

HD-SDI

TRANSMISSION SOLUTION





OVERVIEW

HD SDI SOLUTION

HIGH PERFORMANCE AND COST-EFFECTIVE SOLUTION

HD-SDI TRANSMISSION WITH POWER SUPPLY FUNCTION OVER SINGLE COAXIAL CABLE

LONG DISTANCE TRANSMISSION OVER COAXIAL CABLE (HD : 200m / Full HD: 130m)

VARIOUS APPLICATION AND STABLE WORKING

COST-EFFECTIVE SOLUTION COMPARING WITH FIBER-OPTIC AND OTHER HDMI SOLUTION

EASY INSTALLATION AND MAINTANACE USING NORMAL COAX OR EXISTING COAX



1. OVERVIEW



- **HD-SDI Solution is composed of SC-HDT0801 (HDMI to HD-SDI Converter), SC-HDR0801 (HD-SDI to HDMI Converter), SC-HLR01/02 (Repeater), SC-HDP0801 (DC Converter) and SC-HDS0801 (Power Supply Unit: 48VDC).**
- **SC-HDC0801(SC-HDT0801, SC-HDR0801) is transmit HDMI signal over coaxial cable converting HD-SDI, moreover, as SC-HDR0801 supply power to SC-HDT0801 or HLR01/02 (Repeater) over same coaxial cable, it is no necessary to wire power cabling work.**
- **SC-HDR0801 can be used as repeater that extend the transmission distance of 200m per unit and also can be used with HD-SDI Camera individually . Using SC-HDP0801, it is possible to supply the power to camera over same coaxial cable without power wiring for camera**
- **SC-HLR01 is HD-SDI distance extension device which can extend the distance 200m (HD), 130m (Full HD) per each unit and using with SC-HDP0801 and SC-HDS0801, it supports power over coax also, so that, no need to wire the power cable for its working and also the camera working.**



2. FEATURES

F E A T U R E S

COST-EFFECTIVE I,

- HD-SDI TRANSMISSION AND SUPPLY POWER TO CAMERA OVER COAXIAL CABLE
- COST REDUCTION USING SINGLE COAXIAL CABLE WITHOUT POWER WIRING WORK

COST-EFFECTIVE II

- COST-EFFECTIVE SOLUTION COMPARING WITH FIBER-OPTIC OR HDMI CABLE SOLUTION

LONG DISTANCE TRANSMISSION

- HD-SDI AND POWER (12VDC) TRANSMISSION MORE THAN 200 METERS WITH NORMAL COAXIAL CABLE (RG-6)

VARIOUS APPLICATION

- HDMI TO HD-SDI, HD-SDI TO HDMI, DISTANCE EXTENSION WITH POWER OVER COAX







STABLE AND EASY MAINTENECE

- OPTIONAL UPS CONNECTION AVAILABLE
- AUTO DIAGNOSTIC FUNCTION (HD-SDI / POWER / CABLE STATUE)



3. HD-SDI LINE UP & SPECIFICATION

● HD-SDI LINE UP

<p>HDMI to HD-SDI Converter [SC-HDT0801]</p>	<p>HD-SDI to HDMI Converter [SC-HDR0801]</p>	<p>HD-SDI Repeater [SC-HLR01]</p>
 <p>SC-HDT0801 HDMI to HD-SDI Converter</p>	 <p>SC-HDR0801 HD-SDI to HDMI Converter</p>	 <p>SC-HLR01 Repeater</p>
<p>HD-SDI Repeater [SC-HLR02]</p>	<p>Voltage Down Converter : DC48V => DC12 [SC-HDP0801]</p>	<p>POWER SUPPLY-DC48V [SC-HDS0801]</p>
 <p>SC-HLR02 Repeater</p>	 <p>SC-HDP0801 48 -12V DC Converter</p>	 <p>SC-HDS0801 48VDC Power Supply</p>



3. HD-SDI LINE UP & SPECIFICATION



SC-HDT0801
[HDMI to HD-SDI Converter]

Signal In/Out	HDMI In	HDMI
	SDI Out	SDI
Connection Port	HDMI In	HDMI Connector
	SDI Out	75Ω, BNC F
	DC12V Out	2Pin T.M Block
	DC12V In	3 Pin T.M Block
Power	Power out to camera	DC12V/0.67A, 8W(MAX)
	Power In	DC12V ~ 48V(when no use power over coax function)
LED Indication	Yellow	HDMI normal in
	Green	SDI normal out
	Red	Normal: On / Abnormal: Flickering (OCP,LVO)
Power Consumption / Temperature, Humidity	Video Only	3.8W, -10℃ ~ +40℃ / 0 ~ 80%
	Body / Weight	Aluminium/202g
Case	Dimension	93(W) X 92.5(H) X 34.7(D)mm



SC-HDR0801
[HD-SDI to HDMI Converter]

