

videoReferee® vR 2110

Technical Characteristics



Parameters	videoReferee® vR 2110
Video Inputs	
SMPTE2110	2 (QSFP28)
Total Video Inputs	
	Up to 32
Video Formats	
	1920 x 1080 / 50i; 1920 x 1080 / 59.94i 1920 x 1080 / 29.97PsF; 1920 x 1080 / 25PsF 1280 x 720 / 59.94p; 1280 x 720 / 50p 1920x1080/50p, 1920x1080/100i 1920x1080/59.94p, 1920x1080/119.88i,
	Support of 16:9 and 4:3
Simultaneous operational channels	
Recording	Up to 32
Search / playout	1 / 2 / 3 / 4 Search or 1 Playout
Video Standards	
	SMPTE 2110-20, SMPTE 2110-21, SMPTE 2110-30, SMPTE 2110-40, SMPTE 2022-7
Output for 2nd referee's monitor	
Display Port	4
Referee output for broadcast *	
	Yes
Multiviewer	
	Up to 33 video windows. 2 Layouts Option Delay Mode 3s
Gesture control **	
	Embedded touch screen control
Referee workplaces	
	1 + 3 * (each additional workstation is equipped with a remote control)
Separate workplace for an engineer	
	Yes (if there are no more than 3 Referee workplaces)
Scoreboard Interface ****	
	Yes / PIP from any camera

Parameters	videoReferee® vR 2110
Audio Inputs	
	2 embedded*** audio channels per video channel
When using mini-vR-Cam cameras	2 audio sources per camera
Audio Outputs	
	MB audio output / DP
Internal storage	
Type	SSD
Capacity	320 hours of HD video at 100 Mbps Optional: 640 hours of HD video at 100 Mbps
Compression	
Recording	I-Frame DCT Based
Export formats	M2TS; MPEG-4 (*.mp4); H264 (*.mp4); XDCAM HD422 50Mbps (*.mxf) (for HD only)
Controls	
	Specialized Jog/Shuttle controllers Control-VR (via RS-232 /RS-485 / USB / Ethernet), keyboard, mouse
Additionally	
	Ability to network with SLOMO.TV servers
Control from HQ via Internet	
	Yes
Virtual offside lines (VOL)	
	Built-in VOL SLOMO.TV, Integration with Delta-offside (Deltacast)
Referee buttons	
	Up to 4 pcs.: • Green – mark events; • Red – intercom control; • Blue – timer control. Via USB connection.
Referee intercom integration *	
	Yes Recommended: Vokkero (built-in Vokkero support with adjustable volume)

Parameters	videoReferee® vR 2110
Data exchange	
Ethernet	1/10 GbE
USB 3.0 / NAS	External file storage
DMR™ RACK	1 Built-in trayless/toolless 3.5" SATA HDD Rack
Maximum distance of connections	
SMPTE2110	Up to 10 km (depending on QSFP28)
Control	Up to 150m
DP	Up to 5m
Power	
Voltage	110V/60Hz or 220V/50Hz
Consumption	160 W
Additionally	Redundant PWR Supply *
Physical Parameters	
Chassis	2U, 19"
Dimensions (H x W x L)	88 mm × 482 mm × 512 mm
Weight	12 kg
Temperature	
Operating	+12°C to +29°C (53.6°F to 84.2°F)
Storage	+5°C to +40°C (41°F to 104°F)
Humidity	
Operating / storage	20% to 80%
Notes: * – Optional. ** – Touchscreen monitor not included. Recommended: liyama multi-touch monitor. *** – Embedders are not included. **** – Supported: Westerstrand, Nautronic NTpult, Nautronic NAUCON-1000, Bodet, Omega Saturn, Megalux, NataInfo, Victory, VITA, Araneus–NGLight, ElTablo, Stramatel, Colosseo, CEDR, Favero Console-700, Control-MC.	