

Which video delay do you need?

	Indigo SYSTEM					Vision SYSTEM			
	ViViD 3G	ViViD 3GS	ViViD 3G-20	ViViD 3GS-20	ViViD HD-40	M-VIVID100-3	M-VIVID200-2	M-VIVID400-2	M-VIVID800
Frame system	Indigo (2U, 1U, DTB)	Indigo (2U, 1U, DTB)	Indigo (2U, 1U, DTB)	Indigo (2U, 1U, DTB)	Indigo (2U, 1U, DTB)	Vision (3U)	Vision (3U)	Vision (3U)	Vision (3U)
Product type	Card	Card	Card	Card	Card	Software app	Software app	Software app	Software app
Single or dual or triple channel	Single	Single	Single	Single	Single	Triple (can be configured as single or dual channel for more outputs)	Dual (can be configured as single channel for more outputs)	Dual (can be configured as single channel for more outputs)	Single
Works with SD	●	●	●	●	●	●	●	●	●
Works with HD	●	●	●	●	●	●	●	●	●
Works with 3Gb/s	●	●	●	●	●	●	●	●	●
Works with IP (ST 2022-6, ST 2022-7, ST 2110-10, ST 2110-20 and ST 2110-21)						●	●	●	●
Video delay adjustable in	Seconds, frames, lines and pixels	Seconds, frames, lines and pixels	Seconds, frames, lines and pixels	Seconds, frames, lines and pixels	Seconds, frames, lines and pixels	Frames	Frames	Frames	Frames
Maximum SD delay (in seconds)	5.5 secs (625 line) 4.5 secs (525 line)	5.5 secs (625 line) 4.5 secs (525 line)	110 secs (625 line) 91 secs (525 line)	110 secs (625 line) 91 secs (525 line)	238 secs	4 secs (625 line) 3.33 secs (525 line)	8 secs (625 line) 6.67 secs (525 line)	16 secs (625 line) 13.33 secs (525 line)	32 secs (625 line) 26.67 secs (525 line)
Maximum SD delay (in frames)	137 frames	137 frames	2750 frames	2750 frames	5950 frames (625 line) 7132 frames (525 line)	100 frames per channel	200 frames per channel	400 frames per channel	800 frames
Minimum SD delay	3 lines	3 lines	3 lines	3 lines	46us	8ms	8ms	8ms	8ms
Maximum HD delay (in seconds)	1 sec (1080i50, 720p50, 1080PsF23.98 and 1080PsF24) 0.8 secs (1080i59.94 and 720p59.94)	1 sec (1080i50, 720p50, 1080PsF23.98 and 1080PsF24) 0.8 secs (1080i59.94 and 720p59.94)	20 secs (1080i50, 720p50, 1080PsF23.98 and 1080PsF24) 16 secs (1080i59.94 and 720p59.94)	20 secs (1080i50, 720p50, 1080PsF23.98 and 1080PsF24) 16 secs (1080i59.94 and 720p59.94)	43 secs	4.16 secs (1080p23.98, 1080p24, 1080PsF23.98, 1080PsF24, 2048x1080p23.98, 2048x1080p24, 2048x1080PsF23.98, 2048x1080PsF24) 4 secs (1080i50, 1080p25, 1080PsF25, 2048x1080p25, 2048x1080PsF25) 3.33 secs (1080i59.94, 1080i60, 1080p29.97, 1080p30, 1080PsF30, 2048x1080p30, 2048x1080PsF30, 2048x1080p29.97, 2048x1080PsF29.97) 2 secs (720p50) 1.66 secs (720p59.94, 720p60, 1080PsF29.97)	8.33 secs (1080p23.98, 1080p24, 1080PsF23.98, 1080PsF24, 2048x1080p23.98, 2048x1080p24, 2048x1080PsF23.98, 2048x1080PsF24) 8 secs (1080i50, 1080p25, 1080PsF25, 2048x1080p25, 2048x1080PsF25) 6.67 secs (1080i59.94, 1080i60, 1080p29.97, 1080p30, 1080PsF30, 2048x1080p30, 2048x1080PsF30, 2048x1080p29.97, 2048x1080PsF29.97) 4 secs (720p50) 3.33 secs (720p59.94, 720p60, 1080PsF29.97)	16.67 secs (1080p23.98, 1080p24, 1080PsF23.98, 1080PsF24, 2048x1080p23.98, 2048x1080p24, 2048x1080PsF23.98, 2048x1080PsF24) 16 secs (1080i50, 1080p25, 1080PsF25, 2048x1080p25, 2048x1080PsF25) 13.33 secs (1080i59.94, 1080i60, 1080p29.97, 1080p30, 1080PsF30, 2048x1080p30, 2048x1080PsF30, 2048x1080p29.97, 2048x1080PsF29.97) 8 secs (720p50) 6.67 secs (720p59.94, 720p60, 1080PsF29.97)	33.33 secs (1080p23.98, 1080p24, 1080PsF23.98, 1080PsF24, 2048x1080p23.98, 2048x1080p24, 2048x1080PsF23.98, 2048x1080PsF24) 32 secs (1080i50, 1080p25, 1080PsF25, 2048x1080p25, 2048x1080PsF25) 26.67 secs (1080i59.94, 1080i60, 1080p29.97, 1080p30, 1080PsF30, 2048x1080p30, 2048x1080PsF30, 2048x1080p29.97, 2048x1080PsF29.97) 16 secs (720p50) 13.33 secs (720p59.94, 720p60, 1080PsF29.97)
