

# TransForm A18

High performance video wall controller for medium to large size video walls with strong video & RGB demands.



TransForm A is a flexible and powerful video wall controller. Barco's OmniScaler technology offers easy, built-in integration of digital and analog video and data sources and allows users to place windows of any size anywhere on the video wall, without any compromises on quality.

The high performance TransForm A18 system for medium to large size video walls is based on the easily expandable modular TransForm A architecture. Using a TransForm A Processor and up to multiple TransForm A OmniBus A18 units, a multitude of video and RGB sources can be displayed even on the largest video wall.

### **Maximum flexibility and scalability**

- supported operating systems: Windows 2000/XP
- output resolution up to WUXGA
- virtually unlimited number of display channels and input sources
- up to 68 video/34 RGB sources per display channel
- up to 68 video/34 RGB windows freely movable on the whole video wall

### **Superb video and RGB integration**

- analog and digital sources
- full range scaling capability from finger print size to full wall size
- direct video/RGB access and control
- independent color depth selection of video, RGB, and graphic windows
- uncompromising digital data processing
- genlock synchronization of graphics and video data for a perfectly smooth motion display

### **Power, bandwidth, future-proof**

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- TransForm A processor is the high performance processing core of the system, built on the latest easily upgradeable standard PC technology
- TransForm A OmniBus A18 with dedicated high-bandwidth backplane provides the optimized resources needed for graphic and video data integration
- redundant, hot-swappable critical components for high overall system reliability

### System solution

- perfectly integrated with Barco's Apollo wall management software

### TransForm A system overview

Processing power plus multimedia speedway

- An open architecture and the extensive use of industry standards providing ultimate scalability
- Flexible and economical support for any system size and any input demand
- Future-proof investment thanks to upgradable Processor/OmniBus approach, starting from Processor-only systems up to multi-OmniBus configurations for virtually any system size

TransForm A OmniBus

- TransForm A OmniBus forms the backbone of the graphic and Video subsystem
- Designed to integrate and display all kinds of data sources
- Quality of Service (QoS) by separating graphic data and network traffic from bandwidth-demanding Input data
- PCI 64/66 based with up to 533 MB/s of bandwidth capacity for huge systems
- Non-proprietary, standard PCI 64/66 expansion Card interface ensures compatibility

### TransForm A configuration types

TransForm A is flexibly configurable according to the requirements of the application. The entry level system TransForm A4/AX6, with all Input and output Cards inserted into the TransForm A Processor, can easily be expanded to either a TransForm A18 system integrating up to five OmniBus A18 devices. Typically, adding Inputs or outputs to a system merely means adding an Input Card or an output Card and possibly an OmniBus to the system. TransForm A covers the complete range of today's Video wall controller requirements and scales perfectly with the growing demands in a quickly evolving world.

Best-in-class connectivity for any display size The rich set of configurable TransForm A Input Cards provides dedicated input capabilities for the widest range of source types to be found in typical control room scenarios. Managed by the TransForm A driver level software, multiple TransForm A output Cards on the matrix of display devices generate one giant desktop for all standard user applications, and OmniScaler cards scale, combine and display all sources in true digital quality on the display devices.

Input Cards The Quad Analog Video Card and the Quad SDI Video Card fulfill the demand for analog and digital standard definition Video types, whereas the Dual RGB Input Card connects economically to all types of computers with an analog output. The Dual DVI Input Card is the allrounder that covers standard analog Video and computer signals and distinguishes itself with the support for High Definition and DVI signal sources. Characterized by the widest encoder support and a fully

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**OmniScaler technology** TransForm A distinguishes itself from other Video wall controllers by the consequent realization of the all-digital concept. Quality reducing analog paths and matrix switchers inside the system are kept out by design. The signals are immediately digitized when entering the system and subsequently digitally processed in the OmniScaler. Unlike other controllers the OmniScaler features individual scaling factors for every single data source, even if there are many on one channel. This results in superior signal quality for all windows on the Video wall.

**Output cards** The 4-channel UGX Graphic Card is able to drive all types of digital and analog display devices with native resolution up to WUXGA that are used to build tiled video walls. As the perfect companion to the graphic card, the OmniScaler offers the highest degree of quality and flexibility for video data insertion on the video wall:

- Digital and analog video and RGB/DVI windows can be placed anywhere on the video wall
- Multiple different scaling factors on one module and on the whole wall are processed naturally without any quality loss, at any window size
- Scaling factors range from fingerprint size up to full video wall size.

