

videoReferee® Series

Comparison table

Parameters	Jr.2 / Jr.4 / Jr.8	R-4 / R-8	B / 8B / 8F	SR / SRIII	SR 3G	VHL 2G`	4 / 4A	4G	V / VG	ST	FC
Inputs (SDI)											
HD/SD	2 / 4 / 8	4 / 8	4 / 8 / 8	8 / 12	8	12	16 / 16	16	24 / 24	12 / 16**	32
3G*	-	4 / 4	-	-	8	12	-	16	- / 24	12 / 16**	32
Video Formats											
HD/SD SDI	29.97/59.94Hz based: 1920x1080/59.94i, 1920x1080/29.97PsF, 1280x720/59.94p, 720x480/29.97PsF, 720x480/59.94i 25/50Hz based: 1920x1080/50i, 1920x1080/25PsF, 1280x720/50p, 720x576/25PsF, 720x576/50i Support of 16:9 and 4:3 modes										
3G SDI	1920x1080/59.94p, 1920x1080/119.88i, 1920x1080/50p, 1920x1080/100i										
Channels (simultaneously)											
HD / SD	2/4/8 Recording + 2/4/1 Search or 1 Playout	4 / 8 Recording + 4/1 Search or 1 Playout	4/8/8 Recording + 4/1 Search or 1 Playout	8/12 Recording + 4/1 Search or 1 Playout	8 Recording + 4/1 Search or 1 Playout	12 Recording + 4/1 Search or 1 Playout	16 Recording + 4/1 Search or 1 Playout	16 Recording + 4/1 Search or 1 Playout	24 / 24 Recording + 4/1 Search or 1 Playout	12 / 16 Recording + 4/1 Search or 1 Playout	32 Recording + 4/1 Search or 1 Playout
3G*	-	4 / 4 Recording + 4/1 Search or 1 Playout	-	-	8 Recording + 4/1 Search or 1 Playout	12 Recording + 4/1 Search or 1 Playout	-	16 Recording + 4/1 Search or 1 Playout	- / 24 Recording + 4/1 Search or 1 Playout	12 / 16 Recording + 4/1 Search or 1 Playout	32 Recording + 4/1 Search or 1 Playout
Video Standards SDI											
HD/SD	HD video conforms to SMPTE 292M, SMPTE 274 720p video conforms to SMPTE 296M SD video conforms to SMPTE 259M										
3G	3G video conforms to SMPTE 424M / SMPTE 425M										
Interface monitor	HDMI™ duplicates main monitor	2 (mini DP, HDMI™)	2 (DVI, HDMI™)	3 (HDMI™, DP)	3 (HDMI™, DP)	2 (DVI, HDMI™)	4 (via Display Port)	4 (via Display Port)	4 (via Display Port)	4 (via Display Port)	4 (via Display Port)
Referee output for broadcast***	HD SDI	No	HD SDI	HD SDI	HD SDI	HD SDI	HD SDI	HD SDI	HD SDI	HD SDI	HD SDI
Multiviewer	Up to 4/6/10 video windows. 2 Layouts	Up to 6/10 video windows. 2 Layouts	Up to 6/10 video windows. 2 Layouts	Up to 10/14 video windows. 2 Layouts	Up to 10 video windows. 2 Layouts	Up to 14 video windows. 2 Layouts	Up to 18 video windows. 2 Layouts	Up to 18 video windows. 2 Layouts	Up to 26 video windows. 2 Layouts	Up to 18 video windows. 2 Layouts	Up to 34 video windows. 2 Layouts
Gesture control (Touch screen monitor is provided by user. Recommended: liyama multi-touch monitor)	Embedded touch screen monitor	No	No / No / Embedded touch screen control	No	No	No	Yes***	Yes***	Yes***	Embedded touch screen control	Embedded touch screen control
Referee workplaces. (Each additional WP is equipped with vR-Control console)	1	1 / 1	1 / 1 / 1	1 / 1	1	1	1 + 1***	1 + 1***	1 + up to 3***	1 + 1*** Referee, Replay Operators, Assistant	1 + up to 3*** Referee, Replay Operators, Assistant
Separate engineering workplace	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Audio Inputs	2 embedded audio channels per video channel (embedders are not included)										
Audio Outputs	2 built-in speakers or headphones	MB audio output / HDMI™	MB audio output / HDMI™	MB audio output / DP / HDMI™	MB audio output / DP / HDMI™	MB audio output / HDMI™	MB audio output / DP	MB audio output / DP	MB audio output / DP	MB audio output / DP	MB audio output / DP
Internal storage	SSD	SSD	HDD / SSD	SSD	SSD	HDD/SSD	HDD/SSD	HDD/SSD	SSD	SSD	SSD
Storage capacity	2 / 4 / 8 TB 21 / 42 / 84 hrs. Full HD video	6 / 12 TB 66 / 133 hrs. Full HD video	8 TB 84 hrs. Full HD video	6 / 12 / 24 / 36 TB 66 / 133 / 266 / 400 hrs. Full HD video	6 / 12 / 24 / 36 TB 66 / 133 / 266 / 400 hrs. Full HD video	12 TB 128 hrs. Full HD video	16 / 32 TB HDD or 8 / 16 / 32 TB SSD 84 / 168 / 336 hrs. Full HD video	16 / 32 TB HDD or 8 / 16 / 32 TB SSD 84 / 168 / 336 hrs. Full HD video	16 / 32 TB 168 / 336 hrs. Full HD video	8 TB 84 hrs. Full HD video	16 / 32 TB 168 / 336 hrs. Full HD video
Scoreboard Interface****	External / PiP from any camera	Yes / PiP from any camera	External / PiP from any camera	Yes / PiP from any camera	Yes / PiP from any camera	Yes / PiP from any camera	Yes / PiP from any camera	Yes / PiP from any camera	Yes / PiP from any camera	Yes / PiP from any camera	Yes / PiP from any camera
Compression											
Recording	I-Frame DCT Based										
Export formats	M2TS; MPEG-4 (*.mp4); H264 (*.mp4); DVD XDCAM 50 (*.mxf) (only for HD)										

