

**Comprehensive solution for distributing 18Gbps, 444K HDMI, IR & RS232 signals over 150m of Cat 6/6A for up to 4 displays or more**



**Digital Stream  
Compression**



- HDBaseT technology
- HDMI 2.0 4K@60Hz, 4:4:4, 18Gbps
- HDR 10, HDR10+, Dolby Vision, HLG
- HDCP 2.2/1.3 compliant
- 1 - 4 HDBaseT splitter
- 150m Cat6 extension—HDBaseT
- Looping HDMI input
- RS232 pass-through
- Dolby TrueHD, DTS-HD Master Audio
- Local audio output
- Remote powers the receivers (POC)
- Lockable DC connector
- EDID management
- IR passthrough

**Transmit a single high resolution UHD HDMI signal together with IR & RS232 over a single 150m CAT6/6A cable to 4 displays**

The Smart Digital Solutions **SDSC-TX1150** is a 1 in and 4 out HDBaseT splitter capable of transmitting 1080p/4K UHD signal over 150/120m of structured cabling to 4 remote displays. Additional features include RS232 and Infrared pass-through together with local audio output. A looping HDMI input also allows multiple units to be cascaded together for installations larger than 4 displays. Extension of 18Gbps video is possible by the use of visually lossless compression, Digital Stream compression [DSC]. DSC is an international VESA standard providing a low latency, low complexity codec ideal for a 2:1 compression.

The **SDSC-TX1150** has a single HDMI input which can be connected at the rear of the unit where it gets split internally and then fed to 4 separate HDBaseT outputs. Each receiver (**SDSC-RX925**) decodes the HDBaseT protocol back to HDMI and IR/RS232. Power is provided from the transmitter through the same Cat cable so there is no need for bulky PSUs at the display end. A secure lockable DC connector on the splitter provides a reliable power connection. A local audio output is available on the transmitter together with an audio output on each receiver allows for various sound requirements

Each HDBaseT connection also allows for RS232 signals to be received back from the receiver enabling remote control of the source device. Fully HDCP 2.2 compliant this **SDSC-TX1150** compact unit is ideal for digital signage use in Education, Entertainment and Retail Market.

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**TECHNICAL SPECIFICATION****Video – Digital**

Connectors	2 x HDMI (Type A) input/output
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

**Audio – Analogue**

Standards	Stereo - unbalanced
Bandwidth	20 - 20 kHz
Connector	3.5mm stereo jack socket

**Power**

DC Voltage	External 24V PSUs
DC connector	2.1mm jack with screw fitting
AC Voltage (External Supply)	100-230 VAC
AC frequency (External Supply)	50/60 Hz
Power consumption	35W
Operating temperature	0-40 degrees C
Storage temperature	-20-60 degrees C
Relative humidity	20-90%
Dimensions	220 x 130 x 40mm
Product weight	0.5Kg
MTBF	30,000 hours

specifications are subject to change without notice

**TECHNICAL SPECIFICATION****Control – RS232**

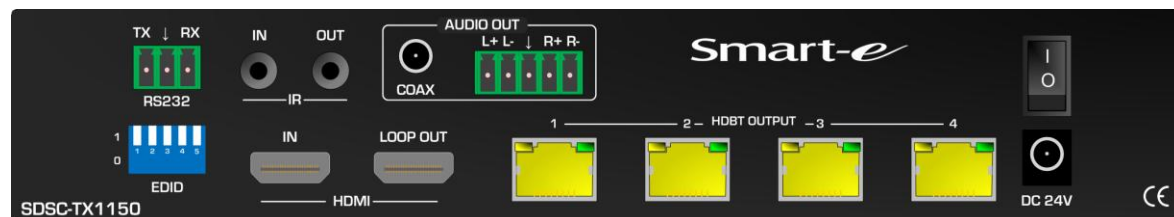
Connector	3pin Phoenix
Signal type	Full duplex
Signal level	+/- 5V
Baud rate	up to 115200
Data bits	8
Stop bits	1
Parity	None
Pinout	1-RX, 2-OV, 3-TX

**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	4 x Cat 6/6A screened twisted pair cables
Connectors	4 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	120 4K@60Hz 150m 1080p@60Hz Shielded twisted pair CAT 6 or CAT 6A

