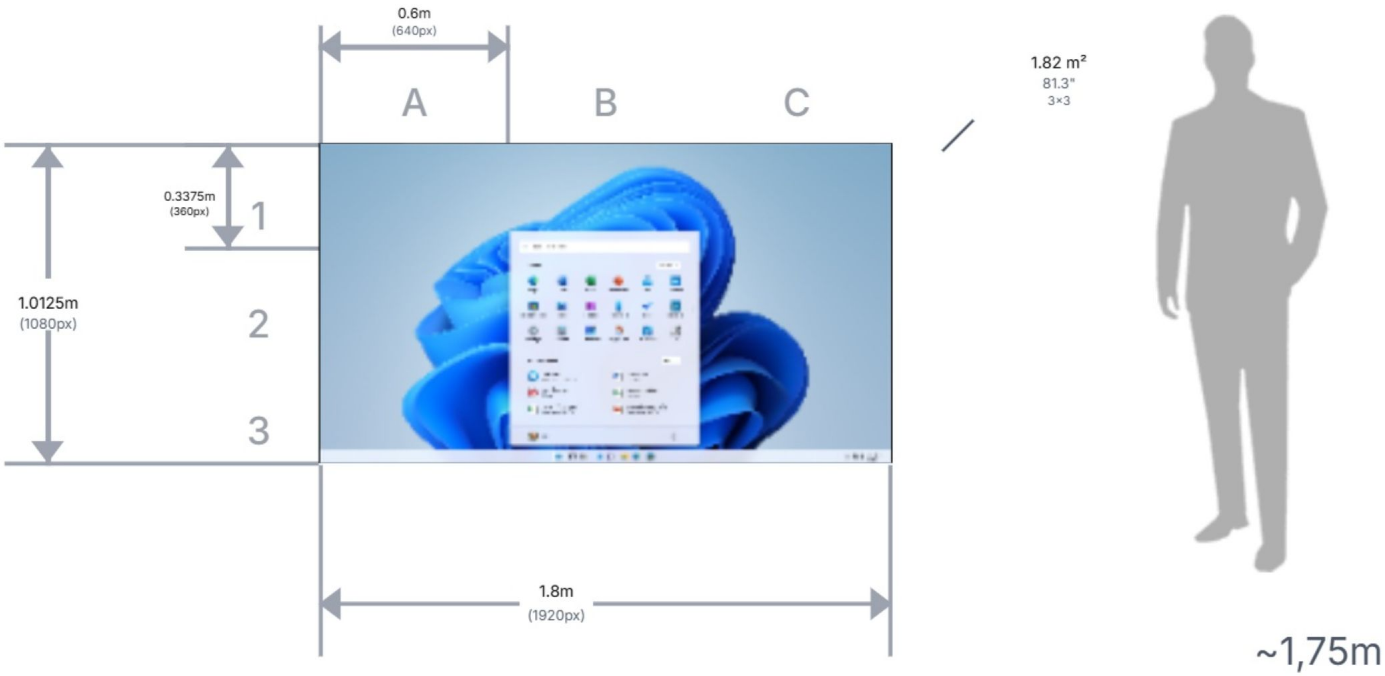
