

PEOPLE FLOW CONTROL SOLUTION

SETUP & INSTALLATION GUIDE

EQUIPMENT

Every kit includes the following items:

IPC-HFW5541E-ZE Camera

- Uses advanced AI technology to track and monitor the flow of people entering and exiting.
- Has a 2.7-13.5mm motorised lens allowing for an adaptable setup, depending on your environmental restrictions.
- H.265+ compression allowing for very sharp and detailed, high-resolution playback.



DSS-EXPRESS-FCS

- Additional License for DSS Express.
- Enables Flow Control Solution within DSS Express.
- A slick, modern interface and easy layout.
- Contains a number of features and tools for monitoring and setting specific guidelines for Flow Control.

- Software -



REQUIREMENTS

Your computer will need the following minimum specifications:

Windows 10	i5 Processor
500GB HDD	HDMI Output
8GB RAM	

JGM 28" 4K Monitor

- 28" screen size with a 4K LED Backlit Monitor Panel, designed for high resolution playback.
- Operating temperature 0°C to 50°C.
- High contrast and brightness and has a viewable display even in bright sunlight.



NUC Barebone Mini PC Kit

- A quad core i5 portable PC with the DSS Express pre-installed.
- This PC kit is small and portable, allowing for flexibility when setting up your solution.
- A HDMI output is built-in to the PC.



PFS3010-8ET-96 - OPTIONAL

- 8 Port Recorder powered by PoE+ and supports up to 30W per port.
- Up to 250m transmission so can therefore allow for very flexible setups and environments.
- Port 1 supports up to 60w Hi-PoE.

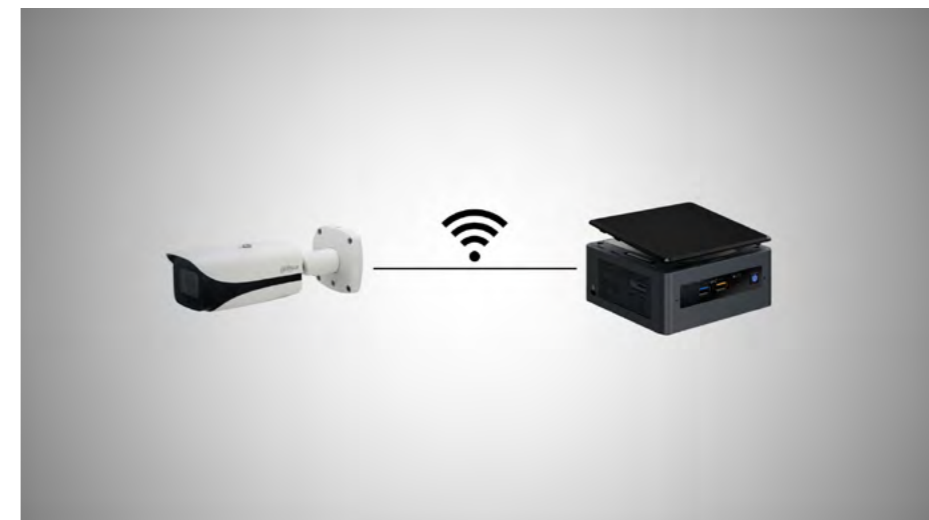


INSTALLATION GUIDE

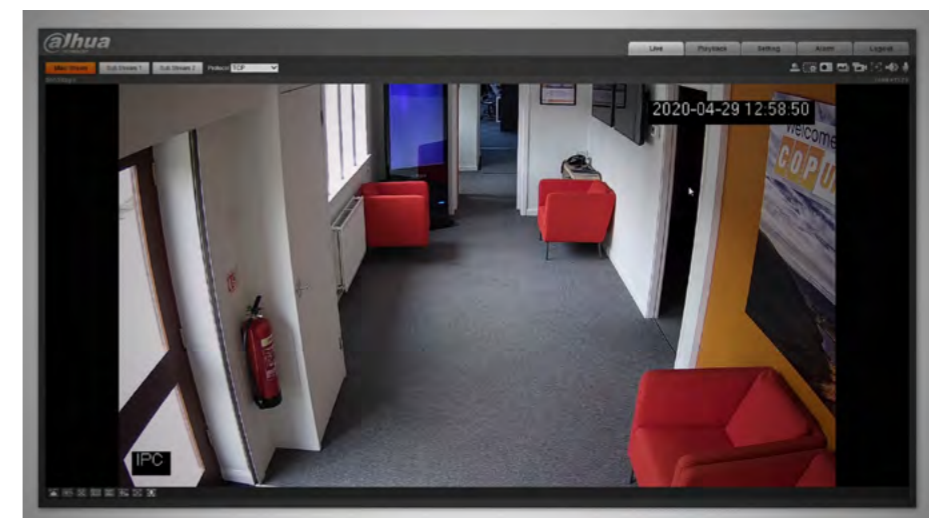
1. The first step is to mount your **AI CAMERA** directly above the area you wish to monitor, pointed down at an **ANGLE OF 45°**. If you can't angle directly above, a side-view would also be suitable.



