

Welcome to a Digital World of HD-CCTV

'1920x1080'



HDC-SD210BSS

2.2M Full HD CCTV Camera

- . Full HD(1920x1080@59.94i) Video Output
- . 3GB/s, HD-SDI(Serial Digital Interface) Type Video Output
- . Supports SMPTE Standard Mode
- . Equipped with an 10X Optical Auto Focus Zoom Lens
- . 12X Digital Zoom Function allows you to zoom up to 120X, combines with a Optical Zoom
- . Minimum Illumination : 6 Lux (ICR On Mode - F1.8 50 IRE)

HD-CCTV

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HDCAP 60S/120SH

HD Video Capture Board



- . PCI Express Interface (2.5GB/s)
- . Video Input : 2ch/4ch Respectively
- . Display & Recording :
NTSC : 60/120fps(1920x1080) Respectively
PAL : 50/100fps(1920x1080) Respectively
- . Resolution : 1920x1080, 1280x720
- . Provide SDK for Software Developers

Pillar-HD

Digital+Analog
Hybrid Software



- . Screen Rotation
- . Panorama Function
- . Change Division Mode
- . Digital Live Zoom
- . Recording
- . Live Display from Main Server
- . Search CMS and Main Server
- . Control Main Application Setup from CMS
- . Lock / Unlock
- . Backup Data
- . Move Page
- . E-MAP
- . Smart Search / POS

HD-SDI Accessories

Receiver/ Repeater/ Encoder/ Decoder/ Multi Signal Converter



HD-SDI Receiver
(SDI to DVI)



HD-SDI Repeater
(1:2)



HD-SDI Repeater
(1:8)



Digital Video Encoder
(H.264, 1920x1080)
+ Character Generator



Digital Video Decoder
(H.264, 1920x1080)
+ HDMI to SDI Converter



Multi Signal Converter
(SDI to RGB/TV/HDMI)

HD-CCTV

FULL HD CCTV CAMERA with Coaxial Cable

HD-CCTV Camera : 2.2M

2.2M HD-CCTV CAMERA

HDC-SD210BAS / HDC-PTZ210BAS

HDC-SD210BAS

- . Full HD(1920x1080 30p) video
- . 3Gb/s, HD, SD-Serial Digital Interface type video output
- . Supports all SMPTE mode : SMPTE 425M(Level A & Level B), SMPTE 424M, SMPTE 292, SMPTE 259M-C & DVB-ASI
- . High resolution video with progressive scan
- . Day & Night : Min. illumination 1Lux
Auto Switching mode at 12Lux
- . Wide Dynamic Range : Magnifying the range of AE 4 times compare to general situation - Efficiency for taking subjects which have large brightness gap.
- . Light source estimated color correction
- . Focus preset function
- . Light and sharp optical x10 zoom lens, F1.8, 2.2 with mechanical shutter
- . 1cm Wide Macro
- . High sensitivity image capture functionality
- . 4.5W at 1080 30p video input and output
- . Built-in EIS (Electronic Image stabilizer for movie)
- . Full HD bitmap OSD(16 color) .HDMI Out
- . TV out (NTSC/PAL)
- . S-Video out
- . Audio out
- . Digital sensor input
- . Remote control



SECTION	HDC-SD210BAS
Image Sensor	1/2.5" model, Primary Color CMOS, 2.2M compatible
	Movie Aspect 4:3 Approximately 0.39M pixel
	Aspect 16:9 Approximately 2.07M pixel
Total Pixel	1920(H) x 1080(V) 2.2M pixel
Effective Pixel	1920(H) x 1080(V) 2.2M pixel
Scanning System	Progressive Scan
Sync System	Internal
Horizontal Resolution	More than 600TVL
S/N ratio	More than 50db
Min. Illumination	6 Lux (F1.8/50IRE/TV=1/30sec, 1920x1080 movie)
	0.35 Lux (F1.8/50IRE/TV=1/8sec, 720x480 movie High Sensitivity mode)
Video Mode	1920x1080 30p (EIS not available), 1920x1080 15p(EIS available),
	1280x720 60p(EIS not available), 1280x720HR 30p(EIS available),
	525-HS 30p(EIS available), 525-HR 30p(EIS available),
	625-HS 25p(EIS available), 625-HR 25p(EIS available),
	VGA-HS 30p(EIS available), VGA-HR 30p (EIS available),
	* HR : Hyper Resolution mode, HS : High Sensitivity mode
	* EIS : Electric Image Stabilizer
DSS	On / Off
MIRIS	On / Off
Lens Mount	1/3.6 model, f = 4.5 - 45.0 mm, F1.8 - 2.2
Lens Control	Support DC Lens
Video Out	HDMI Out / TV Out (NTSC/PAL) / S-Video Out(Composite) / Audio Out
Av Out	Composite 1V p.p. / Audio Out
Sensor	Sensor In 2 Channels
Power Spec	12V DC \pm 2V / 500mA
Storage Temp	0°C ~ 50°C

