Digicom® HC5000

Hardware-based, easy-to-operate for separated video walls

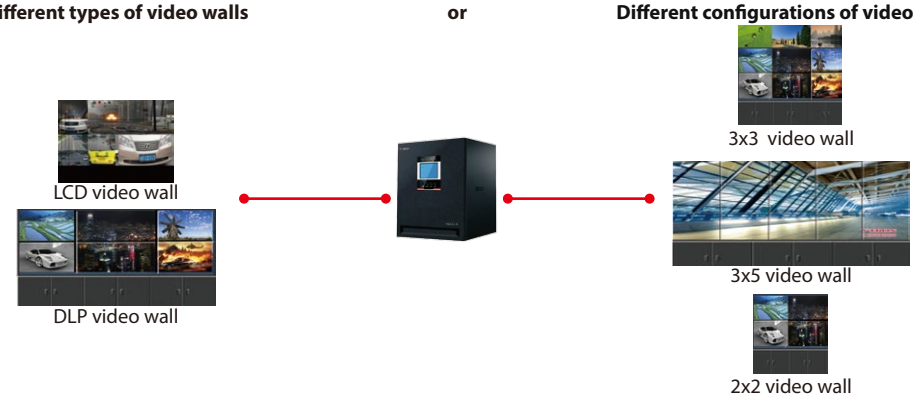
VTRON's Digicom® HC5000 is a hardware-based video wall processor series integrated with RIET technology to achieve stable and high-performance image processing. In additional, separated video walls can be driven by one set of Digicom® HC5000[1] simultaneously. Digicom® HC5000 is ideal to fulfil the demanding 24/7 visualisation needs in control and command centres, data centres and operations monitoring centres.

Embedded with RIET technology

Embedded with the Real-time Intelligent Exchange Transmission (RIET) technology, each signal is allocated to a dedicated high-speed data channel to achieve real-time transmission.