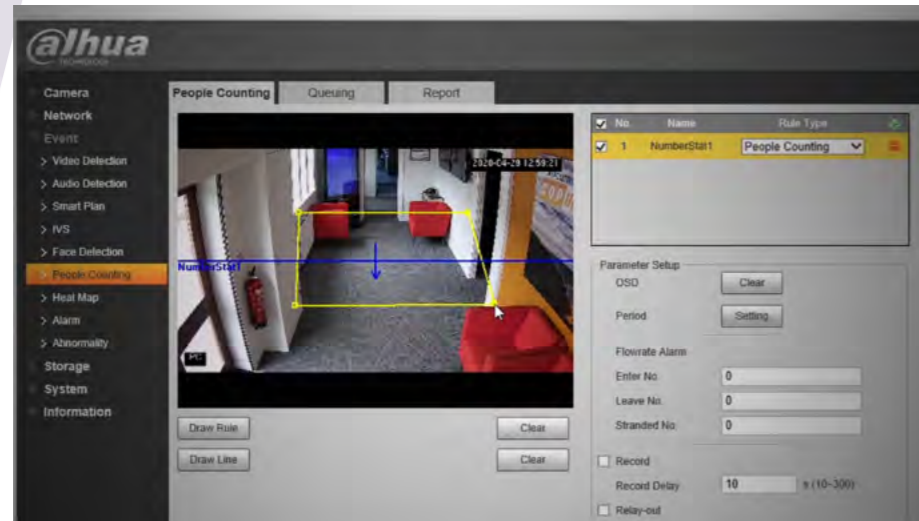
2. Next, power your camera up and **CONFIGURE** it along with your PC to the same network range.



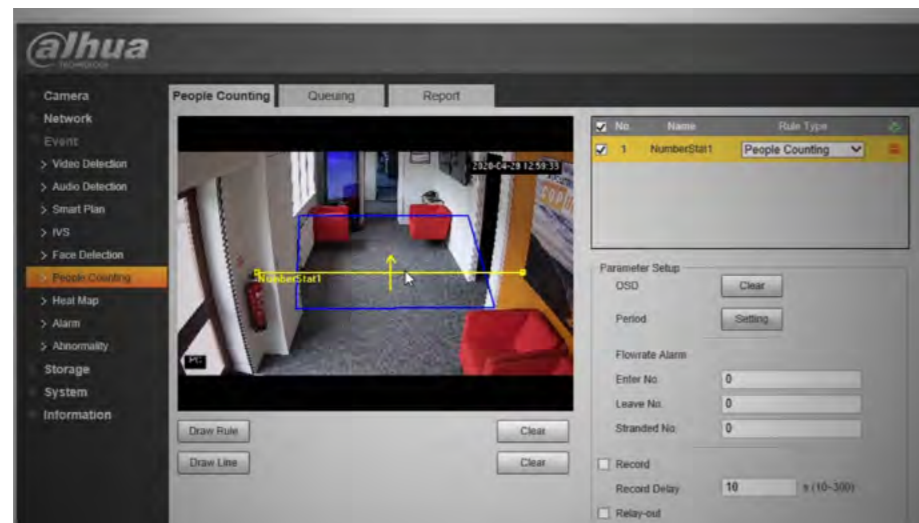
3. Once configured, login to your **CAMERA WEB BROWSER** using your IP address and check your picture, confirming that the angle is correct.



