Data sheet

SDSC

4:4:4
18 Gbps
4K@60hz

Product: SDSC-1050
HDMI 50m Extender

Comprehensive professional HDMI/IR/POC extender pair, up to 50m CAT 6 distribution for Commercial, Education and Residential use

Digital Stream Compression

- HDCP 2.2/1.3 compliant
- 50m CAT 6/6A STP cable
- HDR 10, HDR10+, Dolby Vision, HLG
- CEC compliant
- Compact metal housing
- HDMI resolutions 4K, 2K &1080p
- HDMI 2.0 4K@60Hz, 4:4:4, 18Gbps
- Mounting brackets
- Secure DC connection
- POC (remote powering)

Distribute high resolution 18Gbps UHD HDMI video, reverse IR and remote power over a single CAT 6 screened twisted pair cable up to 50m

The **SDSC-1050** is a flexible and cost effective transmitter and receiver pair solution for extending 4K 18Gbps HDMI resolution video together with Infrared signals and POC (remote power over cable). The pair of units are supplied as a separate compact transmitter **(SDSC-TX1050)** together with its complementary compact receiver (**SDSC-RX1050).**

The **SDSC-TX1050** transmitter has a looping HDMI input allowing multiple transmitters to be cascaded together or add an extra remote display to an existing Digital Signage installation. The local HDMI loop out also provides a convenient method of monitoring the image being shown at the remote end.

The **SDSC-RX1050** receiver unit connects to the wall plate via a single Cat 6/6a cable at a distance of up to 50m. The receiver presents the video out on a single HDMI connector and allows a 12V power supply to be connected which also powers the transmitter wall plate through the Cat cable.

Owing to it compact size and low cost the **SDSC-1050** is ideal for Schools and Further Education applications but can also be used for any meeting/board/huddle room requirements.

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TECHNICAL SPECIFICATION

Video – HDMI

Connectors	HDMI (Type A)
Signal type	HDMI - TMDS
Standards	HDMI 2.0. HDCP 2.2/1.4
Maximum data rate	4.5Gbps per colour
Maximum pixel clock	340MHz
Resolution range - DTV	Max 4096x2160 @60Hz 36 bit colour depth
Resolution range - PC	Max 1920x1200 @60Hz 24 bit colour depth
Frame rate	24, 25, 30, 50 & 60 Hz
Gain	0 dB
Formats	RGB and YCrCb
Colour space	4:4:4, 4:2:2 & 4:2:0
Clock jitter	<0.15T bit
Rise time	<0.3T bit (20-80%)
Fall time	<0.3T bit (20-80%)
Maximum transmission delay	5ns (+/- 1ns)
Signal strength	TMDS +/- 0.4V pk-pk
TMDS signal level	2.9V – 3.3V
Impedance	50R
Maximum DC offset	15mV
Maximum input cable length	15m 24 AWG
Maximum output cable length	15m 24 AWG

Audio – Digital

Standards	Embedded within the HDMI signal, SPDIF
Maximum audio channels	8
Maximum sample rate per channel	192 kHz
Sample size	16-24 bits

Power & Environment

DC Voltage	External 12V PSU
DC connector	2.1mm jack with screw fitting
AC Voltage (External Supply)	100-230 VAC
AC frequency (External Supply)	50/60 Hz
Power consumption	6W (max)/1.2W (standby)
Operating temperature	0-40 degrees C
Storage temperature	-20-60 degrees C
Relative humidity	20-90%
MTBF	30,000 hours

Control – IR

Connector	3.5mm mini-jack socket
Signal type	Full duplex (via 2 connections)
Signal bandwidth	20-60KHz

Cat cable connectivity

Number of cables	1 x Cat 6/6A screened twisted pair cables
Connectors	1 x female screened RJ45 connectors per unit
Termination standard	TIA/EIA T568B
Cable requirements	Solid conductor, 24 AWG or better
Cable recommendations	400 MHz bandwidth STP (shielded twisted pair)
Transmission distance	50m shielded twisted pair STP CAT 6 or CAT 6A

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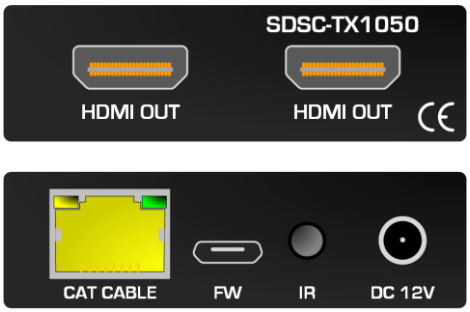
SPECIFICATION - UNITS