Signal In/Out	SDI In	SDI, 48VDC out (Power Over Coax – When using with HDT0801, HDP0801, HLR01, HLR02)
	SDI Buffer out	SDI (Amplified signal out), 48VDC input (Power over Coax – When using with SC-HDR0801, HLR01, HLR02, HDS0801)
	HDMI output	HDMI
Power In	Power over Coax	DC+48V/1.04A
	No power over coax	DC+12V /1A~ 48V/0.5A
Transmission Distance(RG-6)	HD	200m(BELDEN 1694 220m)
	FULL HD	110m(BELDEN 1694 130m)
Connection Port	SDI In	75Ω, BNC F(Low Return Loss)
	SDI Out	75Ω, BNC F(Low Return Loss)
	HDMI Out	HDMI Connector
	Power In	3Pin T.M Block
LED	Yellow	HDMI normal out
	Green	SDI normal in
	Red	Normal: On, Abnormal: Flickering
DIP S/W (POC control)	DIP S/W_1	Not used
	DIP S/W_2(power over coax – 48VDC)	ON: POC (48VDC), OFF: no use POC
소비 전력, 온도/습도	Video Only	4.6W, -10℃ ~ +40℃ / 0 ~ 80%
ADAPTOR	In/Out/Dimension	In: ~ AC 100-240V, Out: DC+48V/1.04A ,115 x 49 x 30(mm)
기 구	Body / Weight	Aluminium/214g
	Dimension	93(W) X 92.5(H) X 34.7(D)mm



3. HD-SDI LINE UP & SPECIFICATION



**SC-HLR01
[Repeater]**

Signal In / Out	SDI In	SDI, DC48V Out (Power over Coax - using with HDT0801, HDP0801, HLR01, HLR02)
	SDI Buffer Out	SDI (Amplified signal out), DC48V In (Power over Coax – using with SC-HDR0801, HLR01, HLR02, HDS0801)
Power In	When using individually	DC+12V/0.5A (When no use Power over Coax function)
Transmission Distance (RG6)	HD	200m(BELDEN 1694 ㄱ 220m)
	FULL HD	110m(BELDEN 1694 ㄱ 130m)
Connection Port	SDI In	75Ω, BNC_F (Low Return Loss)
	SDI Out	75Ω, BNC_F(Low Return Loss)
	Power In	3Pin T.M Block
LED	Yellow	Normal: On, Abnormal: Flickering
	Green	SDI normal In
DIP S/W (POC control)	DIP S/W_1	Not used
	DIP S/W_2 (power over coax – 48VDC)	ON: POC (48VDC), OFF: no use POC
Power Cons. / Temp. / Humidity	Video Only(FULL HD)	2.5W(MAX), -10℃ ~ +40℃ / 0 ~ 80%
Case	Body / Weight	Aluminium/120g
	Dimension	78(W) X 60(H) X 25(D)mm



**SC-HLR02
[Repeater
: 1 Input / 2 Output]**

Signal In / Out	SDI In	SDI, DC48V Out (Power over Coax - using with HDT0801, HDP0801, HLR01, HLR02)
	SDI Buffer Out_1	SDI (Amplified signal out), DC48V In (Power over Coax – using with SC-HDR0801, HLR01, HLR02, HDS0801)
	SDI Buffer Out_2	SDI(amplified Signal out)
Power In	When using individually	DC+12V/0.5A (When no use Power over Coax function)
Transmission Distance (RG6)	HD	200m(BELDEN 1694 ㄱ 220m)
	FULL HD	110m(BELDEN 1694 ㄱ 130m)
Connection Port	SDI In	75Ω, BNC_F (Low Return Loss)
	SDI Out	75Ω, BNC_F(Low Return Loss)
	Power In	3Pin T.M Block
LED	Yellow	Normal: On, Abnormal: Flickering
	Green	SDI Normal
DIP S/W (POC control)	DIP S/W_1	Not used
	DIP S/W_2 (power over coax – 48VDC)	ON: POC (48VDC), OFF: no use POC
Power Cons. / Temp. / Humidity	Video Only(FULL HD)	2.5W(MAX), -10℃ ~ +40℃ / 0 ~ 80%
Case	Body / Weight	Aluminium/120g
	Dimension	78(W) X 60(H) X 25(D)mm



3. HD-SDI LINE UP & SPECIFICATION



SC-HDP0801
48 -12V DC Converter

Signal In/Out	SDI In	SDI
	SDI Out	SDI(Through Out), 48VDC In (Power over Coax – When using with HDR0801, HLR01, HLR02, HDS0801)
	Power Out	DC+12V/8W
Connection Port	SDI In	75Ω, BNC_F(Low Return Loss)
	SDI Out	75Ω, BNC_F(Low Return Loss)
	Power Out	2Pin T.M Block
LED	RED	Normal : On / Flickering: Out
Power Cons. / Temp. / Humidity	HDP0801 Only	-10℃ ~ +40℃ / 0 ~ 80%
Case	Body / Weight	Aluminium /100g
	Dimension	65.5(W) X 60(H) X 25(D)mm