HDC-PTZ210BAS

- . Outdoor vandal speed PTZ camera
- . Optical x10 Acute zoom module equipped
- . Installing on ceiling, wall, and pillar etc
- . 360° degree & -45° surveillance available
- . Max. speed 110° /sec
- . 63 preset, 8 tour, 4 scan and pattern available



SECTION	HDC-PTZ210BAS	
Image Sensor	1/2.5" model, Primary Color CMOS, 2.2M compatible	
	Movie Aspect 4:3 Approximately 0.39M pixel	
	Aspect 16:9 Approximately 2.07M pixel	
Lens	1/3.6 model, X10 Zoom, (4.5~45.0)mm, F1.8-2.2	
Closest Focus Distance	Wide limit : 1cm / Tele limit : 100cm (From the top of front lens)	
Min. Illumination	6 Lux(F1.8/50IRE/TV=1/30sec, 1920x1080 movie)	
	0.35 Lux(F1.8/50IRE/TV=1/8sec, 720x480 movie High Sensitivity mode)	
Pan	Range	0~360°(Endless)
	Speed	More than 100°/sec
	Preset	More than 110°/sec
Tilt	Range	-20°~90°
	Speed	More than 60°/sec
Auto Scan	Max. 4Pan Swing (2 Position Swing)	
Preset	63 Positions	
Control	RS-485/ RS-422C, Baud Rate : 2400 / 115200bps	
Structure	Die-cast all internal parts are corrosion protected epoxy powder coating	
Power	DC12V(DC11-18V) 50/60Hz 3A	
Operation Temp	Outdoor : -40°C to 55°C	
Hygrometry	30 to 90%RH (non-condensing)	
Dimension	138(pie) x 205.81(H) mm/ 3kg	

HD-CCTV Camera : 2.2M

2.2M HD-CCTV CAMERA

HDC-SD210BSS

HDC-SD210BSS

- . Full HD : 1920x1080 30p
- . Progressive Scan
- . 3.6W Video Input/Output at 1080 30p Mode
- . X10 Optical Auto Focus Zoom Lens
- . Full HD Bitmap OSD(16 Color)



SECTION	HDC-SD210BSS
Effective pixel	Approximately. 2.2M Pixel
Video Signal	HD : 1080i/59.94, 1080i/50, 720p/59.94, 720p/50i
	SD : NTSC(Crop), NTSC(Squeeze)
	PAL(Crop), PAL(Squeeze)
Lens	X10 Zoom(F1.8), (5.1~51)mm
Digital Zoom	12 times(Optical Zoom x120) Lens
Minimum Object Distance	10mm(Wide end) / 800mm(Tele end)
Min. Illumination	12 Lux(F1.8) with 50IRE / 1.0 Lux ICR On(F1.8) with 50IRE
Focus	Auto / Manual OSD (selectable)
S/N ratio	50db or more
Shutter Speed	1/2 to 1/10000sec
W/B	Auto WB / Indoor / Outdoor / One push WB / Manual WB
Gain	Auto / Manual
AE	Full Auto / Shutter First/ Iris First / Manual / Bright / Spot AE
B/C	On / Off
Gamma	Normal / Cinema Type1 / Cinema Type2
Auto ICR	On / Off (Auto / Manual)
Video output	1920x1080 59.94i/50i
Video output format	3Gb/s, HD, HD-SDI(SMPTE 425M/424M/292/259M-C)
Interface	BNC-Fe for Video
OSD	Support
Weight	450g (incl case/box type)
Dimension	65x60x140 (incl case/box type)

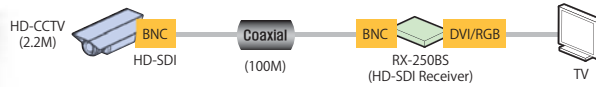
Accessories : 2.2M

HD-SDI Receiver / HD-SDI Repeater

HD-SDI Receiver : RX-250BS



This device is designed for HD CCTV camera only.
This box type HD-SDI receiver can connect to monitor directly. (BNC In & DVI Out)



- . Coaxial cable requirement for BNC connector
- 1) Impedance : 75Ω
- 2) Attenuation : 20db / less than 100M (Frequency 1GHz)

. Note
The quality and distance depends on specification of cable.
(Recommend 75Ω Coaxial and use high frequency cable that attenuation is lower at 1GHz)

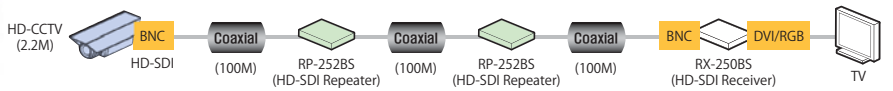
. Test cable
Coaxial cable (tested) : 5C-HFBT
Cable distance : 100m
Connection configuration

- * The distance between HD CCTV camera and receiver is up to 100M.
- * Connection of cable for receiver to TV is DIV to DVI cable and DVI to D-SUB cable.

