

COMPARISON GUIDE

# T2 Model Comparison

Rev. 12 (as of June 1, 2023)



T2™ 4K Series										T2 Series 3		
T2 4K Elite				T2 4K Pro			T2 4K Express			T2 Elite 3	T2 Pro 3	T2 Express 3
12G		Plus		12G	Plus		6G	Plus				
<a href="http://www.grassvalley.com/products/t2_4k_series/">http://www.grassvalley.com/products/t2_4k_series/</a>										<a href="http://www.grassvalley.com/products/t2_series_3/">http://www.grassvalley.com/products/t2_series_3/</a>		
Description	4K/HD Recorder/Players									Digital Recorder/Players		
	KTR4A-ELT-CV00 KTR4-IO-CV12G-KIT	KTR4A-ELT-CV00 KTR4-IO-CV80-KIT	KTR4A-ELT-CV40	KTR4A-PRO-CV00 KTR4-IO-CV12G-KIT	KTR4A-PRO-CV00 KTR4-IO-CV80-KIT	KTR4A-PRO-CV40	KTR4A-EXP-CV00 KTR4-IO-CV12G-KIT	KTR4A-EXP-CV00 KTR4-IO-CV80-KIT	KTR4A-EXP-CV40	iDDR2-ELITE-3	iDDR2-PRO-3	iDDR2-EXPRESS-3
Features	now available	now available	now available	now available	now available	now available	now available	now available	now available	end of production	end of production	end of production
4K DCI/4K UHD 60p/59.94p/50p support	✓	✓	✓	✓	✓	✓	-	-	-	-	-	-
4K DCI/4K UHD 30p/29.97p/25p support	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
Quad SDI - SQD (Square Division)	-	✓	✓	-	✓	✓	-	✓	✓	-	-	-
Quad SDI - 2SI (2 Sample Interleave)	-	✓	✓	-	✓	✓	-	-	-	-	-	-
3G-SDI (Level A/B)	✓	✓	✓	✓	✓	✓	-	-	-	-	-	-
HD 1080 60p/59.94p/50p support	✓	✓	✓	✓	✓	✓	-	-	-	-	-	-
HD 1080 59.94i/50i support	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
HD 1080 30p/29.97p/25p support	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
HD 1080 24p/23.98p support	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
HD 1080 24PsF/23.98PsF support	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
YUV 4:2:2 10-bit depth for video recording	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
In/Out (4K) - AVI/MXF (Grass Valley HQX)	[4K] 1in 0out [4K] 0in 1out [4K] 1 in 1 out (up to 30p) [4K] 0 in 2out (up to 30p)	[4K] 1in 0out [4K] 0in 1out [4K] 1 in 1 out (up to 30p) [4K] 0 in 2out (up to 30p)	[4K] 1in 0out [4K] 0in 1out	[4K] 1in 0out [4K] 0in 1out	[4K] 1in 0out [4K] 0in 1out	[4K] 1in 0out [4K] 0in 1out	[4K] 1in 0out [4K] 0in 1out	[4K] 1in 0out [4K] 0in 1out	[4K] 1in 0out [4K] 0in 1out	-	-	-
In/Out (4K) - MOV/MXF (Apple ProRes 422)	[4K] 0in 1out	[4K] 0in 1out	[4K] 0in 1out	[4K] 0in 1out	[4K] 0in 1out	[4K] 0in 1out	[4K] 0in 1out	[4K] 0in 1out	[4K] 0in 1out	-	-	-
In/Out (4K) - MXF (Avid DNxHR - HQ/SQ/LB)	[4K] 0in 1out	[4K] 0in 1out	[4K] 0in 1out	[4K] 0in 1out	[4K] 0in 1out	[4K] 0in 1out	[4K] 0in 1out	[4K] 0in 1out	[4K] 0in 1out	-	-	-
In/Out (HD) - AVI/MXF (Grass Valley HQX)	[HD] 3in 0out [HD] 2in 1out [HD] 1in 2out [HD] 0in 3out	[HD] 3in 0out [HD] 2in 1out [HD] 1in 2out [HD] 0in 3out	[HD] 3in 0out [HD] 2in 1out [HD] 1in 2out [HD] 0in 3out	[HD] 3in 0out [HD] 2in 1out [HD] 1in 2out [HD] 0in 3out	[HD] 3in 0out [HD] 2in 1out [HD] 1in 2out [HD] 0in 3out	[HD] 3in 0out [HD] 2in 1out [HD] 1in 2out [HD] 0in 3out	[HD] 3in 0out [HD] 2in 1out [HD] 1in 2out [HD] 0in 3out	[HD] 2in 1out [HD] 1in 2out	[HD] 2in 1out [HD] 1in 2out	-	-	-
In/Out (HD) - AVI (Grass Valley HQ)	-	-	-	-	-	-	-	-	-	[HD] 1in 2out	[HD] 1in 2out	[HD] 1in 2out
In/Out (HD) - MXF (XDCAM)	[HD] 1in 2out [HD] 0in 3out	[HD] 1in 2out [HD] 0in 3out	[HD] 1in 2out [HD] 0in 3out	[HD] 1in 2out [HD] 0in 3out	[HD] 1in 2out [HD] 0in 3out	[HD] 1in 2out [HD] 0in 3out	[HD] 1in 2out [HD] 0in 3out	[HD] 1in 2out [HD] 0in 3out	[HD] 1in 2out [HD] 0in 3out	[HD] 1in 1out [HD] 0in 2out	[HD] 1in 1out [HD] 0in 2out	[HD] 1in 1out [HD] 0in 2out