Maximum HD delay (in frames)	25 frames	25 frames	500 frames	500 frames	1075 frames (1080i50) 1280 frames (1080i59.94) 2150 frames (720p50) 2500 frames (720p59.94)	100 frames per channel	200 frames per channel	400 frames per channel	800 frames
Minimum HD delay	2 lines	2 lines	2 lines	2 lines	12us	8ms	8ms	8ms	8ms
Maximum 3Gb/s delay (in seconds)	0.5 secs (1080p50) 0.4 secs (1080p59.94)	0.5 secs (1080p50) 0.4 secs (1080p59.94)	10 secs (1080p50) 8 secs (1080p59.94)	10 secs (1080p50) 8 secs (1080p59.94)		2 secs (1080p50) 1.66 secs (1080p59.94 and 1080p60)	4 secs (1080p50) 3.33 secs (1080p59.94 and 1080p60)	8 secs (1080p50) 6.67 secs (1080p59.94 and 1080p60)	16 secs (1080p50) 13.33 secs (1080p59.94 and 1080p60)
Maximum 3Gb/s delay (in frames)	25 frames	25 frames	500 frames	500 frames		100 frames per channel	200 frames per channel	400 frames per channel	800 frames
Minimum 3Gb/s delay	2 lines	2 lines	2 lines	2 lines		8ms	8ms	8ms	8ms
Inputs and outputs can be any mixture of SDI and IP						●	●	●	●
Inputs and outputs can be mixture of ST 2022 and ST 2110						●	●	●	●
	ViViD 3G	ViViD 3GS	ViViD 3G-20	ViViD 3GS-20	ViViD HD-40	M-VIVID100-3	M-VIVID200-2	M-VIVID400-2	M-VIVID800
Includes IP gateway functionality (IP to SDI or SDI to IP)						●	●	●	●
Includes IP to IP translation functionality (network address translation, unicast to multicast address translation, setting firewall restrictions etc.)						●	●	●	●
Number of video outputs (max)	4 (3 if fibre I/O)	4 (3 if fibre I/O)	4 (3 if fibre I/O)	4 (3 if fibre I/O)	3	1 per channel (3 if configured as single channel)	1 per channel (2 if configured as single channel)	1 per channel (2 if configured as single channel)	1
Video framstore synchronisers		1		1		3	2	2	1
Reference timing		From SDI input or from SD Black and Burst or HD tri-level syncs		From SDI input or from SD Black and Burst or HD tri-level syncs		From any SDI input, or from Vision frame dual references (SD Black & Burst or HD tri-level syncs) or PTP, with reference redundancy and user options for timing source priority	From any SDI input, or from Vision frame dual references (SD Black & Burst or HD tri-level syncs) or PTP, with reference redundancy and user options for timing source priority	From any SDI input, or from Vision frame dual references (SD Black & Burst or HD tri-level syncs) or PTP, with reference redundancy and user options for timing source priority	From any SDI input, or from Vision frame dual references (SD Black & Burst or HD tri-level syncs) or PTP, with reference redundancy and user options for timing source priority
Output timing adjustments with respect to the reference		Fully adjustable using vertical and horizontal settings (vertical increments: 1 line; horizontal increments: approx. 74ns for SD, 13.5ns for HD)		Fully adjustable using vertical and horizontal settings (vertical increments: 1 line; horizontal increments: approx. 74ns for SD, 13.5ns for HD)		0 - 42ms in 0.1ms steps, 0 - 100us in 1us steps and 0 - 1us in 5ns steps (NB. Chosen sub frame timing alignment is global to all channels)	0 - 42ms in 0.1ms steps, 0 - 100us in 1us steps and 0 - 1us in 5ns steps (NB. Chosen sub frame timing alignment is global to all channels)	0 - 42ms in 0.1ms steps, 0 - 100us in 1us steps and 0 - 1us in 5ns steps (NB. Chosen sub frame timing alignment is global to all channels)	0 - 42ms in 0.1ms steps, 0 - 100us in 1us steps and 0 - 1us in 5ns steps
Passes entire video stream including embedded audio and data	●	●	●	●	●	● (when SDI or ST 2022 - no audio or data in ST 2110-20)	● (when SDI or ST 2022 - no audio or data in ST 2110-20)	● (when SDI or ST 2022 - no audio or data in ST 2110-20)	● (when SDI or ST 2022 - no audio or data in ST 2110-20)