HD-SDI Repeater : RP-252BS



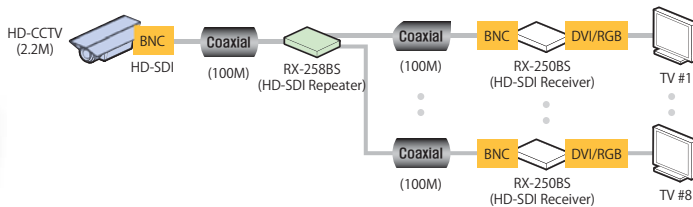
Using 'HD-SDI Repeater' extend distance more than 100M.
Receiving one HD-SDI signal and 2 output sources.



HD-SDI Repeater : RP-258BS



Receiving one HD-SDI signal and 8 output sources



HD-CCTV Capture B/D : 2.2M

HD-CCTV CAPTURE B/D

- . HD-SDI (Serial Data Interface) enable high resolution display and recording
- . HDCAP-60S recording up to 2ch Full HD video data (S/W H.264)
- . HDCAP-120SH recording up to 4 ch Full HD video data based H.264 H/W compression board (No buffering)
- . HDCAP-120SH support HDMI & VGA output, Hence, apart from basic display, the Full HD signal can be connected to PDP or LCD monitor directly

HDCAP-60S



HDCAP-60S is video capture board to support Full HD resolution of 1920x1080 up to 2 channels, and it adopts HD-SDI (Serial Digital Interface) for HD-CCTV camera input to provide Full HD and high quality of video data. HDCAP-60S helps camera to capture a wide range and detailed image with more improved image format. it gives users an advantage beyond the capability of Analog CCTV camera.

One of the merits that SDI transmission has is to transmit heavy data with no compression in comparison with IP mode which has frame loss and buffer

HDCAP-120SH

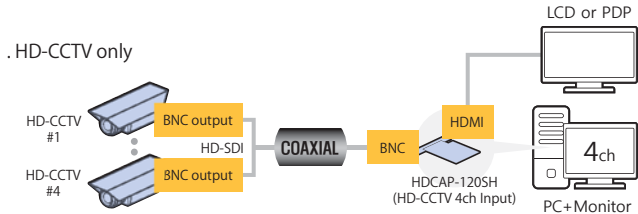


HDCAP-120SH is H.264 Video Compression Board to support Full HD resolution of 1920x1080 up to 4 channels, and it adopts HD-SDI(Serial Digital Interface) for HD-CCTV camera input to provide Full HD and high quality of video data. HDCAP-120SH helps camera to capture a wide range and detailed image with more improved image format. it gives users an advantage beyond the capability of Analog CCTV camera.

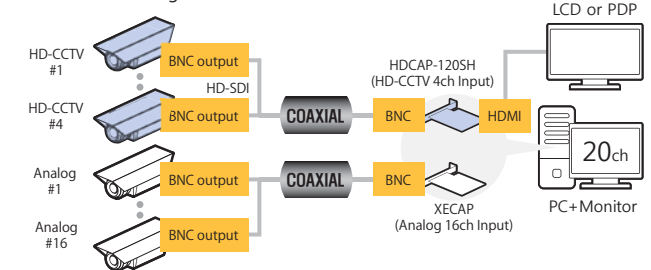
Unlike any other HDCAP series, HDCAP-120SH supports hardware compression with H.264 format. Therefore, it can display and recording 4ch(real-time with audio) images in low PC specification.

Also, HDCAP-120SH has two kinds of video input mode, which are HDMI and VGA. Following these video output functions, user can use the latest big size of PDP, LCD monitor which support Full HD resolution.

Connection Example : HDCAP-120SH



. HD-CCTV + Analog



Specification

SECTION	HDCAP-60S				HDCAP-120SH			
Dimension	148.6 x 93.9 mm				197mm(W) X 100.8mm(H)			
Weight	106 g				175 g			
Power Consumption	5.0 W				8.5 W			
PCI Interface	PCI Express 2.5Gbps				PCI Express 2.5Gbps			
Video Input	HD-SDI 2ch / HDMI 1ch				HD-SDI 4ea			
Video Input Connector	BNC 2ea / HDMI 1ea				BNC 4ea			
Video Output Connector	S-Video 1ea / RCA 1ea(TV output)				HDMI, S-Video / RCA 1ea(TV output)			
Video TV Output	1ch Full screen NTSC / PAL				4ch Full HD screen			
Zone	NTSC		PAL		NTSC		PAL	
Total Display FPS	60fps		50fps		120fps		100fps	
Recording FPS	30fps Camera	60fps Camera	25fps Camera	50fps Camera	30fps Camera	60fps Camera	25fps Camera	50fps Camera
1920x1080	60fps (2ch)	60fps (1ch)	50fps (2ch)	50fps (1ch)	120fps (4ch)	120fps (2ch)	100fps (4ch)	100fps (2ch)
1280x720	60fps (2ch)	120fps (2ch)	50fps (2ch)	100fps (2ch)	120fps (4ch)	120fps (2ch)	100fps (4ch)	100fps (2ch)
Resolution	1920x1080 / 1280x720				1920x1080 / 1280x720			
Capture Format	S/W H.264				H/W H.264			
Sensor	DIO selectable (0404/0804), Expansion available				DIO selectable(0404/0804), Expansion available			
Serial	RS-485/422(Expansion board)				RS-485/422(Expansion board)			