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## **TriCaster<sup>®</sup> TC1 Technical Specifications**

Video Input	16 x simultaneous external video inputs, supporting any combination of compatible sources in
Notwork Video Input	resolutions up to 4K UHD at frame rates up to 60fps (2160p 59.94) 16 x IP video inputs via NDI™, resolution-independent, with support for key and fill
Network Video Input SDI Video Input <sup>1</sup>	4 x 3G/HD/SD-SDI connections supporting video input in any combination of standard formats,
	resolutions, and frame rates <sup>2</sup>
	• 1080p: 59.94, 50, 29.97, 25, 24, 23.976
	• 1080i: 59.94, 50
	• 720p: 59.94, 50, 29.97, 25, 24, 23.976
	• 576i 50
	• 480i 59.94
	<sup>1</sup> Optionally supports up to 16 simultaneous 3G/HD/SD-SDI video inputs or quad-link 3G-SDI video inputs (4K UHD) via network integration with NewTek NC1 conversion modules
	<sup>2</sup> Available frame rates determined by session video standard (NTSC or PAL)
PTZ	Support for up to 8 simultaneous Pan-Tilt-Zoom (PTZ) robotic cameras via serial and network protocols,
	including RS232, RS422 and IP, with integrated controls and preset system
Skype TX	Native support for up to 2 simultaneous Skype® video call inputs via Skype TX software integration,
	including tally and Talk Back communication
Apple <sup>®</sup> AirPlay <sup>®</sup>	Native support for input of compatible iOS mobile devices via Apple AirPlay
Video Output	Configurable for up to 4 independent video mix outputs, with simultaneous delivery via IP and SDI
Network Video Output	IP video output via NDI, optionally configurable for:
	4 x independent video mix outputs
SDI Video Output	<ul> <li>1 x 4K UHD video mix output</li> <li>4 x 3G/HD/SD-SDI connections, optionally configurable for:</li> </ul>
	<ul> <li>4 x 3G/HD/SD-SDi connections, optionary connigurable for.</li> <li>4 x independent 3G/HD/SD video mix outputs</li> </ul>
	<ul> <li>1 x 4K UHD video mix output via 3G-SDI guad-link grouping</li> </ul>
Stream Output	2 x resolution-independent streaming video outputs, independently configurable, with simultaneous
	stream archive
Multiviewer Output	3 x multiviewer outputs supporting standard display resolutions
	<ul> <li>1 x DVI user interface with multiviewer</li> </ul>
	1 x HDMI multiviewer
	1 x DisplayPort multiviewer
Mix/Effect Buses (M/E)	4 x M/E buses supporting video re-entry
	<ul> <li>1 x Mix/Effect channel per bus with support for up to 4 sources</li> </ul>
	• 4 x KEY layers per bus
	9 x memory slots per bus
	1 x PREVIZ configuration and preview bus
DSK Channels	4 x DSK channels
Media	5 x media players <ul> <li>2 x DDR</li> </ul>
	• 2 x GFX
	1 x Sound
	15 x media buffers
	10 x animation buffers
	• 5 x graphic buffers
	30 x clip players (available for use as transitions or media depending on function)
Keyers	Integrated LiveMatte <sup>™</sup> chroma and luma keying technology on all source channels and M/E buses
-	16 x input keyers
	4 x media player keyers
	• 4 x M/E keyers
	1 x PREVIZ keyer
	15 x buffer keyers
COMPs	Integrated video composition engine on the switcher and each M/E bus to create, store, and apply layer
	configurations and DVE-style motion sequences
Virtual Sets	<ul> <li>16 x configurable COMP presets per bus</li> <li>Integrated LiveSet<sup>™</sup> technology with 30+ live virtual sets and box effects included</li> </ul>
DataLink	Integrated DataLink™ technology enabling real-time, automated data input from internal and external
	sources, including webpages, spreadsheets, scoreboards, databases, RSS feeds, watch files, XML, CSV,
	ASCII and more
Macros	Record, store, edit and automate commands and user-configured operation sequences
	<ul> <li>Attach to control panel buttons, keyboard shortcuts, hotspots, MIDI and X-keys<sup>®</sup> buttons or GPI</li> </ul>
	triggers
	• Attach to internal events and state changes, including audio, media playback, tally and specific
	switcher actions
	Supports control via web-based interface

