PixelNet®

Video Wall Processor



The PixelNet Series is ideal for small to unlimited sized installations such as operational control rooms, military and government command centers, surveillance rooms & utility and energy centers. Mission critical operations requires the best in class hardware and software that always deliver the right solution.

- 100% redundant AV over IP system
- Integrated KVM
- · Unlimited video walls and displays
- Unlimited 4K inputs
- Unlimited IP Streams
- Web & VNC support
- Visualize and control video walls that span multiple rooms
- Native support for 4K video
- Uncompressed Video Output





Native support for 4K video, fiber network. Audio for a scalable and ultra HD video distribution system.

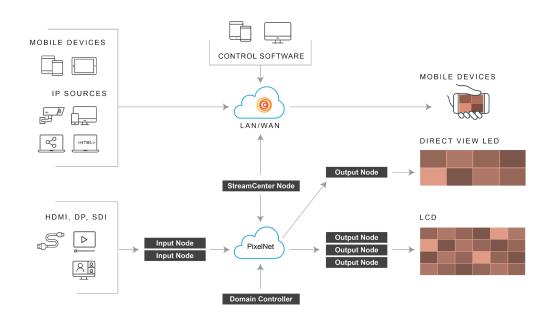


Supports an unlimited number of inputs and displays in multiple locations.



Enable real-time HD or 4K information display to a virtually unlimited number of screens at sites spanning a building, campus, or a continent.