SC-HDS0801
48VDC Power Supply

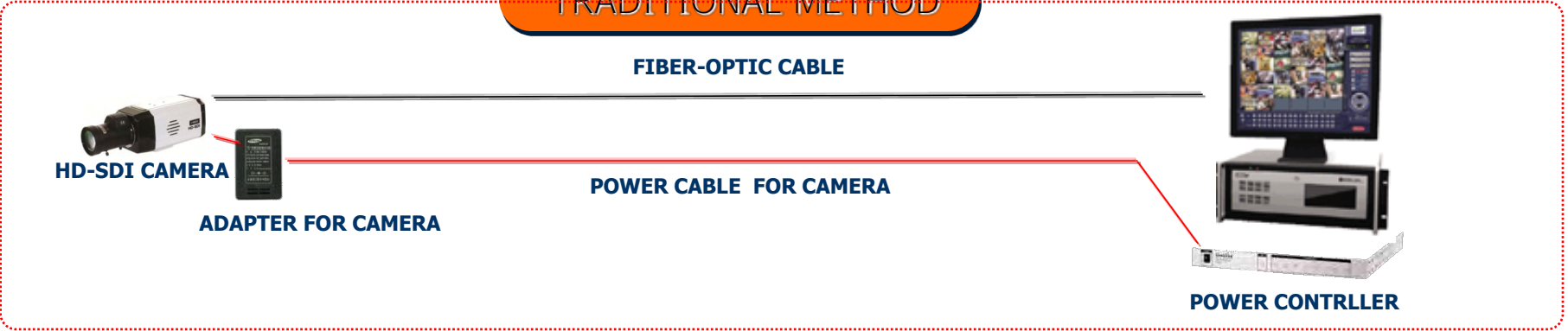
Signal In/Out	SDI In	SDI, 48VDC In (Power over Coax – When using with HDR0801, HLR01, HLR02, HDS0801)
	SDI Out	SDI(Through Out)
	Power In	DC+48V/1.04A
Connection Port	SDI In	75Ω, BNC_F(Low Return Loss)
	SDI Out	75Ω, BNC_F(Low Return Loss)
	Power Out	2Pin T.M Block
LED	RED	Normal : On / Flickering: Out
Power Cons. / Temp. / Humidity	HDS0801 Only	-10℃ ~ +40℃ / 0 ~ 80%
Adaptor	In / Out / Dimension	In: ~ AC 100-240V, Out: DC+48V/1.04A , 115 x 49 x 30(mm)
Case	Body / Weight	알루미늄 / 100g
	Dimension	65.5(W) X 60(H) X 25(D)mm