Parameters	Jr.2 / Jr.4 / Jr.8	R-4 / R-8	B / 8B / 8F	SR / SRIII	SR 3G	VHL 2G`	4 / 4A	4G	V / VG	ST	FC	
Controls	Specialized Jog/Shuttle controllers vR-Control (via RS-232 /RS-485 / USB / Ethernet), keyboard, mouse. ***specialized keyboard videoReferee®-Keypad	Built-in controller with 51 RGB illuminated push buttons and Jog/Shuttle controllers	Specialized Jog/Shuttle controllers vR-Control (via RS-232 /RS-485 / USB / Ethernet), keyboard, mouse. ***specialized keyboard videoReferee®-Keypad				Specialized Jog/Shuttle controllers vR-Control (via RS-232 / RS-485 / USB / Ethernet), Specialized keyboards videoReferee®-Keypad, keyboard, mouse.					
Referee buttons	No	No	Yes for 8F 3pcs.: Green (mark events); Red (intercom control); Blue (timer control). Via USB connection.	No	No	No	No	No	No	Yes, 3pcs. Green (mark events); Red (intercom control); Blue (timer control). Via USB connection.		
Additionally	Ability to network with slomo.tv servers									Ability to network with slomo.tv servers Own virtual offside lines, Referee intercom integration		
Data exchange	1 GbE (Network);	1 GbE (Network); high-speed SD card reader	1 / 10 GbE (Network); Built-in trayless/toolless 3.5" SATA HDD Rack	1 GbE (Network); USB 3.0 / eSATA (External HDD Box), high-speed SD card reader		1 GbE (Network); Built-in trayless/toolless 3.5" SATA HDD Rack; USB 3.0/eSATA (External HDD Box)			10 GbE (Network); USB 3.0; Built-in 3.5" SATA HDD Rack			
Built-in DMR™ RACK	–	–	1	–	–	1	1	1	1	1	1	
Maximum distance of connections	SDI 110m; Control up to 3m; HDMI™ up to 5m	SDI 110m; 3G-SDI 90m; Control up to 150m; HDMI™ / DP up to 5m	SDI 110m; Control up to 150m; DVI / HDMI™ up to 5m	SDI 110m; Control up to 150m; DVI / HDMI™ up to 5m	SDI 110m; 3G-SDI 90m; Control up to 150m; HDMI™ / DP up to 5m	SDI 110m; 3G-SDI 90m; Control up to 150m; DVI / HDMI™ up to 5m	SDI 110m; Control up to 150m; DP up to 5m	SDI 110m; 3G-SDI 90m; Control up to 150m; DP up to 5m	SDI 110m; 3G-SDI 90m; Control up to 150m; DP up to 5m	SDI 110m; 3G-SDI 90m; Control up to 150m; DP up to 5m	SDI 110m; 3G-SDI 90m; Control up to 150m; DP up to 5m	
Control from HQ via Internet	No					Yes						
Power Consumption	120 W	100 W	120 W	100 W	100 W	350 W	350 W / 120 W	350 W	350 W	350 W	350 W	
Power	110V/60Hz or 220V/50Hz											
Redundant PWR Supply	No	No	Yes***	Yes***	Yes***	Yes***	Yes. Included in basic configuration	Yes. Included in basic configuration	Yes. Included in basic configuration	Yes. Included in basic configuration	Yes. Included in basic configuration	
Chassis	All-in-one with Monitor	Ultra-compact devise incorporated into standard replay console	2U, 19"	1U, 19"	1U, 19"	4U, 19"	4U, 19" / 2U, 19"	4U, 19"	4U, 19"	4U, 19"	4U, 19"	
Dimensions (H x W x L) mm	430 x 557 x 196	150 x 263 x 282	88 x 482 x 512	44 x 483 x 403	44 x 483 x 403	176.5 x 484 x 591	176.5 x 484 x 591 / 88 x 482 x 512	176.5 x 484 x 591	176.5 x 484 x 591	176.5 x 484 x 591	176.5 x 484 x 591	
Weight Kg	7.6	3.75	14	5.6	5.6	27.7 / 19.5	27.7 / 14	27.7	19.5	19.5	19.5	

Notes:
* – 3G SDI Level A, Level B support.
** – additional license.
*** – optional.
**** – Supported: Westerstrand, Nautronic NTPult, Nautronic NAUCON-1000, Bodet, Omega Saturn, Megalux, NataInfo, Victory, VITA, Araneus–NGLight, ElTablo, Stramatel, Colosseo, CEDR, Favero Console-700.