Audio delay	Follows video	Follows video	Follows video	Follows video	Follows video	Follows video when SDI or ST 2022 (no audio with ST 2110-20)	Follows video when SDI or ST 2022 (no audio with ST 2110-20)	Follows video when SDI or ST 2022 (no audio with ST 2110-20)	Follows video when SDI or ST 2022 (no audio with ST 2110-20)
Video proc-amp (RGB and YUV lift and gain controls)	●	●	●	●					
13 test patterns						●	●	●	●
SDI signal checks	4 (input missing, video black, video frozen, input audio missing)	4 (input missing, video black, video frozen, input audio missing)	4 (input missing, video black, video frozen, input audio missing)	4 (input missing, video black, video frozen, input audio missing)		9 (video present and time present, video format, video black, video frozen, video error, audio group 1 present, audio group 2 present, audio group 3 present, audio group 4 present)	9 (video present and time present, video format, video black, video frozen, video error, audio group 1 present, audio group 2 present, audio group 3 present, audio group 4 present)	9 (video present and time present, video format, video black, video frozen, video error, audio group 1 present, audio group 2 present, audio group 3 present, audio group 4 present)	9 (video present and time present, video format, video black, video frozen, video error, audio group 1 present, audio group 2 present, audio group 3 present, audio group 4 present)
IP signal checks						● (network error, packet loss, duplicated packets, packet delay variation, count of packets ignored by app, ignored multicast packets)	● (network error, packet loss, duplicated packets, packet delay variation, count of packets ignored by app, ignored multicast packets)	● (network error, packet loss, duplicated packets, packet delay variation, count of packets ignored by app, ignored multicast packets)	● (network error, packet loss, duplicated packets, packet delay variation, count of packets ignored by app, ignored multicast packets)
Reference signal checks		● (reference missing, reference incompatible)		● (reference missing, reference incompatible)		● (reference 1 and 2 present and time present, reference 1 and 2 format, PTP master and backup clock present and time present, PTP statistics – network delay, delay variation, reference offset and sync period)	● (reference 1 and 2 present and time present, reference 1 and 2 format, PTP master and backup clock present and time present, PTP statistics – network delay, delay variation, reference offset and sync period)	● (reference 1 and 2 present and time present, reference 1 and 2 format, PTP master and backup clock present and time present, PTP statistics – network delay, delay variation, reference offset and sync period)	● (reference 1 and 2 present and time present, reference 1 and 2 format, PTP master and backup clock present and time present, PTP statistics – network delay, delay variation, reference offset and sync period)
Number of presets	16	16	16	16	16	16	16	16	16
SNMP control	Available to purchase	Available to purchase	Available to purchase	Available to purchase	Available to purchase	Complimentary	Complimentary	Complimentary	Complimentary
Relay bypass protection	● (RM67 option)	● (RM67 option)	● (RM67 option)	● (RM67 option)	● (as standard)				
Fibre I/O (for SDI over fibre)	● (FIP, FOP)	● (FIP, FOP)	● (FIP, FOP)	● (FIP, FOP)		(NB. IP only over fibre)	(NB. IP only over fibre)	(NB. IP only over fibre)	(NB. IP only over fibre)
Video delays in 2U (max)	12	12	12	12	12				
Video delays in 3U (max)						30	20	20	10
	ViViD 3G	ViViD 3GS	ViViD 3G-20	ViViD 3GS-20	ViViD HD-40	M-VIVID100-3	M-VIVID200-2	M-VIVID400-2	M-VIVID800