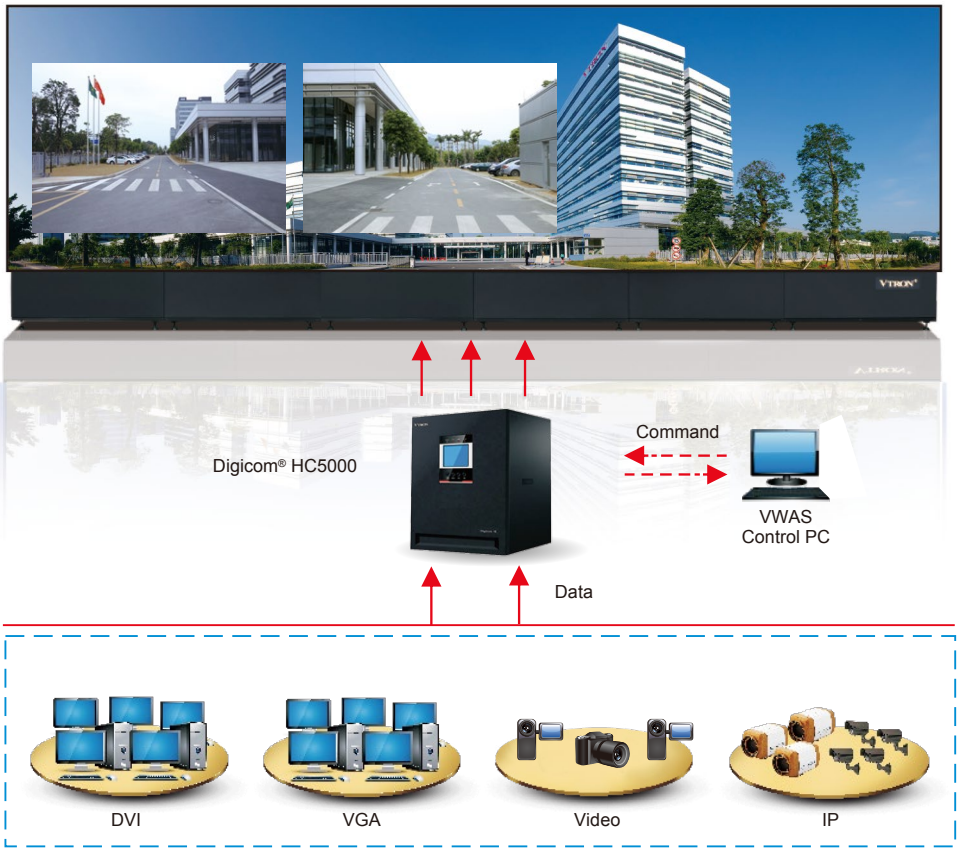
Powerful processing performance

- Single chassis of Digicom HC5000 can drive up to 64 display units.
- Handles multiple resolutions from multiple sources including DVI, VGA, video, HDMI, DP, SDI simultaneously in real-time.
- Various combinations of input sources can be resized, overlapped and placed anywhere on the video wall.
- Multiple types of video walls or different configurations of video walls can be driven by one set of Digicom® HC5000[1] simultaneously, which greatly saves system cost and makes the system simple.



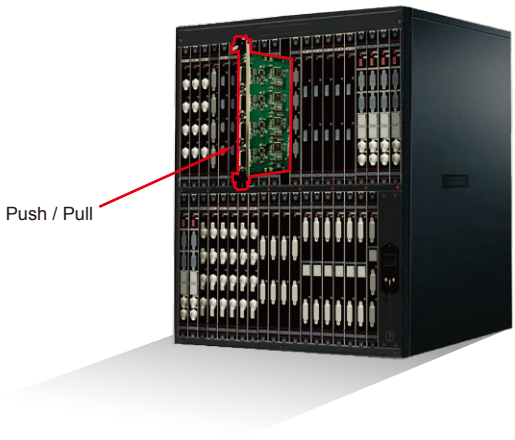
Super high-resolution background

Digicom® HC5000 supports to run a large static background in super high-resolution across the entire video wall that the saved graphics such as map and modelled building image can be recalled from the built-in Web control interface.



Flexible modular design for easy maintenance and expansion

Digicom® HC5000 is easy to maintain and expand because of its advanced modular architecture that all signal I/O boards and fans are hot swappable. The signal I/O boards are supported with instant image recovery after the modules are hot swapped. This feature allows the new modules to be replaced without disassembling the processor case or rebooting the video wall processor. Also, system expansion can be carried out by inserting additional signal I/O boards while the processor is running.



Intelligent monitoring system

Digicom® HC5000 is designed with intelligent temperature sensors which monitor air inlet/ outlet and core components in real-time. Also, you can check status information displayed on its front panel.

VTRON's software

VTRON Video Wall Management System (VWAS/VCMS) provides:

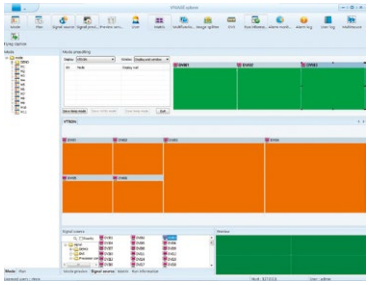
Window operation management
- Open/close/resize/move the signal windows
- Window properties

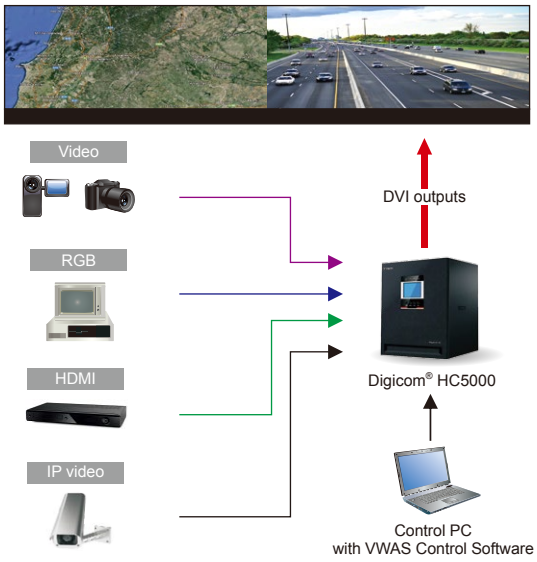
System information management
- Log management
- Operating information
- Warning information