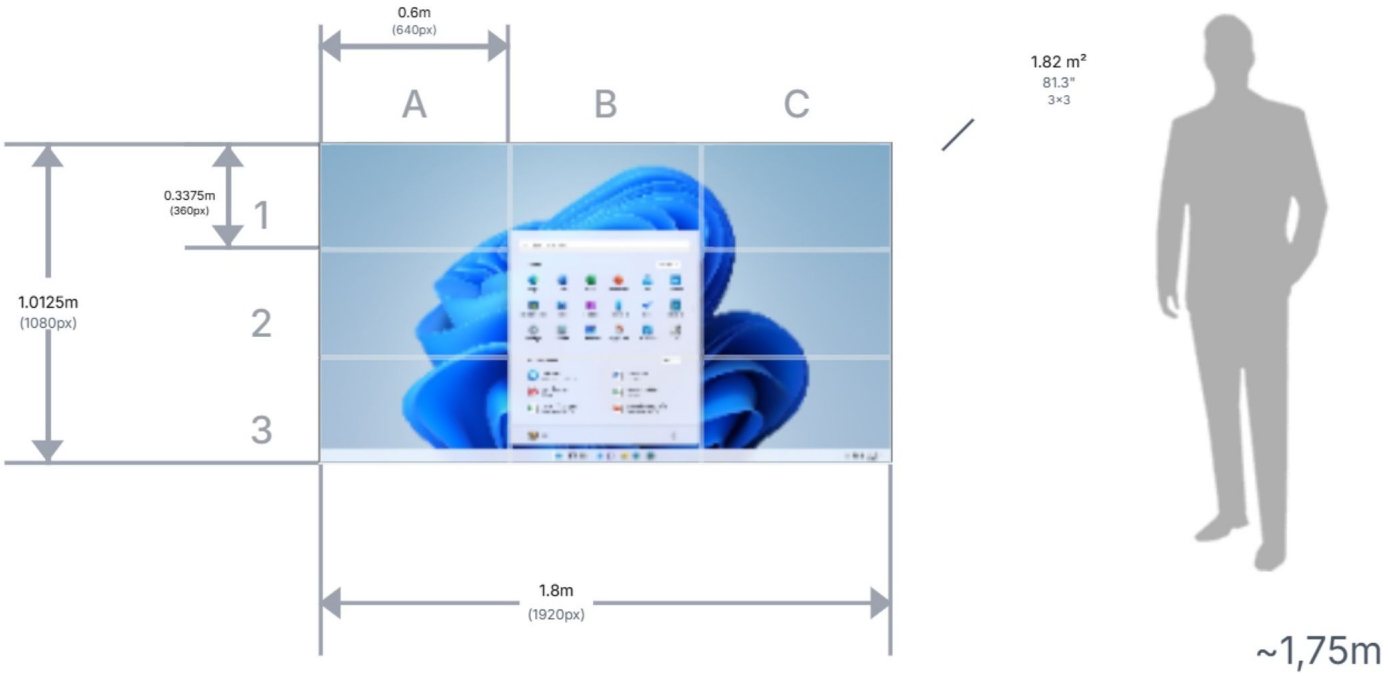
Preview