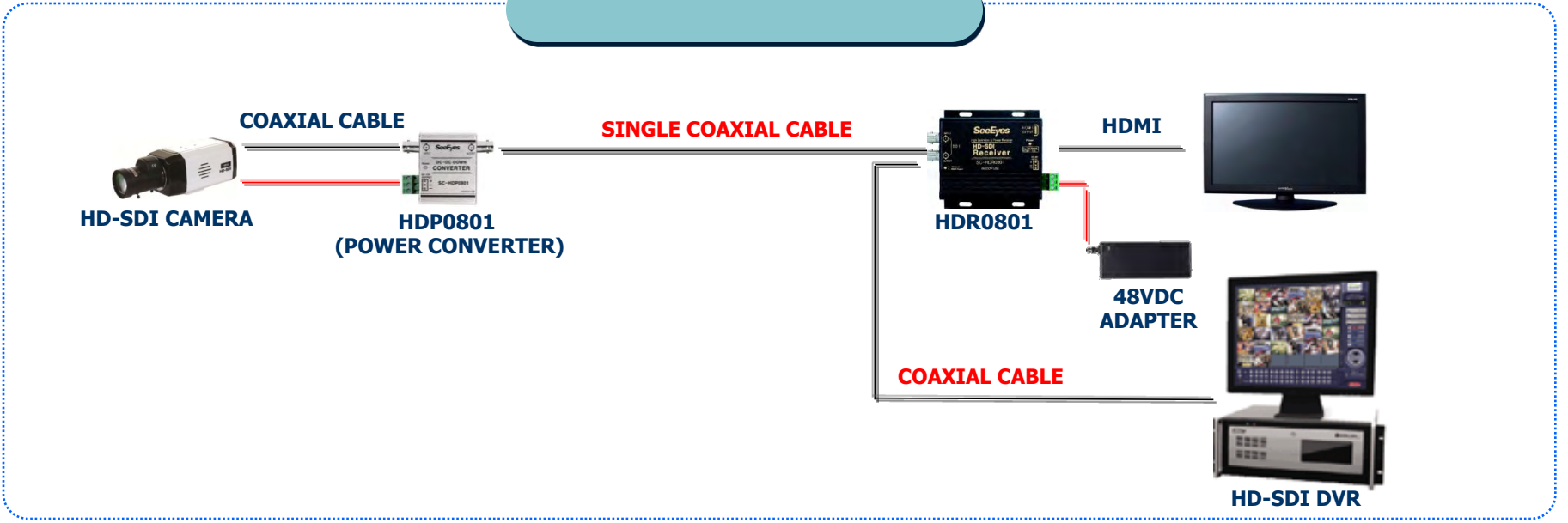
4. ADVANTAGE OF PRODUCT

4-1. HDMI SIGNAL AND POWER TRANSMISSION OVER SINGLE COAXIAL CABLE

TRADITIONAL METHOD



NEW METHOD

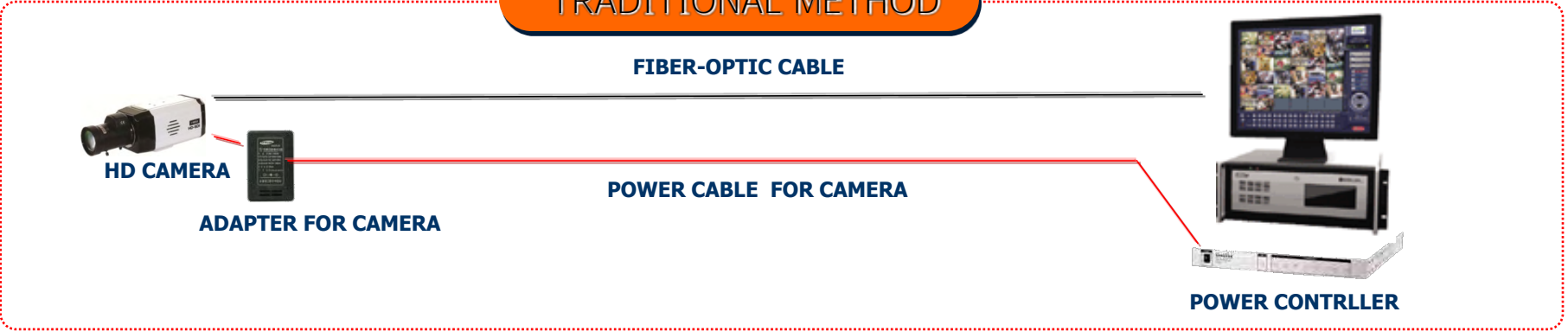




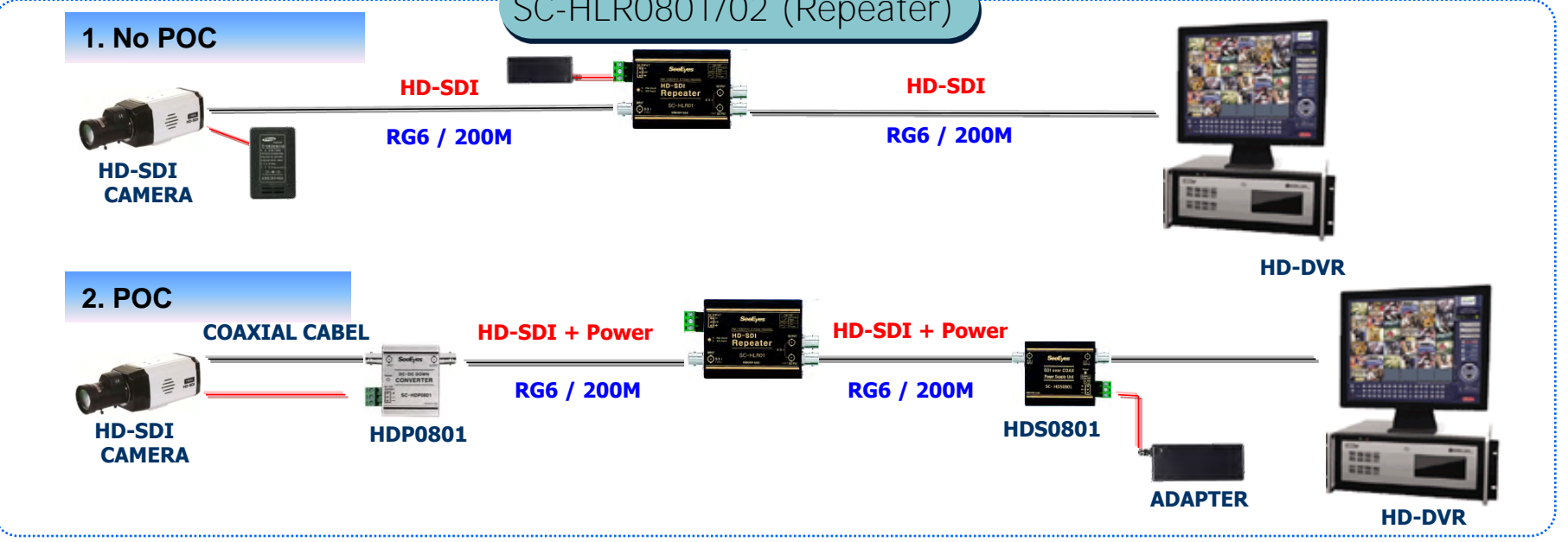
4. ADVANTAGE OF PRODUCT

4-2. HD-SDI AND POWER TRANSMISSION OVER SINGLE COAXIAL CABLE

TRADITIONAL METHOD



SC-HLR0801/02 (Repeater)