Hardware device management
- VTRON video wall and processor management
- Matrix switch management
- Multi-function device management
- Digital signal server management
- Signal source management

Layout management
- Create/save/delete display layout
- Launch display layout
- Scheduling of layouts

Allowed third party device controls
- Launch display layout
- On/off VTRON video wall





Technical Specifications

Digicom® HC5000 (Single chassis)	
Number of inputs	Up to 72 channels of 1080P HDMI / DVI / VGA / SDI; or Up to 36 channels of DP / 4K HDMI; or Up to 144 channels of 1080P IP video; or Up to 288 channels of CVBS
VGA input board (optional)	4 channels per board Up to1920 x 1200 @ 60Hz Signal input connector: VGA
DVI input board (optional)	4 channels per board Up to 1920 x 1200 @ 60Hz Signal input connector: DVI
HDMI input board (optional)	4 channels per board Up to 1920 x 1080 @ 60Hz Support HDMI 1.3, HDCP 1.4 Signal input connector: HDMI
HDMI (4K) input board (optional)	2 channels per board Up to 3840 x 2160 @ 30Hz Support HDMI 1.4, HDCP 1.4 Signal input connector: HDMI
DP input board (optional)	2 channels per board Up to 3840 x 2400 @ 30Hz Signal input connector: DP
SDI input board (optional)	4 channels per board Support SD/ HD/ 3G SDI Signal input connector: BNC
Video input board (optional)	4 channels per board CVBS input format: NTSC, PAL Signal input connector: BNC
	16 channels per board CVBS input format: NTSC, PAL Signal input connector: BNC
IP decoding board[2] (optional)	Up to 8 channels of 1920 x 1080 @ 30Hz per board Support resolution: 1080P, 720P, D1 Support standard H.264 and standard RTSP Signal input connector: RJ45
Number of DVI output (optional)	Up to 64 x DVI-D Up to 1920 x 1080 @ 60Hz
Signal preview (optional)	Preview: DVI + IP Output resolution: 1920 x 1080 @ 60Hz (DVI), 1920 x 1080 @ 30Hz (IP) Output connector: DVI-D, RJ45
Live view (optional)	Live view: DVI + IP Output resolution: 1920 x 1080 @ 60Hz (DVI), 1920 x 1080 @ 30Hz (IP) Output connector: DVI-D, RJ45
IP streaming board[3] (optional)	4 channels of 1920 x 1080 @ 30Hz per board Video coding: H.264, Protocol: RTSP Output connector: RJ45
Mutiple resolution DVI output board[3] (optional)	4 channels per board Output resolution: 1024 x 768 / 1400 x 1050 / 1366 x 768 / 1920 x 1080 Sharing video wall signals on extended displays (e.g. cubes, LCD panels or monitors). And its output resolution is configured to match the native resolution of each display. Output connecotr: DVI-D
Hot swappable module with instant image recovery	Signal board
System control	Dual RJ45 ports, 10 / 100Mbps self-adaptive Support configuration of network application, such as IP address, gateway, time server, etc
Intelligent management	Support alarm monitoring for temperature, fan, power supply, etc Support version review and online software upgrade
Cooling fan	Redundant hot swappable fan
Power supply	N + 1 hot redundant power supply AC 100V - 240V, 50 / 60Hz, 10-5A
Power consumption	≤ 800W
Operating environment	Temperature: 0°C - 40°C Relative humidity: 10% - 90% (non-condensing)
Dimensions (W x H x D)	439.4mm x 577.6mm x 589mm (excluding handle) 19" chassis, 12U high
Qualifications	CCC, CE, CB, RoHS
VTRON's software	Mandatory[4]: VWAS/ VCMS; Optional: VIS

Remarks: Specifications are subject to change without prior notice.

1. This feature depends on actual hardware configuration and application which need prior verification
2. Compatibility needs prior verification
3. These boards occupy the output slots
4. Depends on the type of display unit and actual application

VTRON

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