0.6m
(640px)
A
B
C
0.3375m
(360px)
1
1.0125m
(1080px)
2
3
1.8m
(1920px)
1.82 m²
81.3"
3×3
~1,75m

Solution



SOLUTION DETAILS

ITEM	MODEL	UNITS
LED Cabinets	MiracleWALL P0.938 mm	9 pcs
Video Processor	Novastar MX20	1 pcs
Signal cables	Ethernet (Main/Sub)	5 pcs / 4 pcs
Power cables	Power (Main/Sub)	1 pcs / 8 pcs

Screen details

General

Model	MiracleWALL P0.938 mm
Screen configuration (WxH)	3 x 3 (9 pcs)
Number of controllers	1
Redundancy	No

Dimensions

Dimensions (WxHxD)	1 800 x 1 012,5 x 31 mm
Diagonal size	81.3"
Display area	1.82 m²
Weight	40.5 Kg

Specifications

Pixel pitch	0.938 mm
Screen resolution	1920 x 1080 px
Aspect ratio	16:9
Total pixels	2 073 600 px
Brightness	600 nits
Refresh rate	3840 Hz
Frame rate	60 Hz
Viewing angle (H/V)	170° / 170°
Contrast ratio	1000000:1

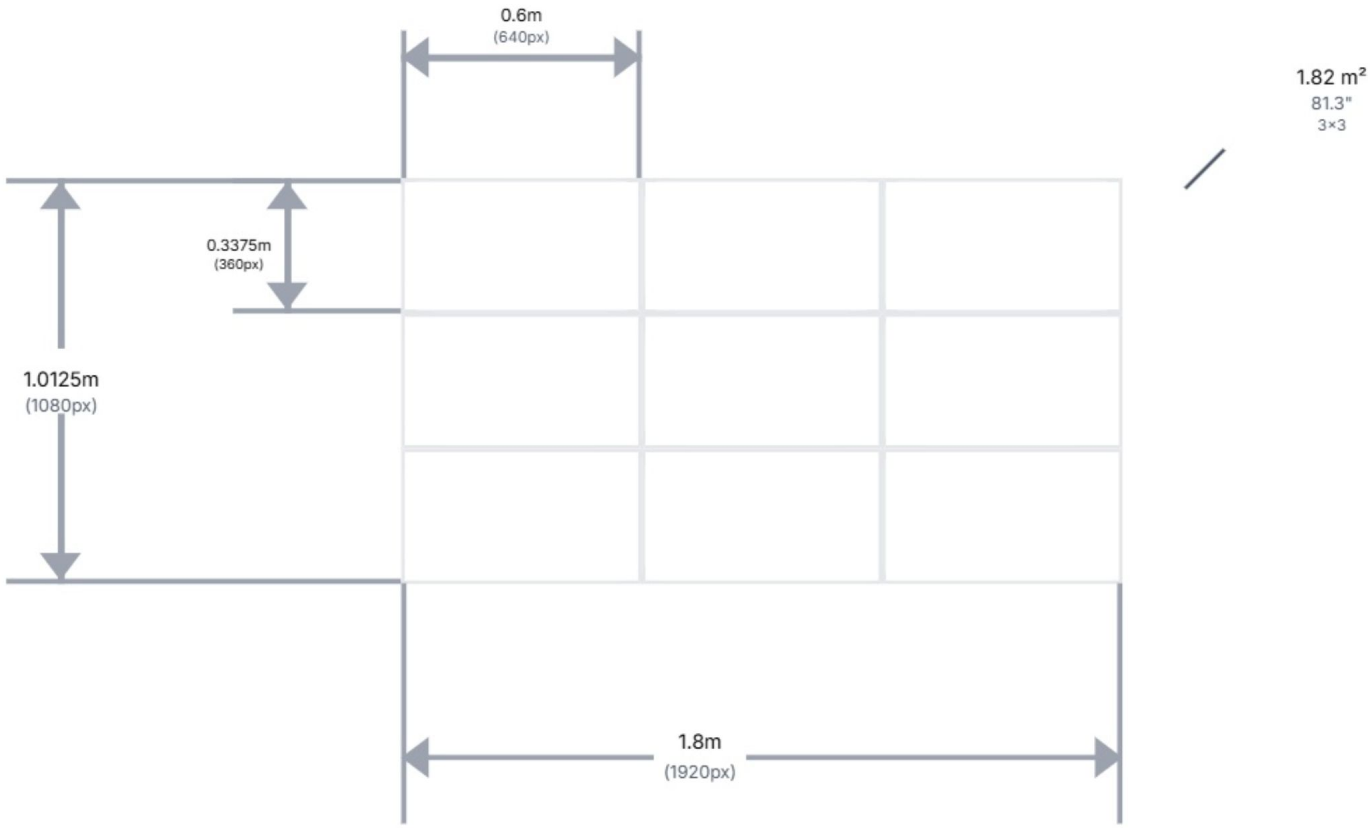
Power requirements

Typical/Max	227,813 / 674,325 W
Based on	1.82 m² × W/m²
Operating voltage	230V 50/60Hz
Power lines	1 x 10 A

Installation

Environment	Indoor

Screen drawing



Screen Details

Dimensions (WxH)	1 800 x 1 012,5 mm
Depth	31 mm
Weight	40.5 kg
Area	1.820 m²
Cabinets (WxH)	3 x 3

LED Cabinet Details

Dimensions (WxH)	600 x 337.5 mm
Depth	31 mm
Weight	4.5 kg
Area	0.203 m²

Screen cabinet numbering

#	A	B	C
1	A1	B1	C1
2	A2	B2	C2
3	A3	B3	C3

Note: This is not always accurate regarding calibration data. Doublecheck factory documents before install regarding specfic order.

Screen pixel mapping

Note: Not accurate to scale. This is scaled to fit PDF.