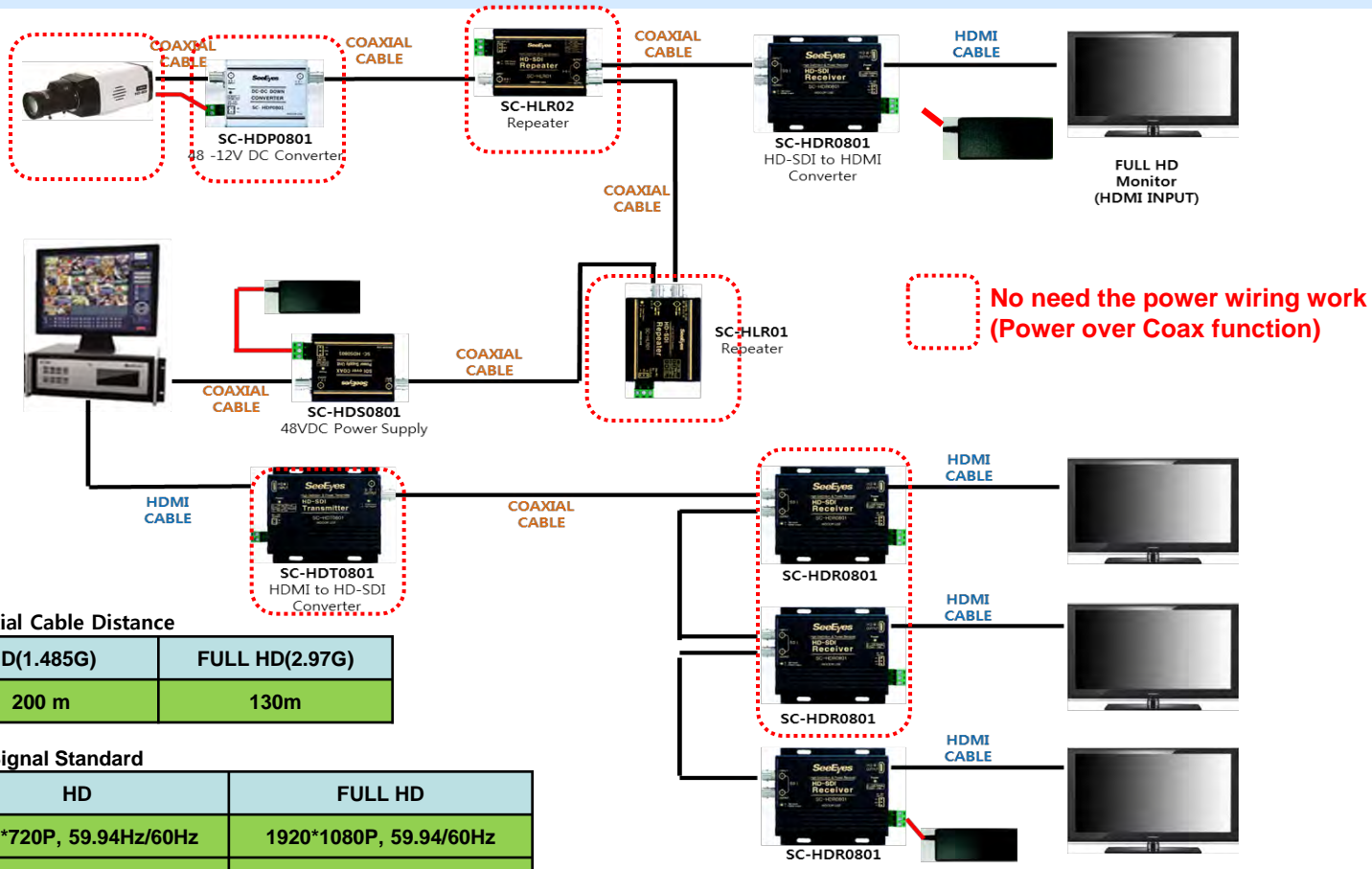




5. APPLICATION



HD-SDI COMBINED APPLICATION



■ Coaxial Cable Distance

HD(1.485G)	FULL HD(2.97G)
200 m	130m

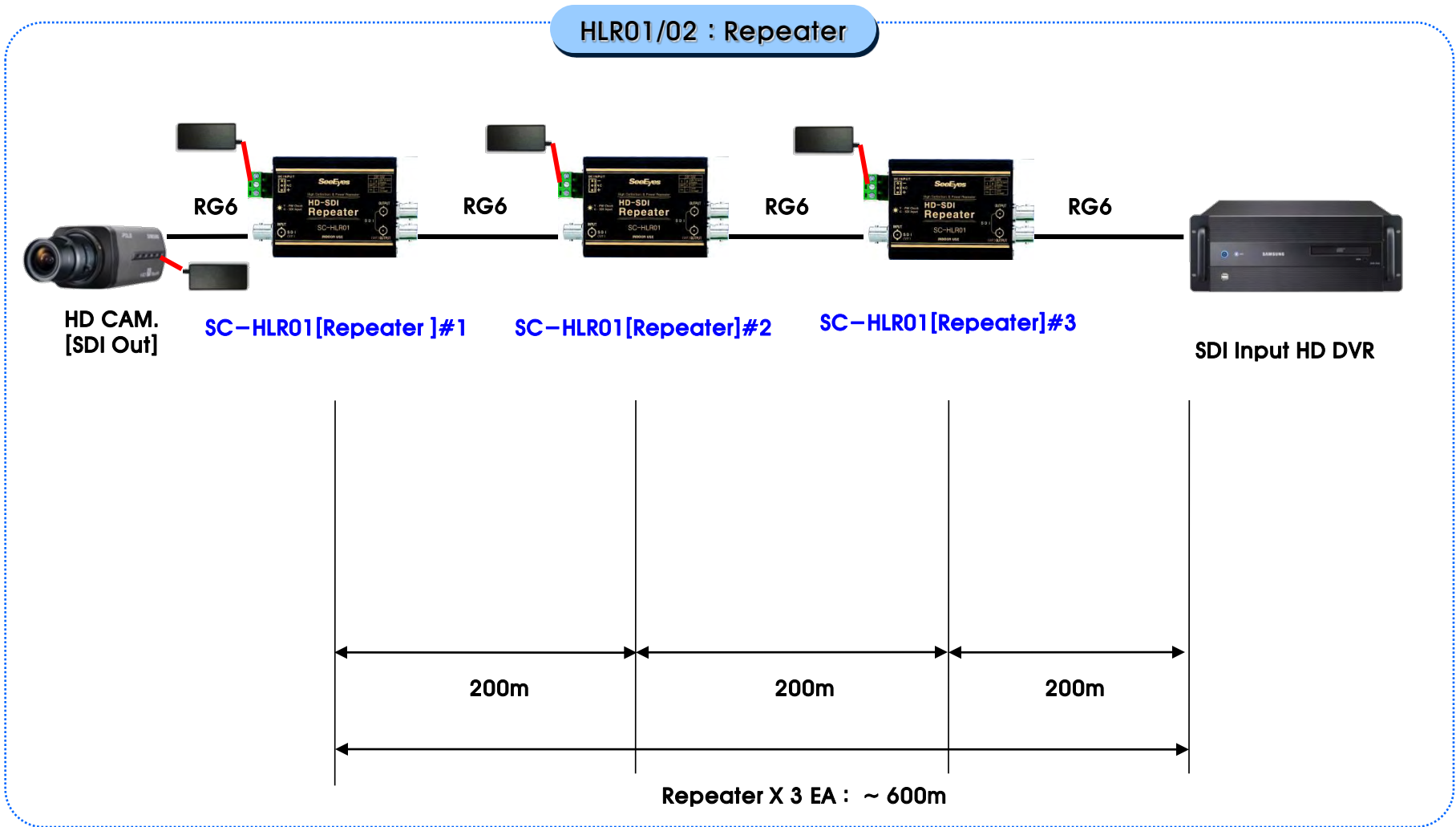
■ HD Signal Standard

HD	FULL HD