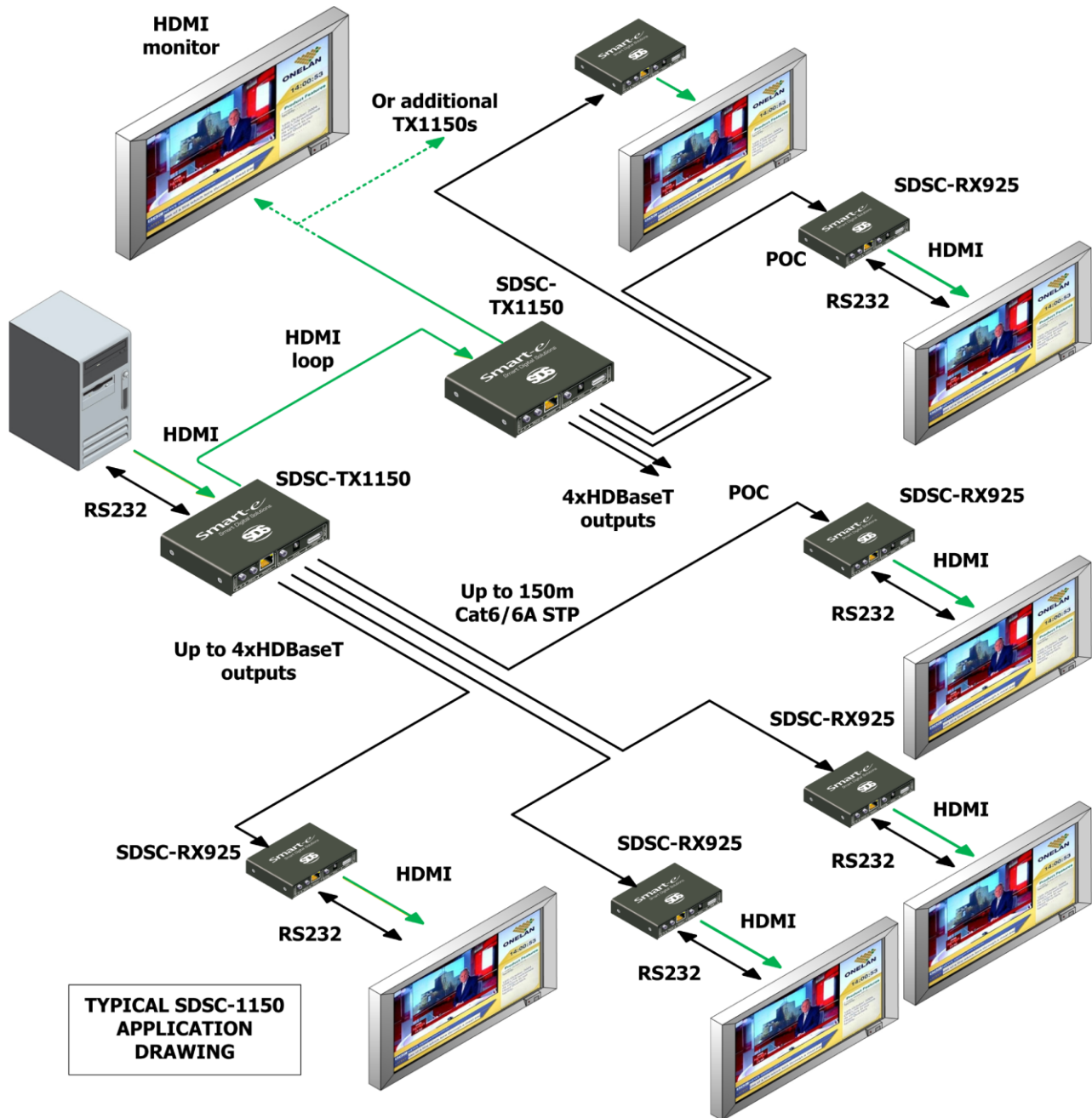
**PANEL DRAWINGS**

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## APPLICATION DRAWING



Application showing an 8 display  
configuration + a local monitor  
using the looping input feature

3 year  
WARRANTY Smart-e

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## Flexible cost-effective long range professional HDMI receiver using CAT 6/6A distribution system



- HDBaseT technology
- HDMI 2.0 4K@60Hz
- 4:4:4, 18G, HDR10, Dolby Vision
- HDCP 2.2/1.3 compliant
- Looping inputs for transmitter
- Full duplex RS232 pass through
- Bi-directional IR pass through
- 150m @1080p, 120m @4K
- Single CAT 6/6A STP/FTP
- CEC compliant
- Analogue audio out on receiver
- Secure DC connection
- POC (remote powering receivers)
- Slim profile 18mm

### Receive high resolution UHD HDMI video together with IR and RS232 over a single CAT 6 screened twisted pair cable up to 150m

The **SDSC-RX925** is a flexible and cost effective HDBaseT receiver solution for extending HDMI, bi-directional IR, full duplex RS232 together with POC (remote power over cable). The unit is very compact and comes with the IR accessories. By incorporating an extended HDBaseT technology, 4K UHD HDMI signals can be transmitted up to 120m and 1080p @60Hz video up to 150m using CAT 6/6A STP/FTP.