Architecture of a PixelNet Installation



PixelNet Specifications

Power Consumption	PIXELNET NODES	
PIXELNET DOMAIN CONTROLLER	Form Factor	1RU
Control Platform	Power Consumption	400 W
Intel Xeon Processor Intel Xeon Processor E5-1620 v4 256 SSD Memory 256 SSD Memory 16 GB RAM Input Devices 4x USB 3.0 ports, 8x USB 2.0 ports Windows 10 TCP (Backwards compatible with PixelNet Gen 1) Video Output Interface VCA	PIXELNET DOMAIN CONTROLLER	
## Drive ## 256 SSD ## 16 GB RAM ## 16 Input Devices ## 24 USB 3.0 ports, 8x USB 2.0 ports ## 256 Uports ## 256 Up	Control Platform	Canvas
Input Devices	CPU Processor	Intel Xeon Processor E5-1620 v4
Input Devices	Drive	256 SSD
Operating System Windows 10 API TCP (Backwards compatible with PixelNet Gen 1) Video Output Interface VGA Output Resolutions 1920 x 1080 INPUT NODES Audio Yes KVM Up to 4 computers with K/M Link FHD HDMI Node 8x @ 1920 x 1200 @ 60Hz UHD DMI Node 4x @ 3840 x 2160 @ 30Hz UHD DP Node 2x or 4x 3840 x 2160 @ 60Hz 3GS SDI Node 38 @ 1920 x 1200 @ 60Hz 12G SDI Node 4x @ 3840 x 2160 @ 60Hz OUTPUT NODES Audio Yes KVM Workstations, Web Browser and VNC Video Output Interface DisplayPort FHD Output Node 6x 1920 x 1080x80 or 3x 1080P30 UHD Output Node 4x 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz STREAMCENTER NODE 4x 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz Audio Yes Network Interface 2x 1G RJ45 Streaming Channels 16x 1920 x	Memory	16 GB RAM
API TCP (Backwards compatible with PixelNet Gen 1) Video Output Interface	Input Devices	4x USB 3.0 ports, 8x USB 2.0 ports
Video Output Resolutions 1920 x 1080 INPUT NODES Audio Yes KVM Up to 4 computers with K/M Link FHD HDMI Node 4x @ 3840 x 2160 @ 60Hz UHD HDMI Node 4x @ 3840 x 2160 @ 60Hz UHD DP Node 2x or 4x 3840 x 2160 @ 60Hz 3G SDI Node 8x @ 1920 x 1200 @ 60Hz 12G SDI Node 4x @ 3840 x 2160 @ 60Hz OUTPUT NODES Audio Yes KVM Workstations, Web Browser and VNC Video Output Interface DisplayPort FHD Output Node 6x 1920 x 1080x60 or 3x 1080P30 UHD Output Node 4x 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz STREAMCENTER NODE Audio Yes Network Interface 2x 1G R,J45 Streaming Video Codecs H.264, H.265, MPEG4 Streaming Channels 16x 1920 x 1080 @ 30Hz, 2x 3840 x 2160 @ 60Hz Web Browser 16x Web Browsers (with KVM) VNC 16x Web Browsers (with KVM) VNC 16x Web Browsers (with KVM) VNC 16x VNC (with KVM)	Operating System	Windows 10
Output Resolutions 1920 x 1080 INPUT NODES Audio Yes KVM Up to 4 computers with K/M Link FHD HDMI Node 4x @ 3840 x 2160 @ 60Hz UHD DMI Node 4x @ 3840 x 2160 @ 60Hz UHD DP Node 2x or 4x 3840 x 2160 @ 60Hz 3G SDI Node 3x @ 1920 x 1200 @ 60Hz 12G SDI Node 4x @ 3840 x 2160 @ 60Hz OUTPUT NODES Audio Yes KVM Workstations, Web Browser and VNC Video Output Interface DisplayPort FHD Output Node 6x 1920 x 1080x60 or 3x 1080P30 UHD Output Node 4x 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz STREAMCENTER NODE 3x 1G RJ45 Audio Yes Network Interface 2x 1G RJ45 Streaming Video Codecs H.264, H.265, MPEG4 Streaming Channels 16x 1920 x 1080 @ 30Hz, 2x 3840 x 2160 @ 60Hz, 4x 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz Web Browser 16x Web Browsers (with KVM) VNC 16x VNC (with KVM) SWITCHES 10x 0x 0	API	TCP (Backwards compatible with PixelNet Gen 1)
New Yes	Video Output Interface	VGA
Audio KVM Up to 4 computers with K/M Link FHD HDMI Node 8x @ 1920 x 1200 @ 60Hz UHD HDMI Node 4x @ 3840 x 2160 @ 30Hz UHD DP Node 3G SDI Node 8x @ 1920 x 1200 @ 60Hz 3G SDI Node 8x @ 1920 x 1200 @ 60Hz 4x @ 3840 x 2160 @ 60Hz 3G SDI Node 4x @ 3840 x 2160 @ 60Hz 4x @ 3840 x 2160 @ 60Hz OUTPUT NODES Audio Yes KVM Workstations, Web Browser and VNC Video Output Interface FHD Output Node 6x 1920 x 1080x60 or 3x 1080P30 4x 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz STREAMCENTER NODE Audio Yes Network Interface 2x 1G RJ45 Streaming Video Codecs H.264, H.265, MPEG4 Streaming Video Codecs H.264, H.265, MPEG4 16x 1920 x 1080 @ 30Hz, 2x 3840 x 2160 @ 60Hz, 4x 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz 4x 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz, 4x 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz Streaming Channels 16x 1920 x 1080 @ 30Hz, 2x 3840 x 2160 @ 60Hz, 4x 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz 16x Web Browser (with KVM) VNC 16x VNC (with KVM) SWITCHES Uplink 24 or 48 10G SFP+ ports Backbone CERTIFICATIONS	Output Resolutions	1920 x 1080