		T2™ 4K Series									T2 Series 3			
		T2 4K Elite			T2 4K Pro			T2 4K Express			T2 Elite 3	T2 Pro 3	T2 Express 3	
		12G	Plus		12G	Plus		6G	Plus					
Recorder/Player	In/Out (HD) - MXF (Apple ProRes 422)	[HD] 1in 1out [HD] 0in 3out	[HD] 1in 1out [HD] 0in 3out	[HD] 1in 1out [HD] 0in 3out	[HD] 1in 1out [HD] 0in 3out	[HD] 1in 1out [HD] 0in 3out	[HD] 1in 1out [HD] 0in 3out	[HD] 1in 1out [HD] 0in 2out	[HD] 1in 1out [HD] 0in 2out	[HD] 1in 1out [HD] 0in 2out	-	-	-	
	In/Out (HD) - MOV (Apple ProRes 422)	[HD] 0in 3out	[HD] 0in 3out	[HD] 0in 3out	[HD] 0in 3out	[HD] 0in 3out	[HD] 0in 3out	[HD] 0in 2out	[HD] 0in 2out	[HD] 0in 2out	-	-	-	
	In/Out (HD) - MXF (Avid DNxHD)	[HD] 1in 1out [HD] 0in 3out	[HD] 1in 1out [HD] 0in 3out	[HD] 1in 1out [HD] 0in 3out	[HD] 1in 1out [HD] 0in 3out	[HD] 1in 1out [HD] 0in 3out	[HD] 1in 1out [HD] 0in 3out	[HD] 1in 1out [HD] 0in 3out	[HD] 1in 1out [HD] 0in 2out	[HD] 1in 1out [HD] 0in 2out	[HD] 1in 1out [HD] 0in 2out	-	-	-
	HD 1 ingest and HD 2 playback support (simultaneously)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	HD 3 playback support	✓	✓	✓	✓	✓	✓	✓	-	-	-	-	-	-
	Scheduled recording	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Chasing playback while ingesting (HD/SD)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Direct ingest to external media/storage device	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Ancillary data ingest and pass through	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Batch capture and external VTR control	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	HD 2-channel synchronized playback support	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	4K key/fill playback support	✓	✓	-	✓	✓	-	✓	✓	✓	-	-	-	-
	HD key/fill playback support	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Cross conversion between 720 & 1080	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Loop playback	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	VAR speed playback	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Playlist playback (trim, transition, end action, place holder, GPI trigger, timeline)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Transition effect (cross dissolve) when manually switching to another clip event in a playlist	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
	E-to-E (Electric to Electric) playback support	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	4K video monitor output	✓	✓	-	✓	✓	-	✓	✓	✓	-	-	-	-
HD video monitor output	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Composite	Composite	Composite	
On-screen display (burn-in)	Timecode Audio level meter	Timecode Audio level meter	Timecode Audio level meter	Timecode Audio level meter	Timecode Audio level meter	Timecode Audio level meter	Timecode Audio level meter	Timecode Audio level meter	Timecode Audio level meter	Timecode Audio level meter	Timecode	Timecode	Timecode	
Marker support	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Audio input/output using ASIO audio device (USB audio interface, Dante Virtual Soundcard)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	
NDI IP input/output support	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	