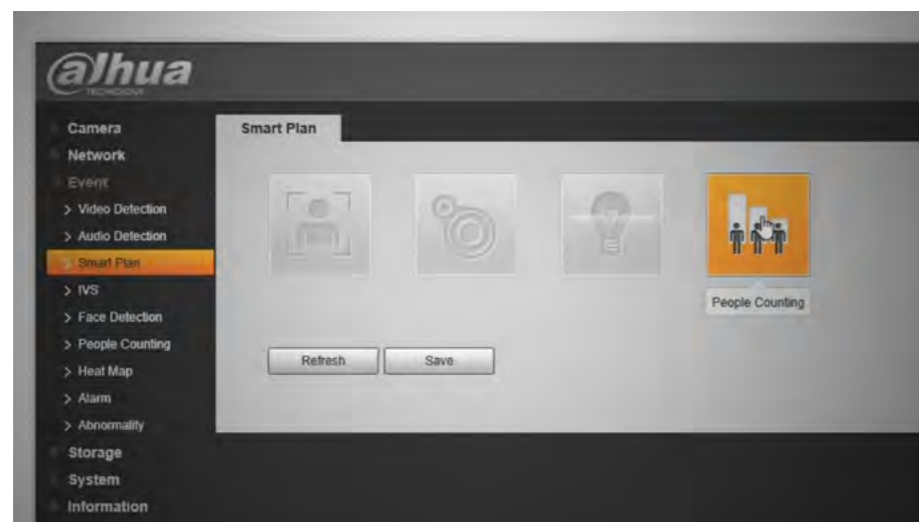
4. Next go to: **SETTINGS** —> **EVENT** —> **PEOPLE COUNTING** and click **DRAW RULE**. Draw a box around the area you wish to monitor.



5. From this, **DRAW A LINE** — whichever way the arrow points will be to the direction of the entrance — click **SAVE**.



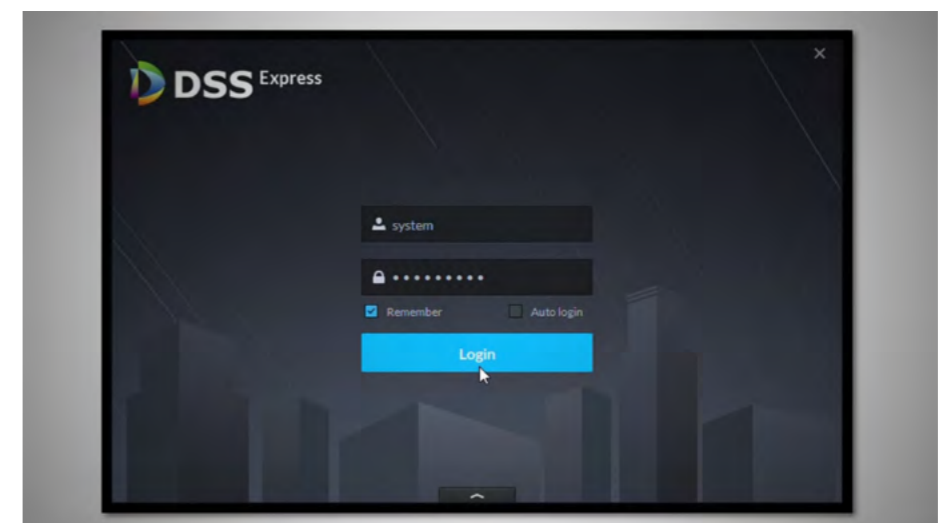
6. Still in the EVENT column, go to **SMART PLAN** and click **ENABLE PEOPLE COUNTING** — click **SAVE**.



7. The next step is to turn on your real time counter. To do this, go to: **CAMERA** —> **VIDEO** —> **OVERLAY** and turn **PEOPLE COUNTING** on.



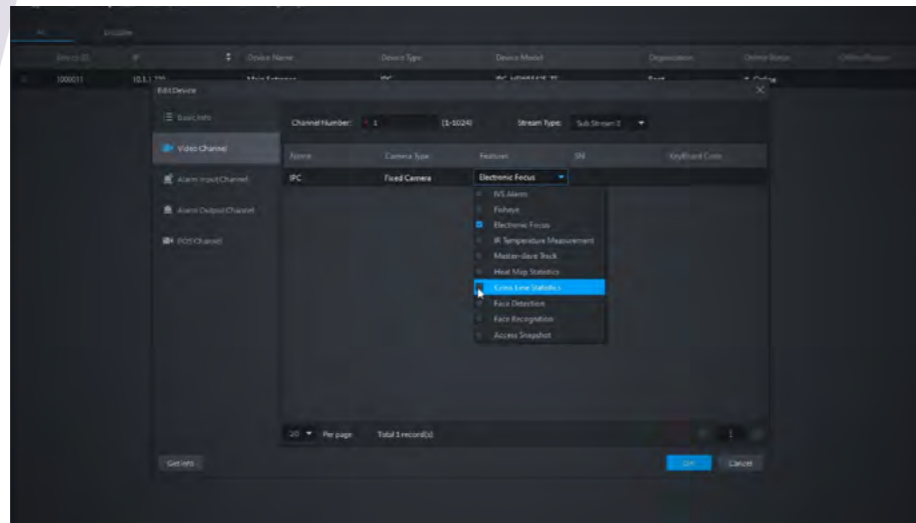
8. After activating your **DSS EXPRESS** software, launch the **CLIENT** and login.



