



Video Wall Image Processing Solution

Planar's Clarity® Visual Control Station™ (VCS™) is a flexible and easy-to-use video wall processor designed to capture, display and manage multiple sources on a video wall. It supports a wide variety of visual inputs including analog, digital, and IP network-based video and computer sources.

The Clarity VCS video wall processor is fully configurable to drive video walls of up to 64 high resolution displays. Using the Windows® 7-based VCS™ Control Software v5, visual sources can be positioned and resized individually anywhere on the video wall or can instantly revert to one of many preset layouts. The Clarity VCS video wall processor is designed for easy set-up, easy use, and easy maintenance.

All-in-one complete hardware and software solution

HARDWARE COMPONENTS

The Clarity VCS video wall processor utilizes a 4U rack-mountable chassis with high performance PCI Express backplane. With its choice of powerful server-class CPUs, RAID 0 1 hard drives and redundant power supplies, Clarity VCS is both powerful and reliable. Clarity VCS is preloaded with 64-bit Windows® 7, ensuring compatibility with the latest user applications. By adding one or more expansion chassis, Clarity VCS can easily support an increased number of high resolution displays and sources. Clarity VCS includes VCS Graphics DP4 output cards, each with the ability to drive four displays at up to 2560 x 1600 resolution or two displays at up to 3840 x 2160 resolution.



Front View



Rear View

Clarity VCS features server-class CPU, PCI Express switched fabric, RAID hard drives, redundant power supplies and modular expansion.

KEY SYSTEM FEATURES

- Network-centric collaboration tools
- Extensive control of the software's user access permissions with the integrated user rights management system
- Expanded connection options including 4K Display Port and IP Capture
- Powerful and user-friendly graphical user interface
- Scalable from small to large installations
- Clarity VCS Control Software v5 available in Standard and Enterprise Editions

BROAD RANGE OF SOURCE CAPTURE

Clarity VCS offers a selection of cards to capture and display a wide range of visual sources. High resolution video sources can be connected using Display Port, DVI, HDMI, component HD, analog RGB, Dual Link DVI, SDI (SD, HD, 3G), composite, S-Video and IP Sources. Collaboration tools allow users to share their individual screens on the video wall. Additionally, Windows® applications can be installed and used as content sources on Clarity VCS. Through different configurations, captured sources and local files can be displayed simultaneously to provide the flexibility and freedom of choice that is unachievable with many video wall processors.

CONNECTIVITY

INPUTS

HD: DVI / HDMI (with HDCP) / RGB
Display Port
SD: Composite, S-Video
IP Capture (H.264, MPEG4)
Dual Link DVI
SDI (SD, HD or 3G)
HDCP-compliant HD



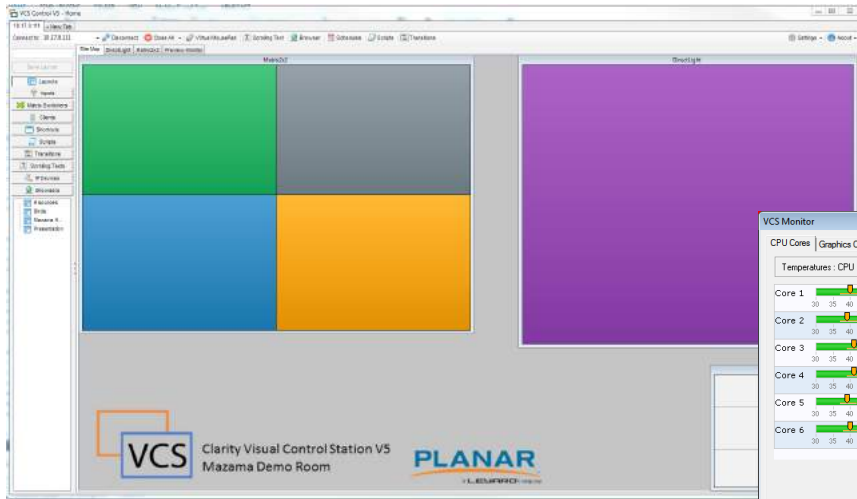
OUTPUT

DVI, HDMI, Display Port

CONTROL AND MONITORING SOFTWARE

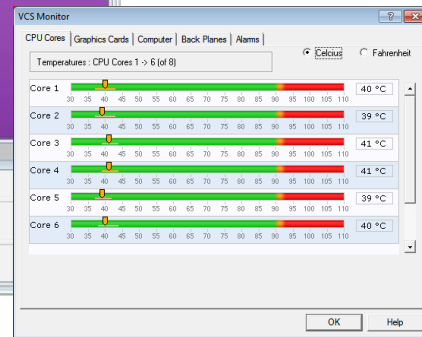
VCS Control Software v5 provides a visual environment to control the entire video wall layout. With VCS Control Software, windows on the video wall can be opened, positioned and sized. Multiple layouts can be saved, recalled and sources can be rotated with scheduling features. The VCS Control Software interface dynamically adjusts to display whatever type of source is connected to the processor. The software's interface complies with the familiar Windows® design standards, making it intuitive and easy to learn.