		T2™ 4K Series									T2 Series 3		
		T2 4K Elite			T2 4K Pro			T2 4K Express			T2 Elite 3	T2 Pro 3	T2 Express 3
		12G	Plus		12G	Plus		6G	Plus				
Import/Export	Watch folder transfers	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	FTP transfers	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Transcode support - to AVI (Grass Valley HQX)	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
	Transcode support - to AVI (Grass Valley HQ)	-	-	-	-	-	-	-	-	-	✓	✓	✓
	Transcode support - to MXF (XDCAM) from AVI	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Transcode support - to MXF (Apple ProRes 422) from AVI	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
	Transcode support - to MXF (Avid DNxHR - HQ/SQ/LB) from AVI	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
	Transcode support - to MXF (Avid DNxHD) from AVI	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Editing	Direct access to T2 data storage via CIFS	✓	✓	✓	-	-	-	-	-	-	✓	-	-
	Export a growing AVI file via CIFS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Export a growing MXF file via FTP	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Edit a growing file with EDIUS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Remote	Timecode chase playback with LTC input	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Remote control via GPI	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Remote control via RS-422 (Sony 9-pin)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Remote control via RS-422 (VDCP)	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
	Remote control via network (VDCP)	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
	Remote control via network (AMP)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Constant delay playback (start/stop) via GPI/RS-422 (Sony 9-pin)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Misc.	Workstation mode	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Keyboard shortcuts and mouse customization on workstation	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	T2-to-T2 data synchronization	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Monitoring using watchdog timer (hardware/software)	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-
	Maintenance tools	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Hardware	T2 4K Series									T2 Series 3			
	T2 4K Elite			T2 4K Pro			T2 4K Express			T2 Elite 3	T2 Pro 3	T2 Express 3	
	12G	Plus		12G	Plus		6G	Plus					
<b>Front Panel</b>													
7-inch touchscreen LCD	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Jog/Shuttle	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Media card slots	✓	✓	✓	-	-	-	-	-	-	-	✓	-	-
<b>Power supply unit</b>													
Redundant	✓	✓	✓	-	-	-	-	-	-	-	-	-	-
Single	-	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>System storage</b>													
M.2 SSD (64 GB)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Data storage</b>													
SSD RAID-0	SSD 2 TB (1 TB x2)	SSD 2 TB (1 TB x2)	SSD 2 TB (1 TB x2)	-	-	-	-	-	-	-	SSD 2 TB (1 TB x2)	-	-
HDD RAID-10	-	-	-	-	-	-	-	-	-	-	-	HDD 1TB (500 GB x4)	-
HDD RAID-0	-	-	-	HDD 2 TB (1 TB x2)	HDD 2 TB (1 TB x2)	HDD 2 TB (1 TB x2)	HDD 2 TB (1 TB x2)	HDD 2 TB (1 TB x2)	HDD 2 TB (1 TB x2)	HDD 2 TB (1 TB x2)	-	-	HDD 1TB (500 GB x2)
<b>Video</b>													
12G/6G/3G/HD-SDI input/output*1	12G-SDI x4	3G-SDI x8	3G-SDI x4	12G-SDI x4	3G-SDI x8	3G-SDI x4	6G-SDI x4	HD-SDI x8	HD-SDI x4	-	-	-	-
SDI input	-	-	-	-	-	-	-	-	-	1	1	1	1
SDI output	-	-	-	-	-	-	-	-	-	2	2	2	2
DVI-I/Component input	-	-	-	-	-	-	-	-	-	1	1	1	1
DVI-I/Component output	-	-	-	-	-	-	-	-	-	2	2	2	2
Composite input	-	-	-	-	-	-	-	-	-	1	1	1	1
Composite output	-	-	-	-	-	-	-	-	-	2	2	2	2
SDI through output for SDI input	-	-	-	-	-	-	-	-	-	1	1	1	1
Monitor output (composite)	-	-	-	-	-	-	-	-	-	2	2	2	2

\*1 Video input and video output are shared. (Some of these can also be assigned for video monitor outputs.)