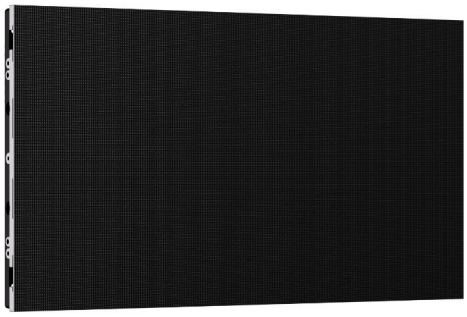
Sections

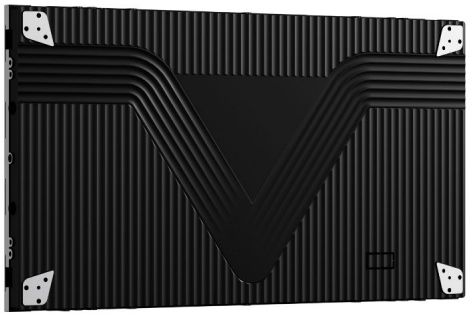
	X0	Y0	W1920	H1080
Section 1				

Sections	1
Display	1920 × 1080 px
Aspect ratio	16:9

MiracleWALL P0.938 mm

INDOOR





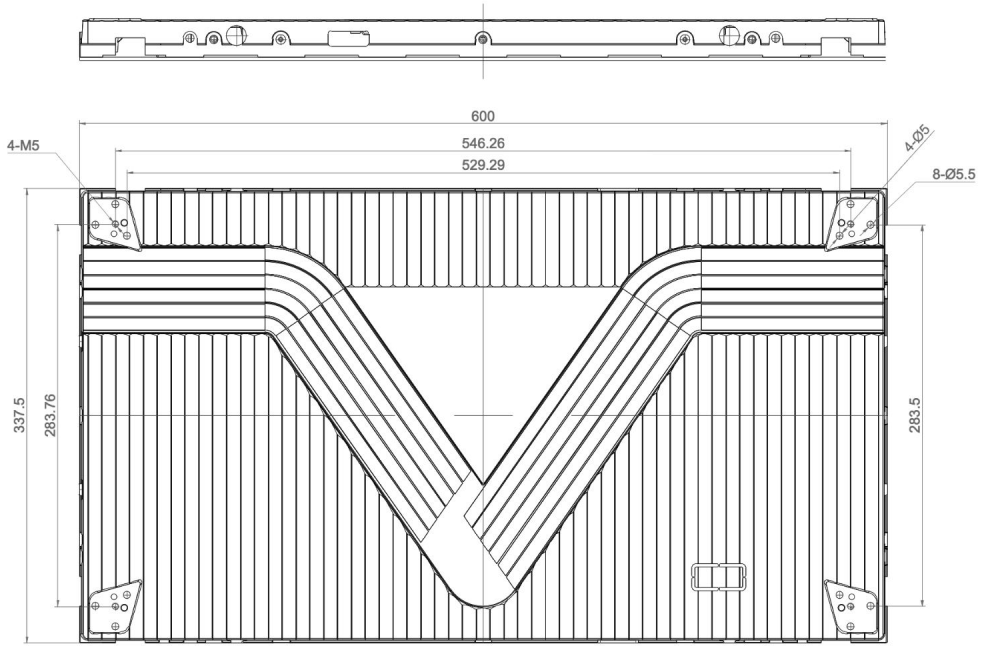
LED Cabinet Specifications

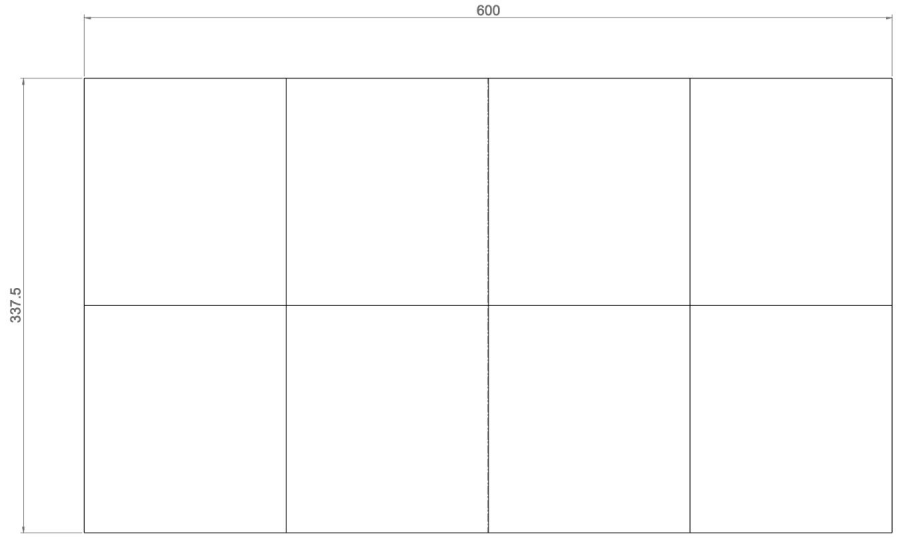
MiracleWALL P0.938 mm

MIRACLEWALL

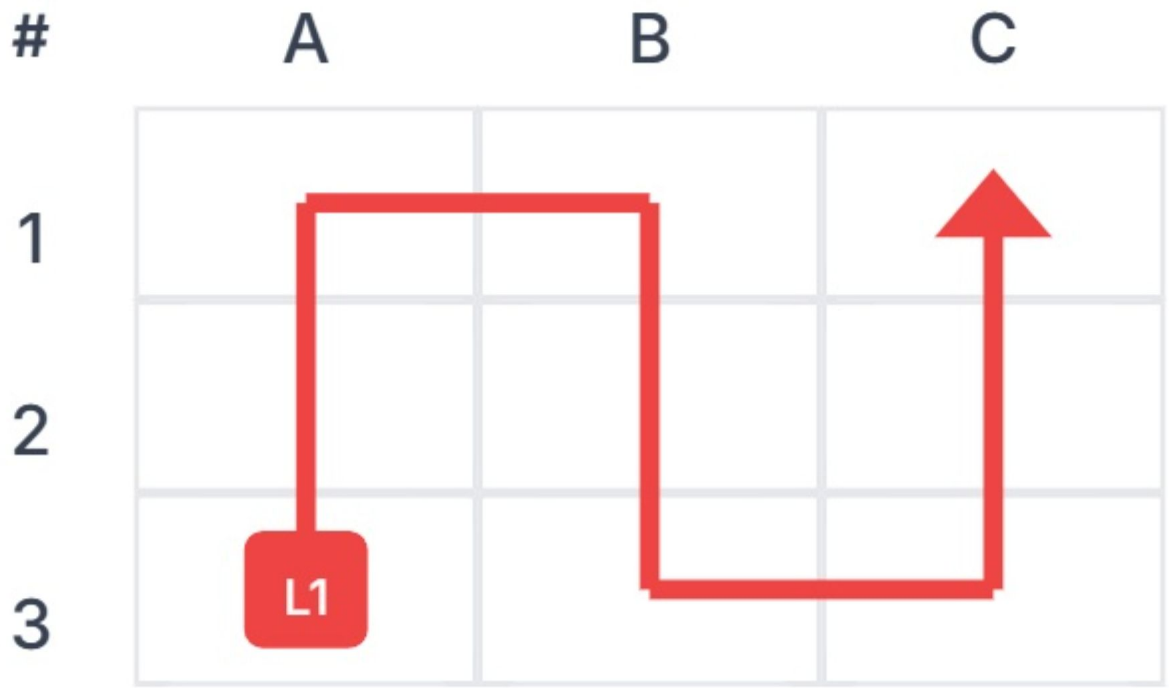
Pixel type	COB (Full Flip-Chip)
Pixel pitch	0.938 mm
Dimensions (WxHxD)	600 x 337.5 x 31 mm
Resolution (WxH)	640 x 360 px
Weight	4.5 kg
Brightness	600 nits
Refresh rate	3840 Hz
Frame rate	60 Hz
Operating voltage	110~240V 50/60Hz
Power consumption	125 - 370 W/m²
Receiving card	Novastar A8s Pro
Contrast ratio	1000000:1
Viewing angle (H/V)	170° / 170°
Operating temperature	-10°C to 50°C
IP Rating (front/rear)	54 / 30