Transmitter

Input connector	
Digital video	2 x HDMI
Embedded audio	HDMI
Output connector	
Cat cable	RJ45 screened connector

Physical

Dimensions	88x61x18mm
Dimensions with brackets	88x95x18mm
Product weight	0.16Kg
Power	4 Watts
Connector	2.1mm DC socket - locking



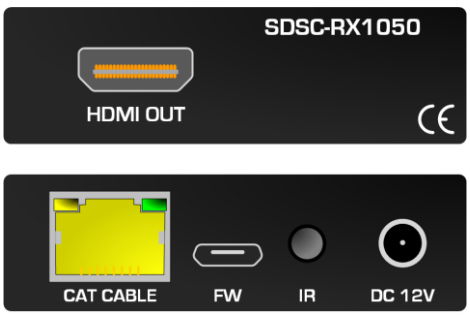
SDSC-TX1050 PANEL DRAWING

Receiver

Output connector	
Digital video	HDMI
Embedded audio	HDMI
Input connector	
Cat cable	RJ45 screened connector

Physical

Dimensions	88x61x18mm
Dimensions with brackets	88x95x18mm
Product weight	0.16Kg
Power	4 Watts
Connector	2.1mm DC socket - locking



SDSC-RX1050 PANEL DRAWING

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18 Gbps
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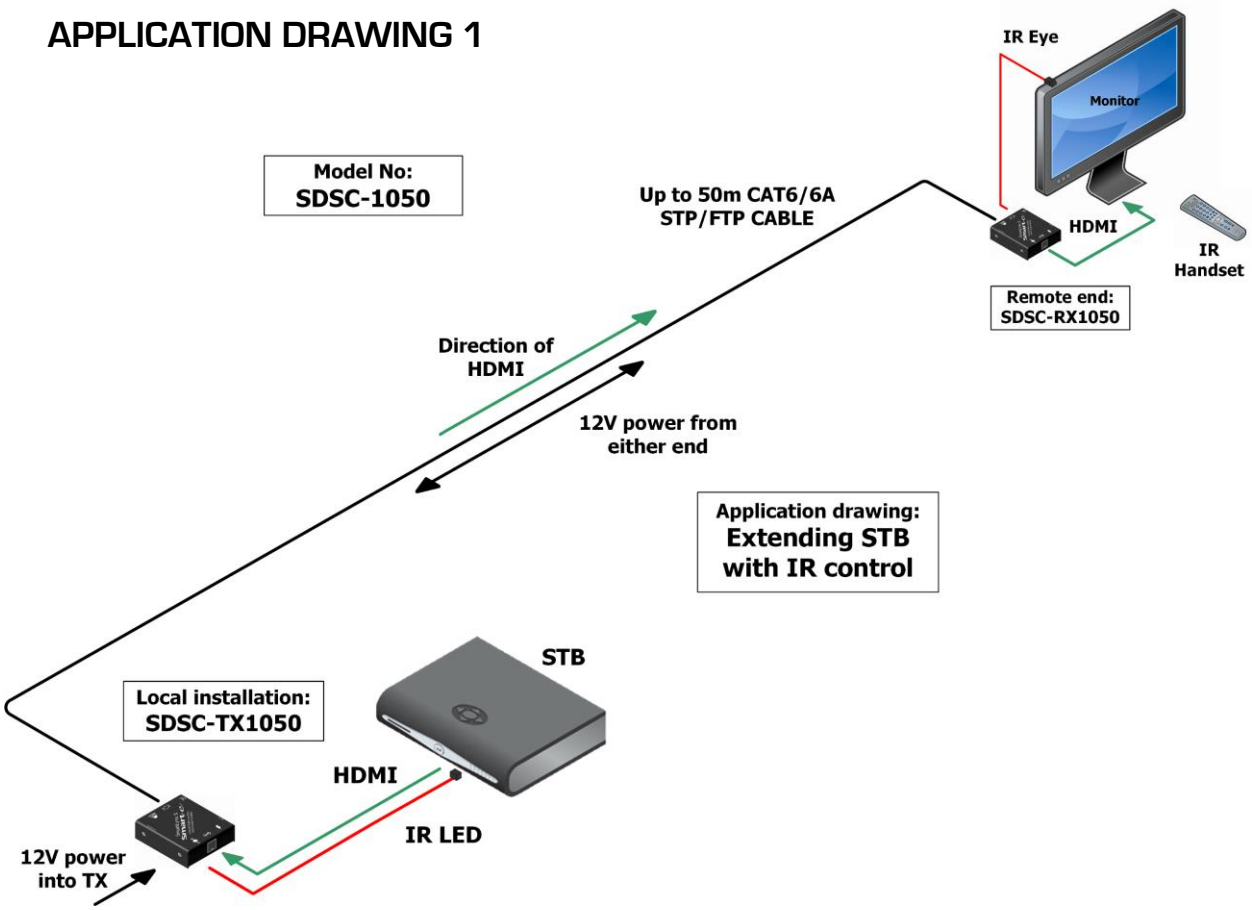
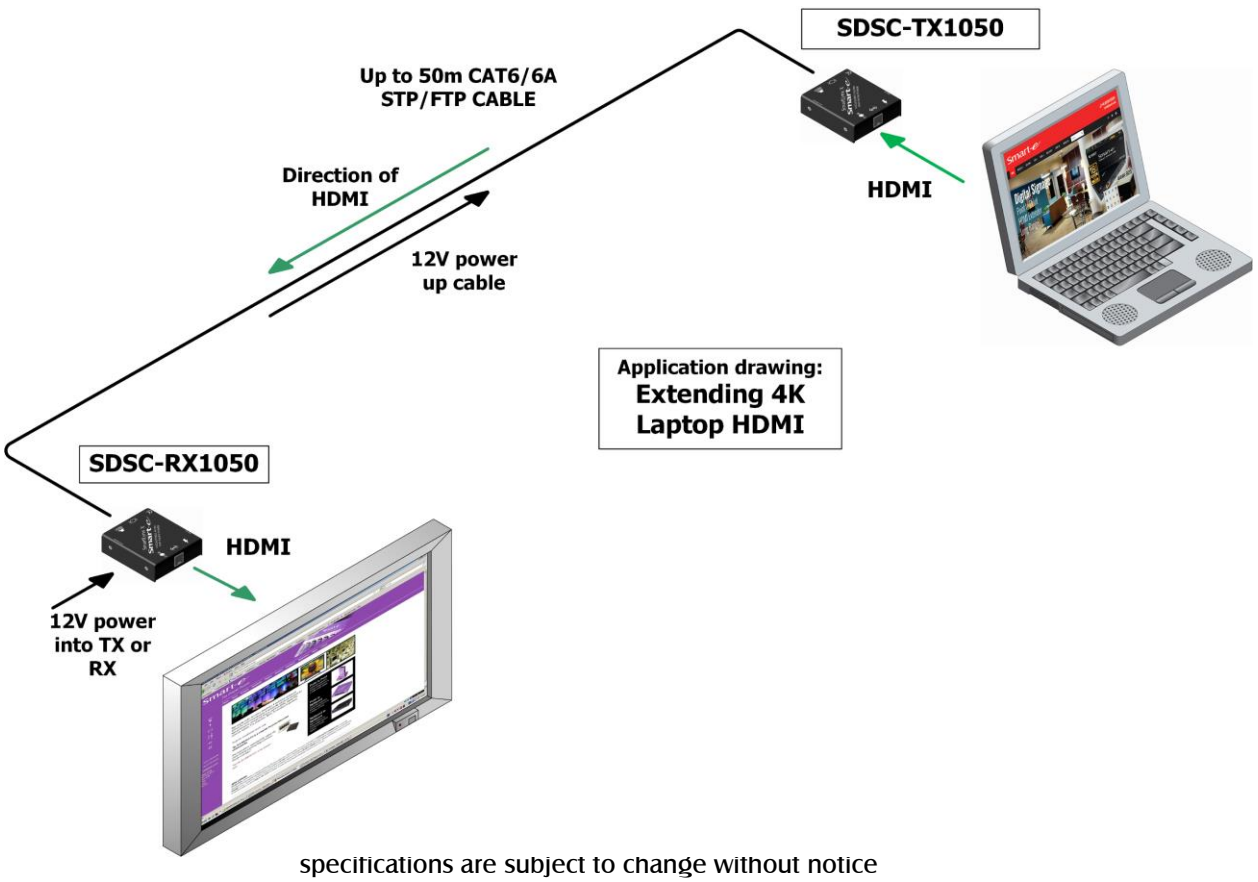
APPLICATION DRAWING 1



APPLICATION DRAWING 2



specifications are subject to change without notice

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