1280*720P, 59.94Hz/60Hz	1920*1080P, 59.94/60Hz
1280*720P, 50Hz	1920*1080P, 50Hz
1920*1080i, 50Hz	
1920*1080P, 29.97/30Hz	
1920*720, 60Hz	



5. APPLICATION

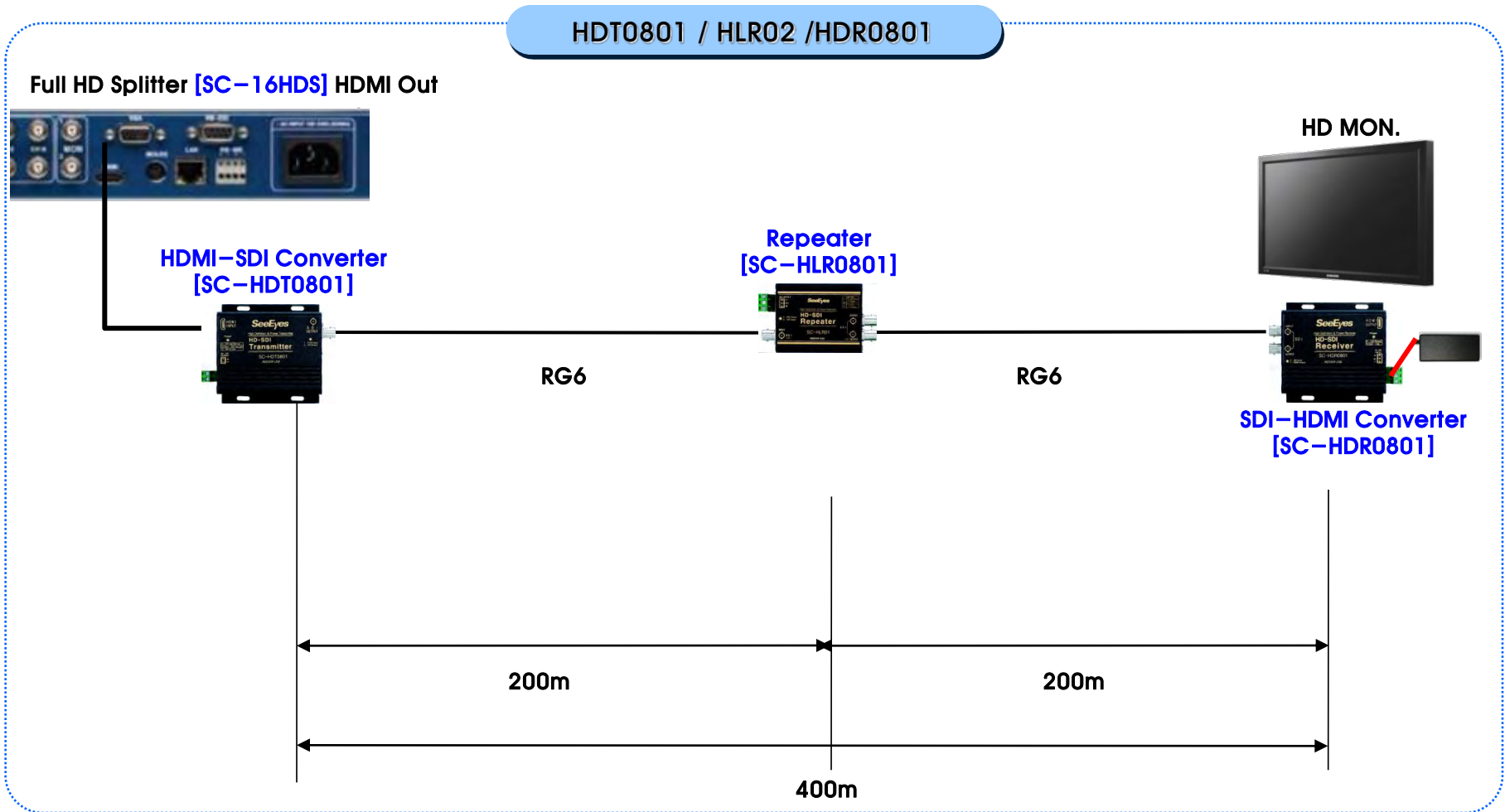
● 5-1. HD-SDI transmission distance extension