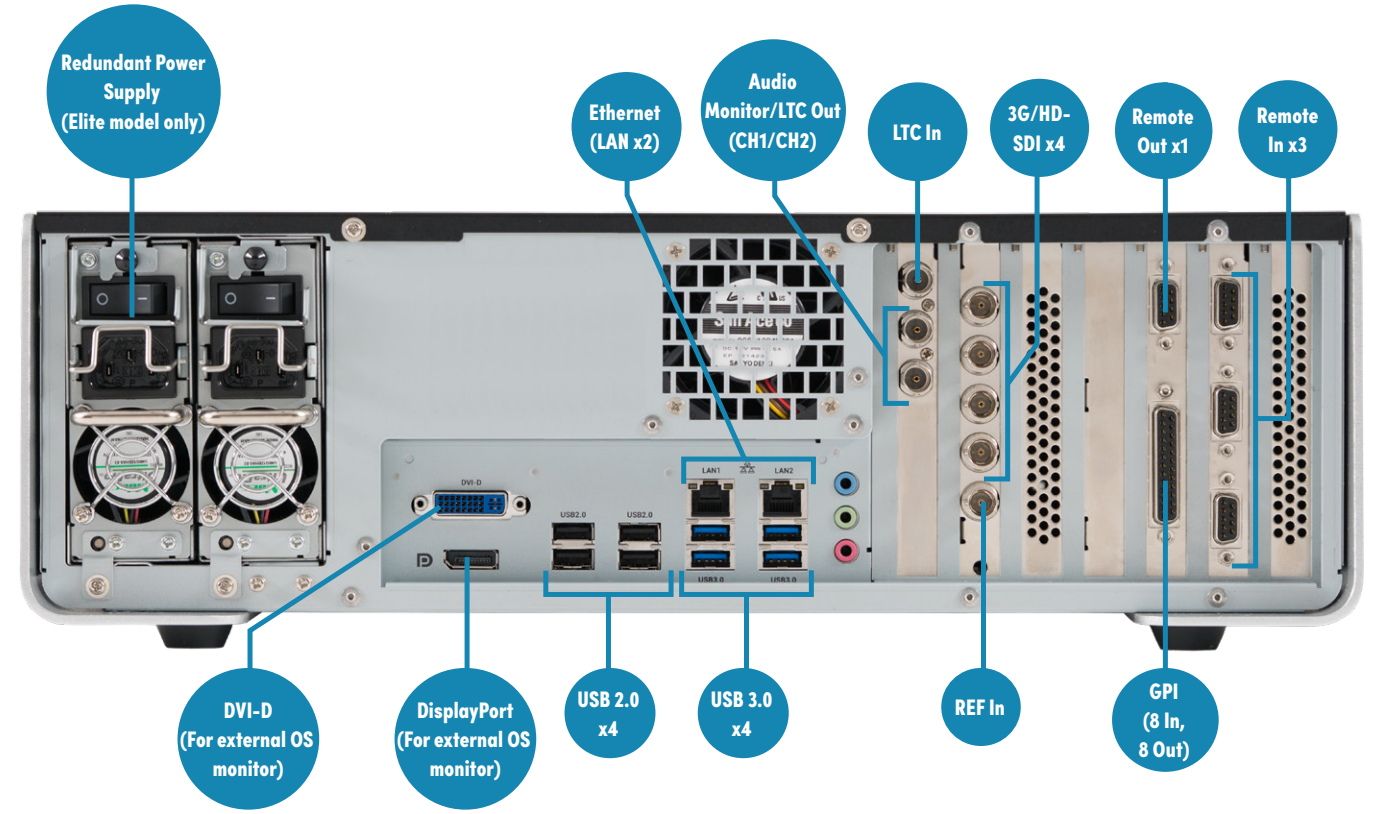
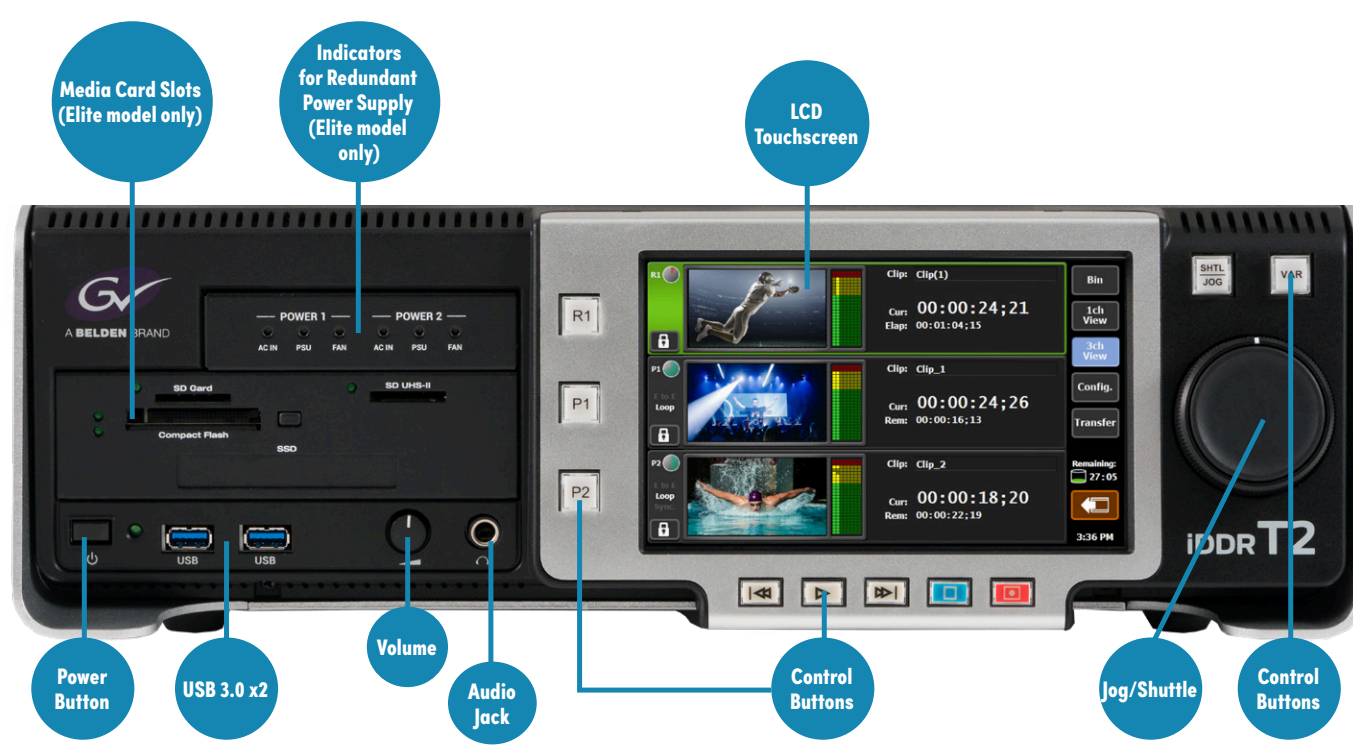
	T2 4K Series									T2 Series 3			
	T2 4K Elite			T2 4K Pro			T2 4K Express			T2 Elite 3	T2 Pro 3	T2 Express 3	
	12G	Plus		12G	Plus		6G	Plus					
<b>Audio</b>													
AES/EBU input	—	—	—	—	—	—	—	—	—	—	1	1	1
AES/EBU output	—	—	—	—	—	—	—	—	—	—	2	2	2
XLR (Balanced analog audio) input	—	—	—	—	—	—	—	—	—	—	2	2	2
XLR (Balanced analog audio) output	—	—	—	—	—	—	—	—	—	—	4	4	4
Headphone jack for audio monitor (front)	1	1	1	1	1	1	1	1	1	1	1	1	1
Headphone jack for audio monitor (rear)	—	—	—	—	—	—	—	—	—	—	1	1	1
Audio monitor output (rear)	2*2	2*2	2*2	2*2	2*2	2*2	2*2	2*2	2*2	2*2	—	—	—
<b>Timecode</b>													
LTC input	1	1	1	1	1	1	1	1	1	1	1	1	1
LTC output	2*2	2*2	2*2	2*2	2*2	2*2	2*2	2*2	2*2	2*2	2	2	2
<b>Reference</b>													
Input	1	1	1	1	1	1	1	1	1	1	1	1	1
Output (loop)	—	—	—	—	—	—	—	—	—	—	1	1	1
<b>GPI</b>													