The VCS Control Software v5 provides powerful collaboration tools including an integrated user rights management system and screen sharing capabilities. The user rights management system has 16 different access permissions to allow customized access in the VCS Control Software. Customized access rights may include access to content, scheduler, or specific sections on the screen. The software can support its own directory or can sync with the Active Directory.



VCS Control

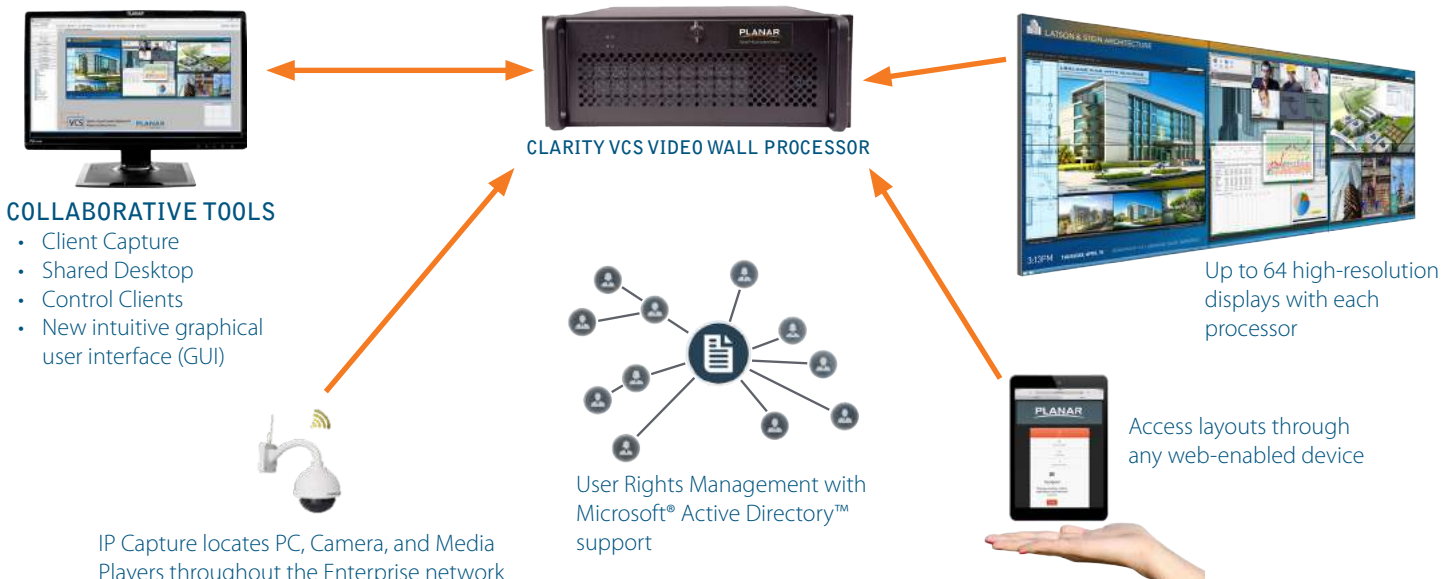
Control and monitoring software comes standard with every Clarity VCS video wall processor



VCS Monitor

FLEXIBLE OPERATION

VCS Control Software v5 runs directly on the Clarity VCS video wall processor and can be managed on any local or network connected desktop using Windows® 7 OS and linked to a Clarity VCS video wall processor. Clarity VCS can also be controlled by any networked device with web browsing capabilities through the software's web interface control panel. VCS Control Software supports HTTP requests and TCP/IP commands.



