

Flexible and comprehensive professional HDMI extender with CAT 6 distribution system for Commercial, Education and Residential use



- HDBaseT technology
- HDMI 2.0 4K@60Hz
- Slim profile 20mm
- Secure DC connection
- HDCP 2.2/1.3 compliant
- 100m CAT 6/6A STP/FTP
- Removeable mounting brackets
- 100BaseT Ethernet extension

- 4:4:4, 18G, HDR10, Dolby Vision
- Full duplex RS232 pass through
- Bi-directional IR pass through
- HDMI resolutions 4K, 2K & 1080p
- 19" rack mounting kit

Distribute high resolution UHD HDMI video together with IR, RS232 and Ethernet over a single CAT 6 screened twisted pair cable to 100m

The **444K-868** is a flexible and cost effective HDBaseT pair solution for extending 18Gbps HDMI, bi-directional IR, full duplex RS232, 100BaseT Ethernet together with POC (remote power over cable). The unit is very compact and comes with the IR accessories. By incorporating the full HDBaseT technology 4K UHD HDMI signals can be transmitted up to 100m away over CAT 6/6A STP/FTP.

The **444K-868** is a pair of TX/RX HDBaseT extenders capable of transmitting UHD HDMI signals up to 4K UHD resolutions with 4:4:4 colour subsampling. Implementing the complete **5-Play** of the HDBaseT specification the receiver extender also provides the pass through of wide band bi-directional InfraRed signals and full duplex RS232 up to 115Kbaud together with 100BaseT Ethernet signals. Whilst POC power (24V) can be sent by either the TX, RX, Matrix or Splitter through the Cat 6 cable to provide power to the remote end. All that is required is a single Cat 6 cable connection to provide all these features.

A 19" rack mounting kit is available to provide a convenient method of installing multiple individual units, either transmitters or receivers for both 70m and 100m versions

The **444K-868** can connect to any other product in the **4Kconnect** range as an extender or into or out of a matrix.

The 4Kconnect range is from a family of digital extenders & matrices using standard CAT 6-8 STP cable to transmit HD signals over long distances

TECHNICAL SPECIFICATION

Video – Digital

Connectors	1 x HDMI (Type A) outputs
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

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	6W (max)/1.2W (standby)
Operating temperature	0-40 degrees C
Storage temperature	-20-60 degrees C
Relative humidity	20-90%
Dimensions (each unit)	157x88x20mm
Dimensions with brackets (each unit)	188x88x20mm
Product weight	0.5Kg
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	100m shielded twisted pair CAT 6 or CAT 6A

PANEL DRAWING

444K-TX868



444K-RX868



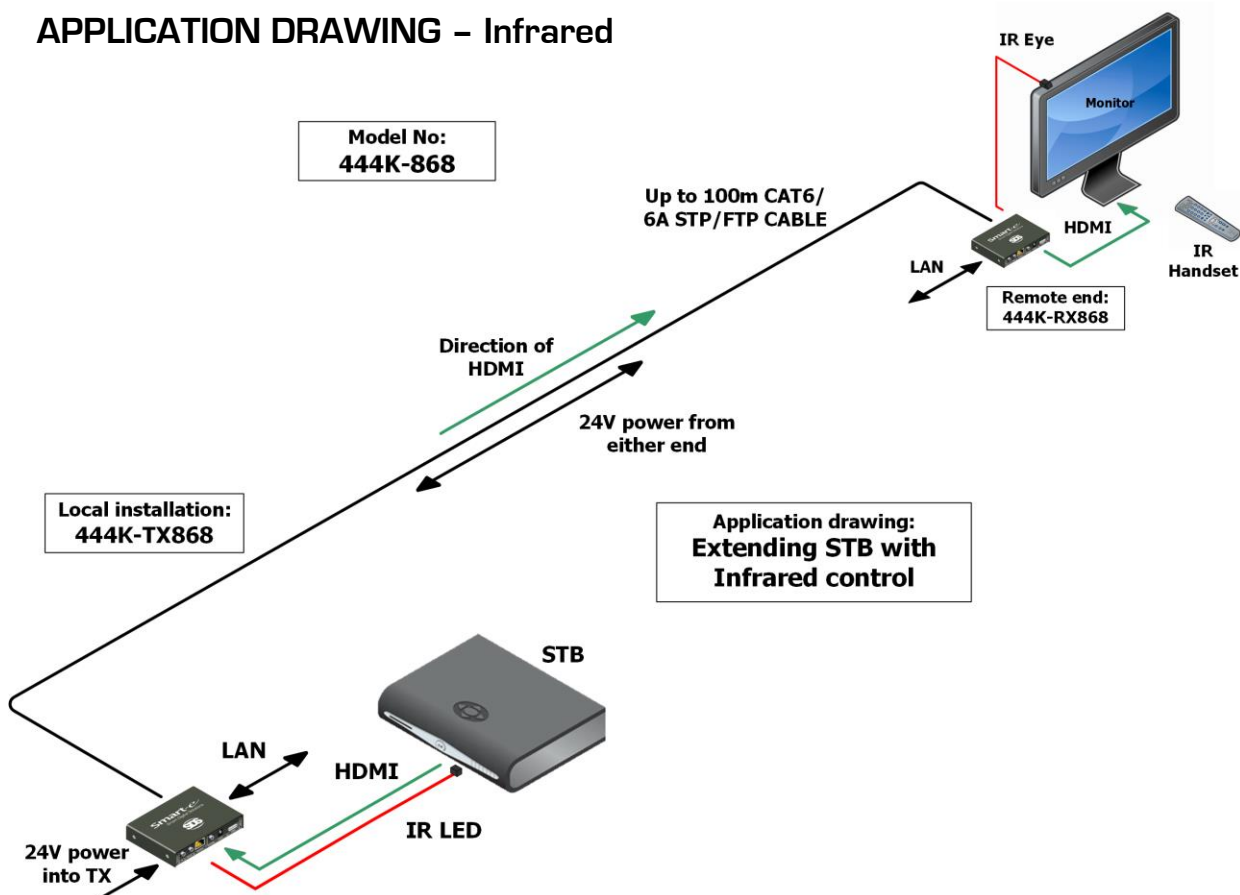
specifications are subject to change without notice