GPI input/output	D-Sub 25-pin (8 in 8 out)	D-Sub 25-pin (8 in 8 out)	D-Sub 25-pin (8 in 8 out)	D-Sub 25-pin (8 in 8 out)	D-Sub 25-pin (8 in 8 out)	D-Sub 25-pin (8 in 8 out)	D-Sub 25-pin (8 in 8 out)	D-Sub 25-pin (8 in 8 out)	D-Sub 25-pin (8 in 8 out)	D-Sub 25-pin (8 in 8 out)	D-Sub 15-pin (6 in 6 out)	D-Sub 15-pin (6 in 6 out)	D-Sub 15-pin (6 in 6 out)
<b>Remote</b>													
RS-422 (D-Sub 9-pin)	4 (in x3, out x1)	4 (in x3, out x1)	4 (in x3, out x1)	4 (in x3, out x1)	4 (in x3, out x1)	4 (in x3, out x1)	4 (in x3, out x1)	4 (in x3, out x1)	4 (in x3, out x1)	4 (in x3, out x1)	3 (in x2, in/out x1)	3 (in x2, in/out x1)	3 (in x2, in/out x1)
<b>LAN</b>													
1 Gb Ethernet	2	2	2	2	2	2	2	2	2	2	2	2	2
<b>USB</b>													
USB 3.0 (front)	2	2	2	2	2	2	2	2	2	2	2	2	2
USB 3.0 (rear)	4	4	4	4	4	4	4	4	4	4	4	4	4
USB 2.0 (rear)	4	4	4	4	4	4	4	4	4	4	4	4	4
<b>PC monitor*3</b>													
DisplayPort	1	1	1	1	1	1	1	1	1	1	1	1	1
DVI-D	1	1	1	1	1	1	1	1	1	1	1	1	1

