

**Product: SDSC-3000 USB KVM extender** 

# Flexible and comprehensive professional USB 2.0 KVM extender with CAT 6 distribution system for Commercial, Education and Residential use



- 100m CAT 6/6A STP/FTP
- Ethernet extension for 100BaseT
- Full duplex RS232 pass through
- Bi-directional IR pass through
- CEC compliant

- HDBaseT 2 USB 2.0 technology
- HDMI 2.0 4K@60Hz
- 4:4:4, 18G, HDR10, Dolby Vision Secure DC connection
- HDCP 2.2/1.4 compliant
- Digital Stream compression
- Dual USB port on receiver
- Mounting brackets
- POC (remote powering)
- Very slim profile 18mm

Distribute high resolution 4K UHD HDMI video together with USB 2.0, IR, RS232, LAN and ARC over a single CAT 6 cable up to 100m

The SDSC-3000 is a flexible and cost effective KVM extender for HDMI, USB 2.0, bi-directional IR, full duplex RS232 and LAN together with Power Over Cable (POC). Consisting of a transmitter/ receiver pair, both units are compact and come with mounting brackets. By incorporating the full HDBaseT2 technology 4K UHD HDMI signals can be transmitted up to 100m.

The KVM extender pair is capable of distributing HDMI, HDR10 signals up to 4K UHD resolutions @4:4:4 colour sub-sampling to 100m of Cat 5e-6 cable. By implementing the complete 5-Play of the HDBaseT2 specification the extender pairs also provides the pass through of wide band bidirectional InfraRed signals, full duplex RS232 up to 115Kbaud and a separate LAN port for Ethernet 100BaseT connectivity.

USB 2.0 extension is achieved by harnessing the HDBaseT2 protocol. An internal USB hub in the SDSC-RX3000 receiver allows connections of 2 peripherals, ideal for keyboard and mouse applications or any USB 2.0 devices like video camera or touch screens.

An Audio Return Channel (ARC) is available through the extender. This feature provides an audio path back from the receiver to the transmitter within the same Cat 6 cable. This audio signal can be normal stereo or surround sound thereby giving a huge improvement in sound quality rather than use the internal monitor speakers. Each unit is powered via a single 24V PSU which can also power the other remote device through the same cable. The compact size of the housings enables ease of installation together with removable mounting brackets.

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## **TECHNICAL SPECIFICATION**

Video - Digital

Connectors HDMI (Type A) input/output

Signal type **HDMI-TMDS** 

HDMI 2.0. HDCP 2.2/1.4 Standards

4.5Gbps per colour Maximum data rate

Maximum pixel clock 340MHz

Max 4096x2160 @60Hz 36 bit colour depth Resolution range - DTV Resolution range - PC Max 1920x1200 @60Hz 24 bit colour depth

Frame rate 24, 25, 30, 50 & 60 Hz

Gain O<sub>dB</sub>

**Formats** RGB and YCrCb 4:4:4, 4:2:2 & 4:2:0 Colour space

Clock jitter <0.15T bit

<0.3T bit (20-80%) Rise time Fall time <0.3T bit (20-80%)

Maximum transmission delay 5ns (+/-1ns)

Signal strength TMDS +/-0.4V pk-pk

2.9V - 3.3VTMDS signal level Impedance 50R

Maximum DC offset 15<sub>m</sub>V

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 192 kHz Maximum sample rate per channel

16-24 bits Sample size

ARC Audio output (TX) Analogue stereo & TOSLINK Analogue audio connector 3.5mm mini-jack socket

Digital connector Optical

**Power** 

DC Voltage External 24V PSU

2.1mm jack with screw fitting DC connector

AC Voltage (External Supply) 100-230 VAC AC frequency (External Supply) 50/60 Hz

Power consumption 14W (max)/1.2W (standby)

Operating temperature 0-40 degrees C Storage temperature -20-60 degrees C

Relative humidity 20-90%

165x88x18mm Dimensions (each unit)

Dimensions with brackets (each unit) 190x88x18mm

Product weight 0.5Kg

**MTBF** 30.000 hours

specifications are subject to change without notice

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## **TECHNICAL SPECIFICATION**

## Passthrough - USB

USB (Type A) input/(Type A) output Connectors

**USB** Signal type

Standards USB 2.0. 480 Mbit/s

Maximum data rate

### Passthrough - RS232

Connector 3pin Phoenix Signal type Full duplex +/-5V Signal level Baud rate 115200

Data bits 8 1 Stop bits Parity None

**Pinout** 1-TX, 2-OV, 3-RX

#### Passthrough - IR

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

20-60KHz Signal bandwidth

## 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

Solid conductor, 24 AWG or better Cable requirements

Cable recommendations 400 MHz bandwidth STP (shielded twisted pair) Transmission distance 100m shielded twisted pair CAT 6 or CAT 6A

### TX PANEL DRAWING



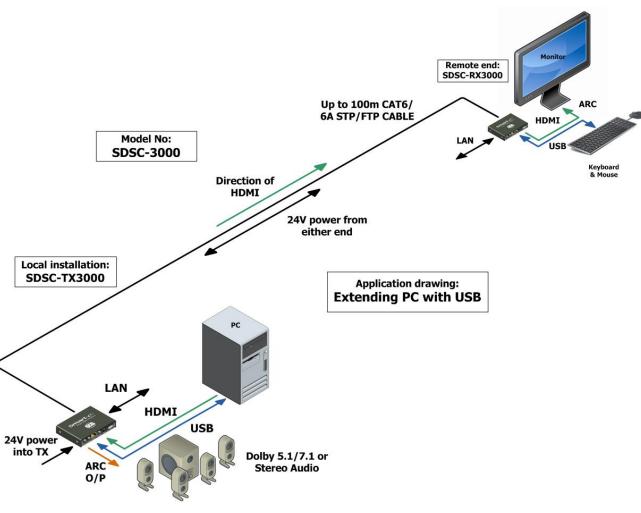




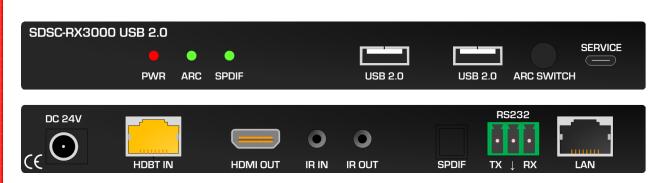
Data sheet 4:4:4 18 Gbps 4K@60hz

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# **APPLICATION DRAWING**



## **RX PANEL DRAWINGS**



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