

TransForm ECU-300

High-resolution video wall controller



- Standalone video wall controller
- Can be easily extended to a full networked controller
- Drives up to the largest video walls with all outputs synchronized
- Support for screen resolutions up to 4K

TransForm ECU-300 is Barco's new generation of video wall controllers, engineered to perfectly master even the largest video walls. Optimally using the extreme bandwidth capacity of the PCI Express backbone, TransForm ECU-300 is capable of capturing and displaying high amounts of video sources and graphical application data on even the largest control room video walls. Running standard Windows OS, TransForm ECU-300 is a powerful platform for running applications directly on the video wall controller.

With Barco's DisplayControl software in combination with the networking and IP stream handling capabilities, the ECU-300 can either be operated standalone or be seamlessly integrated into a full networked environment.

Very large displays capabilities

Thanks to its modular and scalable PCIe based architecture, and high density output cards, TransForm ECU-300 is the solution for seamlessly and synchronously driving all sizes of video walls, including screens of up to 4K resolution.

High density for high number and types of sources

TransForm ECU-300 uses newest generation high density input cards supporting a high number of directly connected HDMI/DVI and Analog Video sources, in a particularly compact configuration. Additionally, streaming cards can be configured to allow for IP-decoding. The PCIe switch matrix backbone implemented in the TransForm ECU-300 base unit, combined with optional extenders, delivers double the bandwidth compared to a legacy PCIe based system. This allows more source windows, with absolute freedom of placement and zooming.

Standalone wall controller or fully networked

Whereas TransForm ECU-300 can start in many single wall installations as a Standalone Wall controller, it can be easily and fully integrated into a networked system. A networked TransForm ECU-300 behaves as output node and application node with additional local source capture capabilities. It is then an integral part of a collaborative system environment, managed by the DisplayControl software.

Ease of use and reliability

TransForm ECU-300 comes pre-installed with the advanced Barco DisplayControl software, which meets all demanding 24/7 control room visualization needs, supported by redundancy and hot-plug capability features for the critical components. Furthermore, the system is easy to install and easy to use. It comes pre-configured out of the box, assuring a simplified and hassle-free setup.

- Standalone video wall controller
- Can be easily extended to a full networked controller
- Drives up to the largest video walls with all outputs synchronized
- Support for screen resolutions up to 4K
- Large Windows Desktop support
- Large number of input channels
- HDCP support

Product specifications

TRANSFORM ECU-300

Processing

CPU	Intel 7th Gen Kaby Lake Core i7-7700 Processor
CPU frequency	TBD
Memory	32 GB RAM
Hard disk	2x 240 GB SSD or 2x 480 GB SSD RAID1
Network	2x 1 Gb/s LAN
System backplane	11-slot PCI Express 3.0 Switch Fabric backplane
System expansion	With up to 2 expansion chassis the system can be configured to support up to a total of 31 input and output cards

Outputs

Graphics card	4ch Graphic card - Max resolution: 4x 3840 x 2160@60Hz (HDMI 2.0) - Up to 24 4K or HD non-Barco displays - Up to 96 HD Barco displays
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Inputs

HDMI	2 HDMI Input Cards: 4ch HDMI 1.4 - Quad DVI-I Capture Channel: - RGB 5-5-5, 5-6-5 or 8-8-8 / YUV 4:2:2 / MONO 8 bits Video Capture - Maximum resolution: - Channel 1 & 3: 3840 x 2160 at 60Hz - Channel 2 & 4: 1920 X 1080 at 60Hz - HDMI audio capture with streaming from each DVI Channel 2ch HDMI 2.0 - Support HDMI 2.0 with HDCP 2.2 - Maximum resolution: - Dual 4K into 8K x 2K - RGB10(10-bit), 8-8-8(24/32), 5-6-5, 5-5-5, 8-bit mono - Y410(10-bit), 4:2:2, YUY2, UYVY, YVYU
DisplayPort	2ch Display Port 1.2 Input Card, supporting - Display Port signals up to 4096x2160@60 Hz - Up to 32 Display Port sources per system - HDCP (supported on Barco Display Control 10 only)
Analog video inputs	8ch Analog Video Input Card, supporting - PAL (B, D, G, H, I, M, N), PAL-60 - NTSC M, NTSC 4.43 - SECAM - Input formats Composite, S-Video
Streaming card	2 x RJ45 1Gbps Ethernet ports, support IPv4 and IPv6 - Streaming codes: - H.264(Mpeg4 Part 10 AVC) - VC-1 - MPEG2 Part2 - MJPEG - Decode density: 1 x 4096 x 2160 @60Hz 3 x 4096 x 2160 @30Hz 6 x 1920 x 1080 @60Hz 12 x 1920 x 1080 @30Hz

General specifications

Dimensions	19" Rackmount
Power supply	100-240VAC 800W+800W, Hot-plug Redundant
Temperature	Operating: 0°C to 35°C (32°F to 98°F) Non-operating: -20°C to 70°C (-4°F to 158°F)

Software

Management	Barco Display Control 10 (no Barco CMS)
OS	Windows 10 64bit IoT Enterprise LTSC

Certification

EMC	CE, FCC Part 15 Class A, CISPR 22, ICES-003
Safety	UL/CSA/EN/IEC 60950-1 CB report

Available models

Available models	R983930000: ECU-300 system Configuration customer defined
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