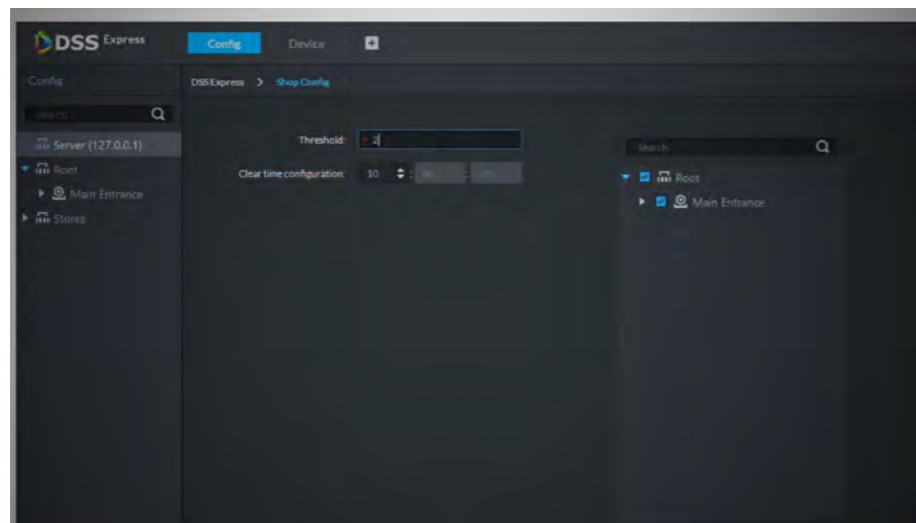
9. From the **HOMEPAGE**, go to **DEVICE** —> **ADD** and input your **CAMERA SETTINGS** — it is now connected to your server and should be indicated as online.



10. In your **OPERATION** column, select the **PENCIL ICON** followed by: **VIDEO CHANNEL** —> **FEATURES COLUMN** and select the drop down box, add a tick in the **CROSS LINE STATISTICS** — click **OK**.



11. Back in your homepage go to: **CONFIG** —> **SHOP CONFIG** and set your **MAXIMUM** entrants threshold and **TIME SETTINGS**. Also, from the right hand panel, select your **CAMERA(S)**.



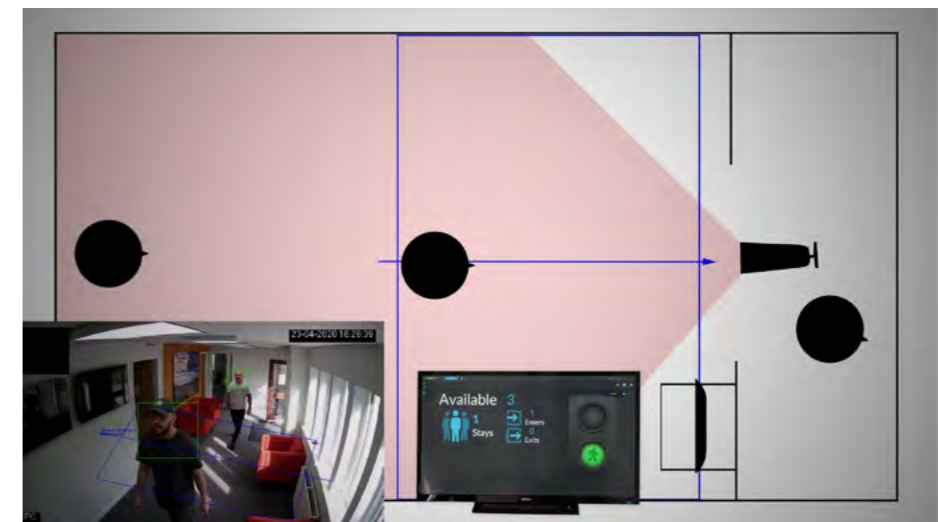
12. Back in your homepage, click **FLOW ANALYSIS** and select **SHOP LIVE VIEW** from your left window panel.