LED Cabinet Drawing





Power cabling - Front view



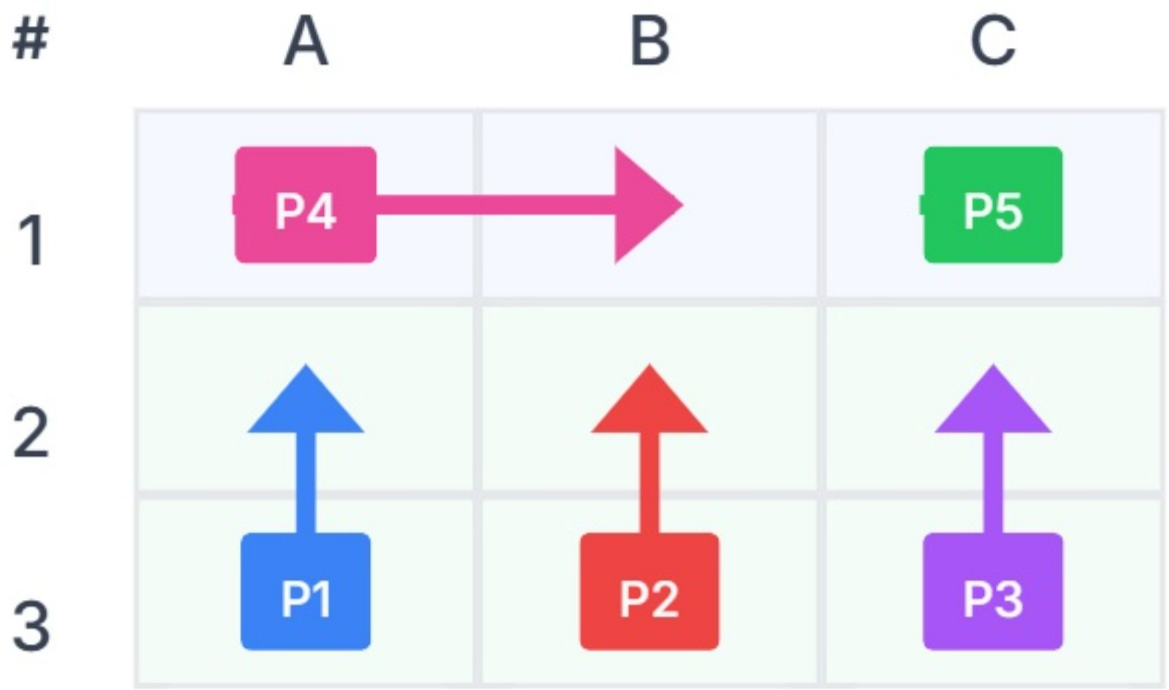
Electrical parameters

Power draw (avg-max) (from 1.82 m² × W/m²)	227,813 - 674,325 W
Current (typical-max)	0,99 - 2,932 A
Fuse rating	10 A (2 300W)
Power lines	1
Max load on single line (spike)	674,325 W
Input voltage	230 V 50/60Hz
Breaker based on:	Type C

Power Line Details (10 A @ 230V)

LINE	PCS	AVERAGE WATT	MAX WATT	CURRENT	FUSE CAP.
L1	9	472W (20.5%)	674W (29.3%)	2.05-2.93 A	2300W

Network cabling - Front view



Processing details

Screen resolution	1920 x 1080 px
Processor count	1
Redundancy	None
Total pixels for screen	2 073 600 px
Total pixels per cabinet	230 400 px

Signal parameters

Network type	1G
Capacity per port	659 722 px
Signal main cables	5
Signal sub cables	4
Max load on single port	460 800 px (69.8%)
Max cabinets used per port	2

Image details

Color depth	8 bit
Frame rate	60 Hz
Low latency capable	No
Zero frame latency capable	No

Signal Port Details (5 ports)

SIGNAL	PCS	PIXELS (%)	SIGNAL	PCS	PIXELS (%)	SIGNAL	PCS	PIXELS (%)	SIGNAL	PCS	PIXELS (%)
P1	2	460 800 px (69.85%)									
P2	2	460 800 px (69.85%)									
P3	2	460 800 px (69.85%)									
P4	2	460 800 px (69.85%)									
P5	1	230 400 px (34.92%)									

Video Processor

Novastar MX20

COEX

General

Model	Novastar MX20
Max units to be cascaded	20
Communication protocol	ethernet
Max canvas size	3840 x 2560
Max total load capacity	3,9 million
Max load capacity over Ethernet	3,9 million
Max load capacity over Fiber	3,9 million
Max load capacity per Ethernet	659 722 px

Features

All-in-one	Yes	Video splicer	No
Genlock	Yes	10-bit support	Yes
Low latency	Yes	12-bit support	No
Zero frame latency	Yes	HDR	No
Shutter fit	No	3D LUT	No
Redundant PSU	No	HLG	No
Modular	No	14ch Color Correction	Yes
Adaptive frame rate	Yes	Multiviewer (MVR)	No

Inputs

HDCP Support	1.4
Max Standard Input	1920×1200@60Hz
Max Input Count	3
Max forced resolution width	3840 px
Max forced resolution height	3840 px
Max input frame rate	144 Hz
Inputs	

1×3G-SDI, 2xHDMI1.3

Outputs

Fiber support	Yes
Fiber ports	2
Ethernet ports on device	6
Ethernet ports over fiber	6
Ethernet ports per fiber	6
Network support	1G
Max output framerate	144 Hz