5. APPLICATION

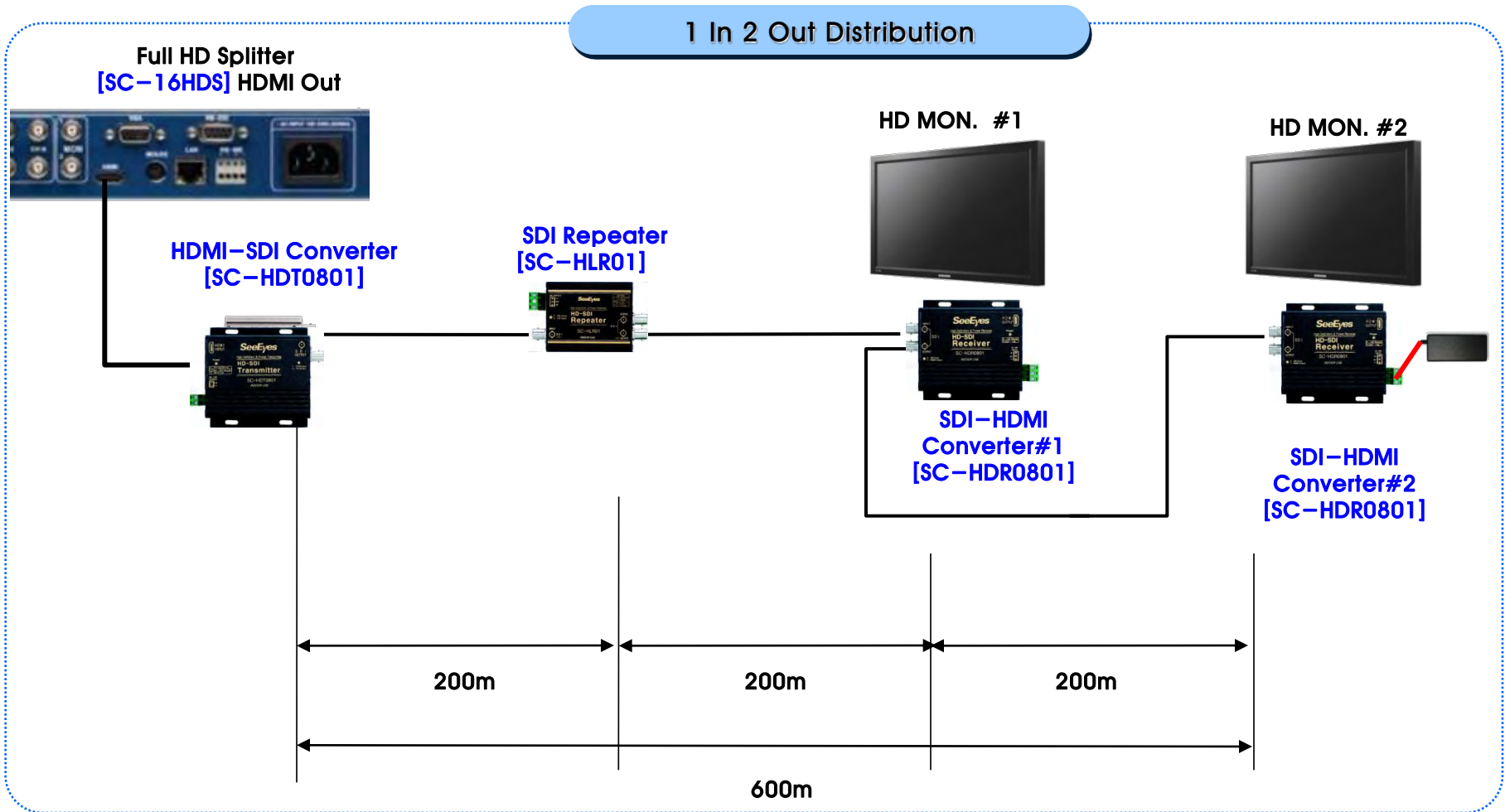
● 5-2. HDMI transmission + Distance extension + Power over Coax





5. APPLICATION

● 5-3. HDMI Transmission + Distance extension + HD Monitor#1 + HD Monitor#2





5. APPLICATION

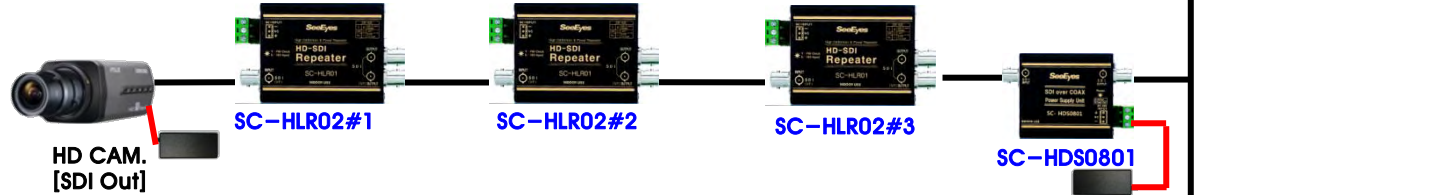
● 5-4. Practical Application [Parking Lot : over 150m]