Up to 4 computers with K/M Link	INPUT NODES	
### FHD HDMI Node ### Bx @ 1920 x 1200 @ 60Hz ### Bx @ 1920 x 1200 @ 60Hz ### Bx @ 3840 x 2160 @ 30Hz ### By	Audio	Yes
UHD HDMI Node 4x @ 3840 x 2160 @ 30Hz UHD DP Node 2x or 4x 3840 x 2160 @ 60Hz 3G SDI Node 8x @ 1920 x 1200 @ 60Hz 12G SDI Node 4x @ 3840 x 2160 @ 60Hz OUTPUT NODES Audio Yes KVM Workstations, Web Browser and VNC Video Output Interface DisplayPort FHD Output Node 6x 1920 x 1080x60 or 3x 1080P30 UHD Output Node 4x 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz STREAMCENTER NODE Audio Yes Network Interface 2x 1G RJ45 Streaming Video Codecs H.264, H.265, MPEG4 Streaming Channels 16x 1920 x 1080 @ 30Hz, 8x 1920 x 1080 @ 60Hz, 4x 3840 x 2160 @ 60Hz Web Browser 16x Web Browsers (with KVM) VNC 16x VNC (with KVM) SWITCHES Uplink 24 or 48 10G SFP+ ports Backbone 32 100G QSFP28 ports	KVM	Up to 4 computers with K/M Link
## DP Node 2x or 4x 3840 x 2160 @ 60Hz ## 3G SDI Node 8x @ 1920 x 1200 @ 60Hz ## 3B40 x 2160 @ 60Hz ## 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz ## 3840 x 2160 @ 60Hz or 1x 3840 x 2160 @ 60Hz ## 3840 x 2160 @ 60Hz or 1x 3840 x 2160 @ 60Hz ## 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz ## 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz ## 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz ## 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz ## 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz ## 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz ## 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz ## 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz ## 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz ## 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz ## 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz ## 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz ## 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz ## 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz ## 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz ## 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz ## 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz ## 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz ## 3840 x 2160 @ 30Hz, 3x 3840 x 2160 @ 60Hz ## 3840 x 2160 @ 30Hz, 4x 3840 x 2160 @ 60Hz ## 3840 x 2160 @ 30Hz, 4x 3840 x 2160 @ 60Hz ## 3840 x 2160 @ 30Hz, 4x 3840 x 2160 @ 60Hz ## 3840 x 2160 @ 30Hz, 4x 3840 x 2160 @ 60Hz ## 3840 x 2160 @ 30Hz, 4x 3840 x 216	FHD HDMI Node	8x @ 1920 x 1200 @ 60Hz
3G SDI Node 8x @ 1920 x 1200 @ 60Hz 12G SDI Node 4x @ 3840 x 2160 @ 60Hz OUTPUT NODES Audio Yes KVM Workstations, Web Browser and VNC Video Output Interface DisplayPort FHD Output Node 6x 1920 x 1080x60 or 3x 1080P30 UHD Output Node 4x 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz STREAMCENTER NODE Audio Yes Network Interface 2x 1G RJ45 Streaming Video Codecs H.264, H.265, MPEG4 Streaming Channels 16x 1920 x 1080 @ 30Hz, 8x 1920 x 1080 @ 60Hz, 4x 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz Web Browser 16x Web Browsers (with KVM) VNC 16x Web Browsers (with KVM) SWITCHES Uplink Backbone 32 100G QSFP28 ports CERTIFICATIONS	UHD HDMI Node	4x @ 3840 x 2160 @ 30Hz
12G SDI Node	UHD DP Node	2x or 4x 3840 x 2160 @ 60Hz
OUTPUT NODES Audio Yes KVM Workstations, Web Browser and VNC Video Output Interface DisplayPort FHD Output Node 6x 1920 x 1080x60 or 3x 1080P30 UHD Output Node 4x 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz STREAMCENTER NODE Audio Yes Network Interface 2x 1G RJ45 Streaming Video Codecs H.264, H.265, MPEG4 Streaming Channels 16x 1920 x 1080 @ 30Hz, 8x 1920 x 1080 @ 60Hz, 4x 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz Web Browser 16x Web Browsers (with KVM) VNC 16x VNC (with KVM) SWITCHES Uplink 24 or 48 10G SFP+ ports Backbone 32 100G QSFP28 ports	3G SDI Node	8x @ 1920 x 1200 @ 60Hz