The **SDSC-RX925** is a HDBaseT receiver unit capable of accepting UHD HDMI signals up to 4K UHD resolutions. Implementing a special extended version of the HDBaseT specification, the extender also provides the pass through of wide band bi-directional InfraRed signals and full duplex RS232 up to 115Kbaud. Whilst POC power (24V) can be sent by either the TX or RX through the Cat 6/6A cable to provide power to the remote end. All that is required is a single Cat 6/6A cable connection to provide all these features.

The **SDSC-RX925** receiver has an analogue stereo audio output replicating the de-embedded audio from the HDMI signal.

The unit is very compact having a height of only 18mm helping to hide the units in confined spaces. Each box also has integral mounting feet for desktop use and the ability to fix right-angled brackets allowing ease of installation.



## TECHNICAL SPECIFICATION

### Video – Digital

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
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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

### Audio – Analogue

Standards	Stereo - unbalanced
Bandwidth	20 - 20 kHz
Connector	3.5mm stereo jack socket

### Power

DC Voltage	External 24V 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	9W (max)/1.2W (standby)
Operating temperature	0-40 degrees C
Storage temperature	-20-60 degrees C
Relative humidity	20-90%
Dimensions (each unit)	140x65x18mm
Product weight	0.16Kg
MTBF	30,000 hours

## TECHNICAL SPECIFICATION

### Control - RS232

Connector	3pin Phoenix
Signal type	Full duplex
Signal level	+/- 5V
Baud rate	115200
Data bits	8
Stop bits	1
Parity	None
Pinout	1-RX, 2-OV, 3-TX

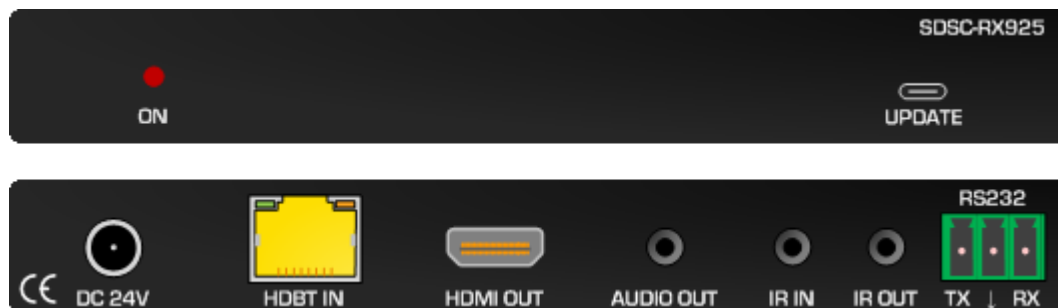
### Control - IR

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

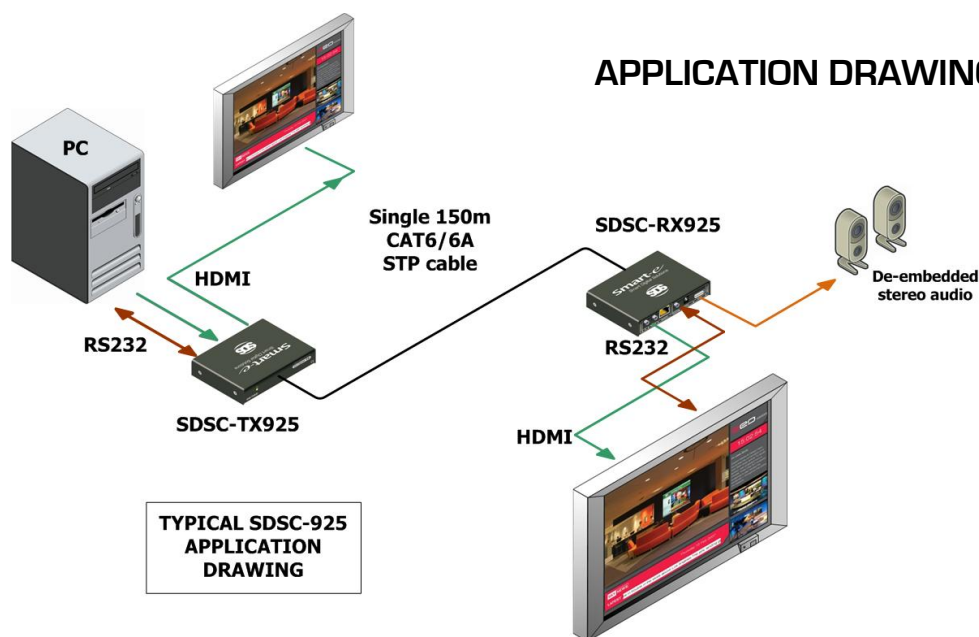
### Cat cable connectivity

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	120/ 150m shielded twisted pair CAT 6 or CAT 6A - resolution dependent

## PANEL DRAWINGS



## APPLICATION DRAWING



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