STANDARD CONFIGURATIONS

Clarity VCS Models	VCS5-4DP 4	VCS5-8DP 4	VCS5-8DP 8	VCS5-12DP 8	VCS5-12DP 12	VCS5-16DP 8	VCS5-16DP 12	Custom
Outputs (Display Port)	4	8	8	12	12	16	16	Up to 64 outputs - depending on input configuration
HDCP-Compliant Inputs (DVI / RGB / HDMI)	4	4	8	8	12	8	12	

CLARITY VCS SPECIFICATIONS

Clarity VCS Chassis	
Form factor	19" 4U industrial PC chassis
Processor and Memory Options	Intel® Core™ i7, 8GB DDR3 Intel® Core™ i7, 16 GB DDR3 Intel® Dual Xeon, 32GB DDR3
Operating System	Windows® 7 64 bit
Backplane	3rd generation PCIe switched fabric
Expansion Slots	1 8 lane slot; 8 4 lane slots
Hard Disk Drive	2 x 750GB removable SATA hard drives with RAID 1
Removable Storage	1 x DVD-RW drive
VGA Port	Integrated DVI output for control screen
Networking	2 x 10/100/1000 Ethernet
USB Ports	5 external ports: USB 2.0 Front; 2 US 3.0 Rear
Serial Ports	1 via USB to Serial adapter
Power Supply	2 x 600 Watt, Redundant
Power Consumption	227 Watt (typical)
Dimensions (W x H x D)	500 mm x 175 mm x 482 mm
Weight	30-32 Kg (shipping)
Expansion Chassis	
Form Factor	19" 4U industrial PC chassis
Dimensions (W x H x D)	500 mm x 175 mm x 482 mm
Expansion Slots	8 x PCI Express; 4 lane
Graphics Output	
Max Output Resolution Per Card	4x Display Port 2560x1600 @ 60Hz max resolution each or 2x Display Port 3840 x 2160 @ 30Hz max resolution each
GPU	600 MHz GPU with 512 MB GDDR5 at 800MHz
DP Adapt	Active Display Port to DVI converter
DP Extend	Extends Display Port runs to 30m
Software	
Operating System	Windows® 7 64 bit
Wall Control Options	VCS Control Software V5 Standard VCS Control Software V5 Enterprise
Language Support	English, French, German, Italian, Portuguese, Russian, Spanish
Controller Monitoring	Clarity VCS Monitor
Environmental & Regulatory	
Operating Temperature	0° to +35° C
Storage Temperature	-20° to +70° C
Relative Humidity	5% to 90% non-condensing
Product Approvals	FCC-Class A, RoHS, IEC60950, CE low voltage compliance

CLARITY VCS SPECIFICATIONS (CONTINUED)

HD: DVI / HDMI (with HDCP)/ RGB Capture	
Max Component HD Capture	1080p at 60 frames per second
Max DVI Capture	1920 x 1200
Max Analog RGB Capture	2048 x 1536
Max Data Transfer	650MB/sec
Connectors	DVI-H type, DVI/HDMI adapter, DVI/Component adapter
HDCP Compliance	via HDMI 1.3 up to 225 MHz
Display Port (DP) Capture	
Inputs	2x Independent Display Port 1.2 capture channels
Max Capture Resolution	4096 x 2160 @ 60Hz
Connectors	Dual Locking Display Port 1.2
Internet Protocol (IP) Capture	
Inputs	2 x 10/100/1000 Ethernet
Codec Support	H.264 (Mpeg4 Part 10 AVC) Mpeg 4 Part 2, WMV 7 Mpeg 2
Max Capture Resolution	3 Displays 4096 x 2160 @ 30 FPS 6 Displays 1920 x 1080 @ 60 FPS 12 Displays 1920 x 1080 @ 30 FPS 50+ Displays 704 x 480 (D1) @ 30 FPS
Dual Link DVI Capture	
Video Formats	DVI Dual Link, DVI Single Link. Autodetected
Max DL DVI Capture	330MHz. 3840 x 2160 @ 30Hz
Max Data Transfer	650MB/sec
Connectors	Dual Link DVI-D type
SDI Capture	
SDI Capture formats	SD-SDI (480i/576i) HD-SDI (up to 1080i) 3G-SDI (up to 1080p @ 60Hz)
Max SDI Bit Rate	3Gb/sec
Max Data Transfer	650MB/sec
Connectors	SDI BNC
SD Video Capture	
Inputs	Composite and S-video
Video Formats	PAL, NTSC and SECAM
Max Capture Resolution	720 x 576
Max Data Transfer	480 MB/s
Options	
Electronics	Capture cards, graphics cards, expansion chasses, SBC and RAM upgrades
Accessories	Signal converters and extenders, cables, monitors
Service Plans	Standard two years, extendable up to five years

CUSTOM CONFIGURATIONS

With Clarity VCS Custom Configurations, nearly any combination of inputs and outputs can be integrated in a system. Contact Planar for a custom configuration quote.



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