DESIGN

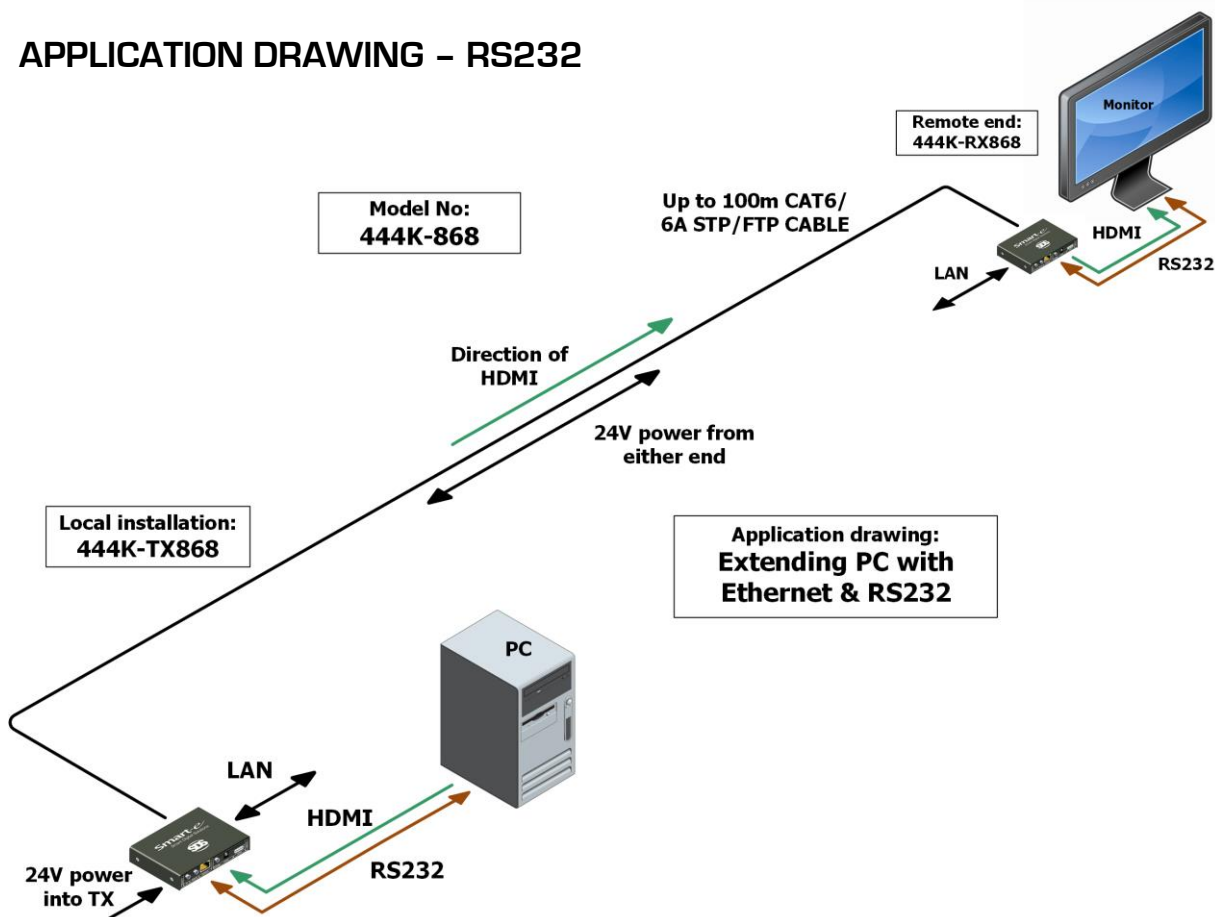
INNOVATE

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APPLICATION DRAWING – Infrared



APPLICATION DRAWING – RS232



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DESIGN

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