\*2 Audio monitor output and timecode output are shared.

\*3 DisplayPort and DVI-D cannot be used at the same time.



	T2 4K Series									T2 Series 3		
	T2 4K Elite			T2 4K Pro			T2 4K Express			T2 Elite 3	T2 Pro 3	T2 Express 3
	12G	Plus		12G	Plus		6G	Plus				
Power (rated input voltage, frequency)	AC 100 - 240V, 50/60 Hz	AC 100 - 240V, 50/60 Hz	AC 100 - 240V, 50/60 Hz	AC 100 - 240V, 50/60 Hz	AC 100 - 240V, 50/60 Hz	AC 100 - 240V, 50/60 Hz	AC 100 - 240V, 50/60 Hz	AC 100 - 240V, 50/60 Hz	AC 100 - 240V, 50/60 Hz	AC 100 - 240V, 50/60 Hz	AC 100 - 240V, 50/60 Hz	AC 100 - 240V, 50/60 Hz
Electric power consumption	Up to 200W	Up to 200W	Up to 200W	Up to 200W	Up to 200W	Up to 200W	Up to 200W	Up to 200W	Up to 200W	Up to 250W	Up to 250W	Up to 250W
Operating temperature range	5°C to 35°C (41°F to 95°F)	5°C to 35°C (41°F to 95°F)	5°C to 35°C (41°F to 95°F)	5°C to 35°C (41°F to 95°F)	5°C to 35°C (41°F to 95°F)	5°C to 35°C (41°F to 95°F)	5°C to 35°C (41°F to 95°F)	5°C to 35°C (41°F to 95°F)	5°C to 35°C (41°F to 95°F)	5°C to 35°C (41°F to 95°F)	5°C to 35°C (41°F to 95°F)	5°C to 35°C (41°F to 95°F)
Operating relative humidity	Max. 80% (non-condensing)	Max. 80% (non-condensing)	Max. 80% (non-condensing)	Max. 80% (non-condensing)	Max. 80% (non-condensing)	Max. 80% (non-condensing)	Max. 80% (non-condensing)	Max. 80% (non-condensing)	Max. 80% (non-condensing)	Max. 80% (non-condensing)	Max. 80% (non-condensing)	Max. 80% (non-condensing)
Dimensions (W x D x H)	430 x 550 x 140 mm (16.9 x 21.6 x 5.5 in.)	430 x 550 x 140 mm (16.9 x 21.6 x 5.5 in.)	430 x 550 x 140 mm (16.9 x 21.6 x 5.5 in.)	430 x 550 x 140 mm (16.9 x 21.6 x 5.5 in.)	430 x 550 x 140 mm (16.9 x 21.6 x 5.5 in.)	430 x 550 x 140 mm (16.9 x 21.6 x 5.5 in.)	430 x 550 x 140 mm (16.9 x 21.6 x 5.5 in.)	430 x 550 x 140 mm (16.9 x 21.6 x 5.5 in.)	430 x 550 x 140 mm (16.9 x 21.6 x 5.5 in.)	430 x 550 x 140 mm (16.9 x 21.6 x 5.5 in.)	430 x 550 x 140 mm (16.9 x 21.6 x 5.5 in.)	430 x 550 x 140 mm (16.9 x 21.6 x 5.5 in.)
Weight	16.5 kg (36.4 lbs.)	16.5 kg (36.4 lbs.)	16.5 kg (36.4 lbs.)	16.5 kg (36.4 lbs.)	16.5 kg (36.4 lbs.)	16.5 kg (36.4 lbs.)	16.5 kg (36.4 lbs.)	16.5 kg (36.4 lbs.)	16.5 kg (36.4 lbs.)	15 kg (33 lbs.)	15 kg (33 lbs.)	15 kg (33 lbs.)



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