HLR02 : Repeater

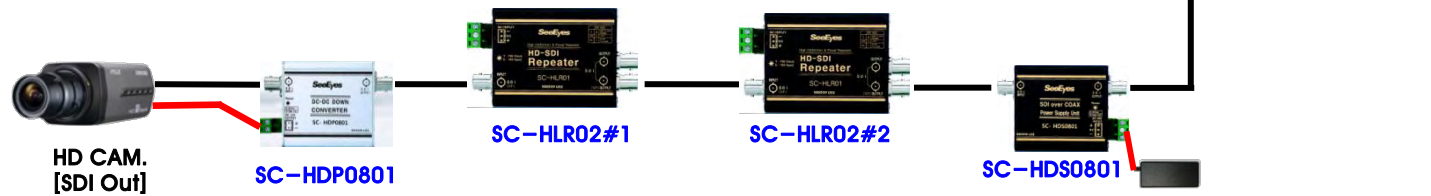
When Use separate power



Power over Coax for Repeaters (HDS0801)



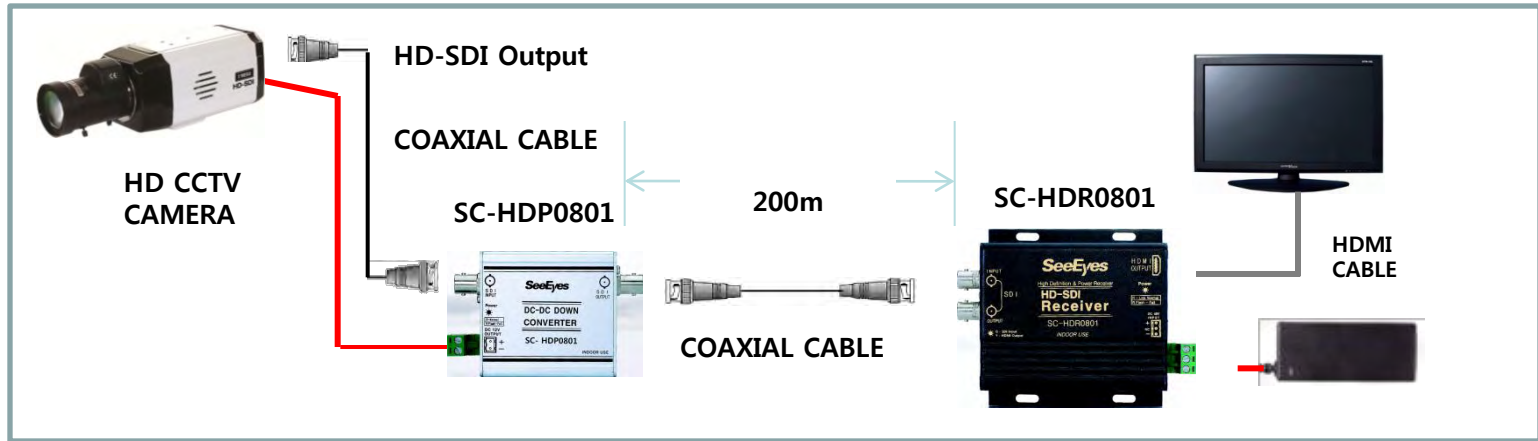
Power over Coax for Camera and Repeaters (HDP0801+ HDS0801)



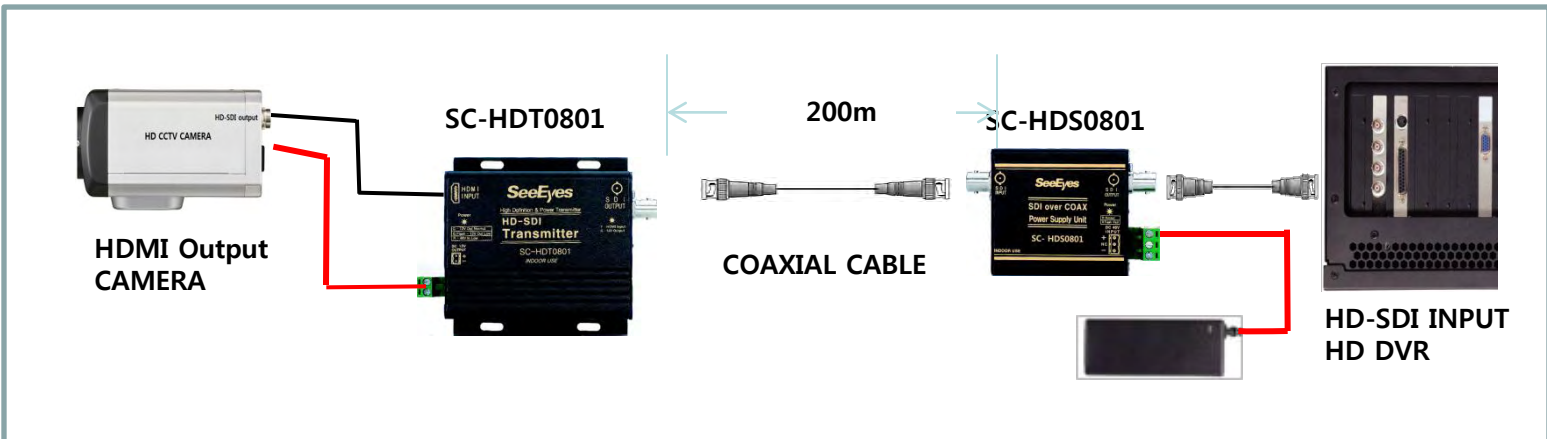


5. APPLICATION

● 5-5. HD-SDI Camera + HD Monitoring + Power Over Coax



● 5-6. HDMI Camera + HD-SDI DVR + Power Over Coax





5. APPLICATION

5-7. HD-SDI Camera + Distance extension + Power over Coax