13. Place your **MONITOR** in front of the **ENTRANCE** displaying the **SHOP LIVE VIEW**.



14. See the **RESULTS!**



SPECIFICATIONS

IPC-HFW5541E-ZE

CAMERA

Image Sensor:	1/2.7" Progressive Scan CMOS
Resolution:	5 Megapixel
Effective Pixels:	2592 x 1944
RAM/ROM:	1GB/128MB
Scanning System:	Progressive
Min Illumination :	0.015 Lux@F1.5
IR Distance :	50m
IR On/Off Control:	Auto/Manual
IR LEDs:	4

LENS

Lens Type:	Motorised
Mount Type :	Board-in
Focal Length:	2.7-13.5mm
Max Aperture:	F1.5
Angle of View:	H:100°-28° V:72°-21°
Optical Zoom:	5x
Aperture Type :	Auto
	Close Focus Distance: 0.8m
DORI Distance :	Detect:64-212m, Observe:26-85m, Recognize:13-42m, Identify:6-21m

PAN/TILT/ROTATION

Pan/Tilt/Rotation Range :	Pan:0°~360°; Tilt 0°~90°; Rotation: 0°~360°
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ARTIFICIAL INTELLIGENCE

Face Capture:	Support Face image Capture
Face Attributes :	Support 6 kinds of face attributes extraction: Age, Gender, Expression, Glasses, Mouth Mask, Beard
Perimeter Protection :	Tripwire, Intrusion (Human & Vehicle classification)
People Counting :	Support Line Crossing / Region /Queueing People Counting; Support 4 accesses independent detection, 4 areas independent detection.

GENERAL INTELLIGENCE

Event Trigger:	Motion, Tampering, Scene change, Network disconnect, IP conflict Illegal Access, Storage anomaly
General Intelligence :	Abandoned/Missing

VIDEO

Compression:	H.265+ / H265 / H.264+ /H.264
Streaming Capability :	3 Streams
Resolution:	5MP / 4MP /3MP / 1080P / 1.3M / 720P / D1 / VGA / CIF
Frame Rate :	Main Stream: 5MP@20fps, 4MP@25fps, 1080P@60fps / Sub Stream: D1@50fps
	Bit Rate Control: CBR/VBR
Bit Rate:	H.264:32Kbps-8192Kbps / H.265:19Kbps-8192Kbps
Day/Night:	Auto/Colour/Mono
BLC Mode:	BLC/HLC/WDR (120dB)
White Balance:	Auto/Natural/Street Lamp/Outdoor/Manual
Gain Control:	Auto/Manual
Noise Reduction:	3D DNR
Motion Detection:	Off/On
Region of Interest :	Off/On
Electronic Image Stabilization :	Support
Smart IR:	Support
Defog:	Support
Digital Zoom:	N/A
Flip:	0°/90°/180°/270°

Camera

AUDIO

Compression:	G.711a / G.711Mu / AAC / G.726 / G.723
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NETWORK

Ethernet:	RJ-45 (10/100Base-T)
Protocol:	HTTP, HTTPs, TCP, ARP, RTSP, RTP, UDP, SMTP, FTP, DHCP, DNS, PPPoE, IPv4/v6, QoS, UPnP, NTP, Bonjour, 802.1x, Multicast, ICMP, IGMP, SNMP
Interoperability:	ONVIF, PSIA, CGI, Milestone, Genetec, P2P
Streaming Method:	Unicast / Multicast
Max User Access :	20 Users
Edge Storage :	NAS, FTP, Micro SD car 256GB
Web Viewer:	IE, Chrome, Firefox, Safari
Management Software :	Smart PSS, DSS, P2P
Smart Phone:	IOS, Android

INTERFACE

Video Interface :	N/A
Audio Interface :	1 In / 1 Out
RS485:	N/A
Alarm :	2 In / 1 Out

ELECTRICAL

Power Supply:	DC12V, PoE (802.3af)
Power Consumption:	<10.9W

ENVIRONMENTAL

Operating System :	-30°C~+60°C, Less than 95%RH
Storage Conditions:	-30°C~+60°C, Less than 95%RH
Ingress Protection:	IP67
Vandal Resistance :	IK10

CONSTRUCTION

Casing :	Metal
Dimensions :	273.2 x 95 x 95mm
Net Weight :	1.11kg
Gross Weight :	1.51kg