**Windows 2000/XP**

- The display is operated as one giant Windows 2000/XP desktop
- Transparent, unrestricted use of the entire wall for standard Windows 2000/XP applications
- All applications can be operated by the local keyboard or by any other Windows 2000/XP computer (with optional Apollo software package)
- Powerful Windows 2000/XP drivers tuned and optimized for large multiscreen video walls

**Wall management software** Barco's wall management software enables operators to control and manage the video wall layout and content in a user-friendly way, both for remote and local applications.

**Reliability and redundancy** For uninterrupted system operation TransForm A provides several redundancy options:

- Redundant hot-swap power supplies
- Redundant hot-swap RAID Level 1 or RAID Level 5 harddisk
- Redundant Ethernet adapter
- The redundancy components are continuously monitored; audio and video alarms are triggered in case of failure

## Product specifications

## TRANSFORM A18

### General specifications

Processor	<p>Processor A4</p> <ul style="list-style-type: none"><li>• Intel Core 2 Duo 2.13 GHz</li><li>• 1 GB main memory standard</li><li>• extendable up to 4 GB max. (3 GB usable)</li><li>• SATA disk drive 250 GB (RAID-1/RAID-5 option)</li><li>• 10/100/1000 MBit LAN (redundant option)</li><li>• redundant, hot-swap power supply (option)</li><li>• host for up to 4 OmniBus units</li></ul> <p>Processor AX6</p> <ul style="list-style-type: none"><li>• Dual-core Intel Xeon® CPU, 3 GHz, 1 or 2 CPU's</li><li>• 2 GB ECC main memory standard</li><li>• extendable up to 4 GB (3 GB usable)</li><li>• SATA disk drive 250 GB (RAID-1/RAID-5 option)</li><li>• dual 10/100/1000 MBit onboard LAN (redundant)</li><li>• redundant, hot-swap power supply</li><li>• host for up to 5 OmniBus units</li></ul>
OmniBus	<ul style="list-style-type: none"><li>• Enhanced PCI 64/66 backplane</li><li>• 533 MB/s</li><li>• 18 slots</li><li>• redundant hot-swap power supply (option)</li></ul>
Weight	<p>Processor A4</p> <ul style="list-style-type: none"><li>• standard, no cards: 18.0 kg   39.7 lbs</li><li>• redundant PSU, no cards: 20.5 kg   45.2 lbs</li></ul> <p>Processor AX6</p> <ul style="list-style-type: none"><li>• redundant PSU, no cards: 23.3 kg   49.2 lbs</li></ul> <p>OmniBus A18</p> <ul style="list-style-type: none"><li>• standard, no cards: 19.8 kg   43.7 lbs</li><li>• redundant PSU, no cards: 21.8 kg   48.1 lbs</li></ul>
Dimensions	<p>Processor A4</p> <ul style="list-style-type: none"><li>• 19" industrial case, height in rack unit: 4U</li><li>• width case: 440 mm   17.32 in.</li><li>• width with fixation: 482 mm   18.98 in.</li><li>• depth case: 516 mm   20.32 in.</li><li>• depth with handles: 566 mm   22.28 in.</li><li>• height: 177 mm   6.97 in.</li><li>• height with rubber feet: 183 mm   7.20 in.</li></ul> <p>Processor AX6</p> <ul style="list-style-type: none"><li>• 19" industrial case, height in rack unit: 4U</li><li>• width case: 440 mm   17.32 in.</li><li>• width with fixation: 482 mm   18.98 in.</li><li>• depth case: 566 mm   22.28 in.</li><li>• depth with handles: 616 mm   24.25 in.</li><li>• height: 177 mm   6.97 in.</li><li>• height with rubber feet: 183 mm   7.20 in.</li></ul> <p>OmniBus A18</p> <ul style="list-style-type: none"><li>• 19" industrial case, height in rack unit: 6U</li><li>• width case: 449 mm   17.68 in.</li><li>• width with fixation: 482 mm   18.98 in.</li><li>• depth case: 420 mm   16.54 in.</li><li>• depth with handles: 461 mm   18.15 in.</li><li>• height: 267 mm   10.51 in.</li><li>• height with rubber feet: 270 mm   10.63 in.</li></ul>
Power supply	100-240 V, 50-60 Hz
Power consumption	<p>Processor A4</p> <p>standard (typ): 400 W redundant (typ): 400 W</p> <p>Processor AX6</p> <p>redundant: 650 W</p> <p>OmniBus A18</p> <p>standard (typ): 600 W redundant (typ): 600 W</p>
Operating conditions	0 – 40°C   32 – 104°F at max. 80% humidity (non condensing)

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