Becording	6 x configurable video recording channels via IsoCorder™ technology
Recording	<ul> <li>4 x QuickTime<sup>®</sup> archival video recorders (XDCAM HD compatible, 4:2:2 encoding, 24-bit audio,</li> </ul>
	with timecode) <sup>3</sup>
	<ul> <li>2 x H.264 distribution video recorders (multiple profiles)</li> </ul>
	1 x MP3 audio recorder
	<sup>3</sup> QuickTime Player not required for playback in common NLE applications
Storage	2 x 3TB internal drive
	Capacity varies by format, resolution and file specification
	Supports recording to external storage via USB 3.0 and eSATA
Grab	<ul> <li>Supports shared storage integration and third-party partner solutions</li> <li>Grab full-resolution, deinterlaced still images from external video sources and outputs</li> </ul>
Export	Export video and image files to social media, FTP, local or external volumes, and network servers, with
	optional transcoding
Audio Mixer	Integrated multi-channel audio mixer with support for quad-channel audio, DSPs and 4x4x4 audio input
	routing
Local Audio Input	4 x SDI embedded
	1 x Balanced XLR stereo pair (Line)
Lees Audie Outrut	3 x Balanced 1/4" stereo pairs (Line)
Local Audio Output	4 x SDI embedded 1 x Balanced XLR stereo pair
	1 x Balanced 1/4" stereo pair
	1 x Stereo 1/4" (phones)
Network Audio	Native support for network audio input and output via NDI
	<ul> <li>Embedded audio supported for all NDI input and output video signals</li> </ul>
	<ul> <li>Integrated support<sup>4</sup> for Dante<sup>™</sup> networking protocol from Audinate<sup>®</sup></li> </ul>
	<ul> <li>Support for AES67 protocol via compatible WDM audio drivers<sup>5</sup></li> </ul>
	<sup>4</sup> Requires Dante Virtual Soundcard license from Audinate (sold separately)
Cumpented Medie File Fermente	<sup>5</sup> Requires third-party virtual sound card license (sold separately)
Supported Media File Formats	<ul> <li>Import, store, and play back multimedia files, with optional transcoding, including:</li> <li>Video: AVI, DV, DVCPro, DVCProHD, FLV, F4V, H.263, H.264, MOV, MKV, MJPEG, MPEG,</li> </ul>
	MP4, WMV, WebM, and more
	<ul> <li>Image: PSD, PNG, TGA, BMP, JPEG, JPEG-XR, JPEG2000, EXR, RAW, TIF, WebP, and more</li> </ul>
	• Audio: AIFF, MP3, WAV, and more
Monitoring	Support for up to 3 multiviewer displays with configurable workspaces and viewports
Signal Monitoring	Integrated waveform and vectorscope, full field rate with digital calibration, color preview and support for
- ·	ITU-R Rec. 709
Processing	Video: Floating Point YCbCr +A 4:4:4
Throughput Latency	Audio: Floating Point, 96 kHz ~1.0-1.5 frames
A/V Standards	4K UHD video conforms to SMPTE 2036 (UHDTV1 using Square Division Quad Split)
	3G-SDI video conforms to SMPTE 424M (Level A)
	HD-SDI video conforms to SMPTE 292M
	<ul> <li>SD video conforms to SMPTE 259M and ITU-R BT.656</li> </ul>
	Analog audio levels conform to SMPTE RP-155
Tally	Support for hardware tally via HD15 GPI connector, network tally via NDI, and Blackmagic Design <sup>®</sup> SDI
	tally standard
Genlock	Genlock input supporting SD (Bi-level) or HD (Tri-level) reference signals Supports GPI signals via JLCooper Electronics eBox GPI interface
GPI MIDI	Supports GPI signals via JLCooper Electronics eBox GPI interface Support for standard MIDI protocol enabling third-party device control
System Drive	120GB SSD
NIC	2 x 1 Gigabit NIC
System Physical	TriCaster TC1
	2RU chassis with 400W PSU and multi-tiered hardware and software fail-safe
	• 19.0 x 3.5 x 19.57 in (48.3 x 8.9 x 49.7 cm) with rack ears attached
	TriCaster TC1 (Redundant Power Option)
	3RU chassis with 500W redundant PSU and multi-tiered hardware and software fail-safe
	• 19.0 x 5.25 x 19.57 in (48.3 x 13.34 x 49.7 cm) with rack ears attached

Subject to change without notice.

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