PFS3010-8ET-96

Model Number:	PFS3010-8ET-96
Ethernet Port:	8 x 10/100 Mbps PoE Ports, 2 x 1000 Mbps
PoE Power Consumption:	Port 1 <60W, Ports 2 - 8, <30W
PoE Protocol:	IEEE802.3af, IEEE802.3at, Hi-PoE
PoE Budget:	96W
Switching Capacity:	36Gbps
Packet Forwarding Rate:	14.88 Mpps
Packet Buffer Memory:	4Mb
Application Humidity:	10%-90%
Power :	DC48-57V Power Adapter
Lightning Protection:	Common Mode 2KV, Differential Mode 500V
Working Temperature:	-10°C~+55°
Weight:	0.49kg
Dimensions:	190 x 100 x 30mm

NVR

JGM-284K

Model Number:	JGM-284K
Screen Size:	28
Backlight Type:	LED
Aspect Ratio:	16:9
Brightness:	280cd/m ²
Contrast Ratio:	3000:1
Maximum Resolution:	3840 x 2160
Refresh Rate :	60Hz
Response Time :	5ms
Viewing Angle :	170°/160°
Colour Support:	8 Bit - 16.7 Million Colours
Connectors:	HDMI x 2, DP x 2
Power Consumption:	40W
Power Supply :	DC12V 5A
Audio :	2x5W
VESA Pattern:	100 x 100
Accessories :	User manual, Power Supply
Monitor Dimensions Incl Stand :	663 x 462 x 227mm
Net weight:	6kg
Gross Weight:	7.2kg
Storage Temp:	-20°C - 70°C
Operating Temp:	0°C - 50°C
Operating Humidity:	10 - 95%

Intel NUC Kit NUC8i5BEH

Edition:	Intel NUC Kit NUC8i5BEH
Form Factor:	Intel NUC (Tall)
CPU Type:	Intel Core i5
CPU Model:	8259U
Architecture:	Coffee Lake
Core:	Quad Core
No. of Threads:	8
Clock Speed:	2.3 GHz
Burst Frequency:	3.8 GHz
CPU Cache:	6MB
CPU Cooler:	Air Cooled
Max. TDP:	28 W
CPU Socket:	Integrated CPU
Chipset:	Intel SoC
Motherboard Form Factor:	UCFF (4" x 4")
Motherboard Model:	NUC8i5BEB
Memory Type:	DDR4 SO-DIMM
Memory Channels:	Dual (2)
Memory Type (ECC):	Non-ECC
Memory Type (R/U):	UDIMM (Unbuffered)
Memory Speed (Mhz):	DDR4 - 2400
Max. Memory Capacity:	32GB (2x16GB)
Processor/Motherboard Chip:	Graphics Intel Iris Plus Graphics 655
GPU Cores/Streams/Execution Units:	48
GPU Tensor Cores:	N/A
Base GPU Speed:	300 MHz
Max. GPU Speed:	1050 MHz
GPU Memory Size:	128MB
GPU Memory Type:	eDRAM
Max. GPU Resolution:	4096x2304 (4K) @60Hz
Graphics Interface:	On-board
Expansion Slots:	1 x M.2, 22-30 (Occupied by WiFi Card) 1 x M.2, 22-42/80, PCIe Gen3/SATA
SATA:	SATA3 / M.2

Monitor

Model Number:	JGM-284K
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Backlight Type:	LED
Aspect Ratio:	16:9
Brightness:	280cd/m ²
Contrast Ratio:	3000:1
Maximum Resolution:	3840 x 2160
Refresh Rate :	60Hz
Response Time :	5ms
Viewing Angle :	170°/160°
Colour Support:	8 Bit - 16.7 Million Colours
Connectors:	HDMI x 2, DP x 2
Power Consumption:	40W
Power Supply :	DC12V 5A
Audio :	2x5W
VESA Pattern:	100 x 100
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Monitor Dimensions Incl Stand :	663 x 462 x 227mm
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Gross Weight:	7.2kg
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PC Kit

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Max. Memory Capacity:	32GB (2x16GB)
Processor/Motherboard Chip:	Graphics Intel Iris Plus Graphics 655
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GPU Tensor Cores:	N/A
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Expansion Slots:	1 x M.2, 22-30 (Occupied by WiFi Card) 1 x M.2, 22-42/80, PCIe Gen3/SATA
SATA:	SATA3 / M.2