Audio Yes KVM Workstations, Web Browser and VNC Video Output Interface DisplayPort FHD Output Node 6x 1920 x 1080x60 or 3x 1080P30 UHD Output Node 4x 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz STREAMCENTER NODE Audio Yes Network Interface 2x 1G RJ45 Streaming Video Codecs H.264, H.265, MPEG4 Streaming Channels 16x 1920 x 1080 @ 30Hz, 8x 1920 x 1080 @ 60Hz, 4x 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz Web Browser 16x Web Browsers (with KVM) VNC 16x VNC (with KVM) SWITCHES Uplink 24 or 48 10G SFP+ ports Backbone 32 100G QSFP28 ports	12G SDI Node	4x @ 3840 x 2160 @ 60Hz
KVM Workstations, Web Browser and VNC Video Output Interface DisplayPort FHD Output Node 6x 1920 x 1080x60 or 3x 1080P30 UHD Output Node 4x 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz STREAMCENTER NODE Audio Yes Network Interface 2x 1G RJ45 Streaming Video Codecs H.264, H.265, MPEG4 Streaming Channels 16x 1920 x 1080 @ 30Hz, 8x 1920 x 1080 @ 60Hz, 4x 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz Web Browser 16x Web Browsers (with KVM) VNC 16x VNC (with KVM) SWITCHES Uplink 24 or 48 10G SFP+ ports Backbone 32 100G QSFP28 ports CERTIFICATIONS	OUTPUT NODES	
Video Output Interface DisplayPort FHD Output Node 6x 1920 x 1080x60 or 3x 1080P30 UHD Output Node 4x 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz STREAMCENTER NODE Audio Yes Network Interface 2x 1G RJ45 Streaming Video Codecs H.264, H.265, MPEG4 Streaming Channels 16x 1920 x 1080 @ 30Hz, 8x 1920 x 1080 @ 60Hz, 4x 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz Web Browser 16x Web Browsers (with KVM) VNC 16x VNC (with KVM) SWITCHES Uplink 24 or 48 10G SFP+ ports Backbone 32 100G QSFP28 ports	Audio	Yes
### FHD Output Node ### 0	KVM	Workstations, Web Browser and VNC
UHD Output Node 4x 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz STREAMCENTER NODE Audio Yes Network Interface 2x 1G RJ45 Streaming Video Codecs H.264, H.265, MPEG4 Streaming Channels 16x 1920 x 1080 @ 30Hz, 8x 1920 x 1080 @ 60Hz, 4x 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz Web Browser 16x Web Browsers (with KVM) VNC 16x VNC (with KVM) SWITCHES 24 or 48 10G SFP+ ports Backbone 32 100G QSFP28 ports CERTIFICATIONS	Video Output Interface	DisplayPort
## STREAMCENTER NODE Audio	FHD Output Node	6x 1920 x 1080x60 or 3x 1080P30
Audio Yes Network Interface 2x 1G RJ45 Streaming Video Codecs H.264, H.265, MPEG4 Streaming Channels 16x 1920 x 1080 @ 30Hz, 8x 1920 x 1080 @ 60Hz, 4x 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz Web Browser 16x Web Browsers (with KVM) VNC 16x VNC (with KVM) SWITCHES 24 or 48 10G SFP+ ports Backbone 32 100G QSFP28 ports	UHD Output Node	
Network Interface 2x 1G RJ45 Streaming Video Codecs H.264, H.265, MPEG4 Streaming Channels 16x 1920 x 1080 @ 30Hz, 8x 1920 x 1080 @ 60Hz, 4x 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz Web Browser 16x Web Browsers (with KVM) VNC 16x VNC (with KVM) SWITCHES 24 or 48 10G SFP+ ports Backbone 32 100G QSFP28 ports CERTIFICATIONS	STREAMCENTER NODE	
Streaming Video Codecs H.264, H.265, MPEG4 Streaming Channels 16x 1920 x 1080 @ 30Hz, 8x 1920 x 1080 @ 60Hz, 4x 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz Web Browser 16x Web Browsers (with KVM) VNC 16x VNC (with KVM) SWITCHES 24 or 48 10G SFP+ ports Backbone 32 100G QSFP28 ports CERTIFICATIONS	Audio	Yes
Streaming Channels	Network Interface	2x 1G RJ45
Streaming Channels 4x 3840 x 2160 @ 30Hz, 2x 3840 x 2160 @ 60Hz Web Browser 16x Web Browsers (with KVM) VNC 16x VNC (with KVM) SWITCHES 24 or 48 10G SFP+ ports Backbone 32 100G QSFP28 ports CERTIFICATIONS	Streaming Video Codecs	H.264, H.265, MPEG4
VNC 16x VNC (with KVM) SWITCHES Uplink 24 or 48 10G SFP+ ports Backbone 32 100G QSFP28 ports CERTIFICATIONS	Streaming Channels	
SWITCHES Uplink 24 or 48 10G SFP+ ports Backbone 32 100G QSFP28 ports CERTIFICATIONS	Web Browser	16x Web Browsers (with KVM)
Uplink 24 or 48 10G SFP+ ports Backbone 32 100G QSFP28 ports CERTIFICATIONS	VNC	16x VNC (with KVM)
Backbone 32 100G QSFP28 ports CERTIFICATIONS	SWITCHES	
CERTIFICATIONS	Uplink	24 or 48 10G SFP+ ports
	Backbone	32 100G QSFP28 ports
Regulatory Certifications UL, TAA, CE, FCC	CERTIFICATIONS	
	Regulatory Certifications	UL, TAA, CE, FCC





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