Data sheet





4K@60hz YUV4:4:4, 18Gbps, HDR10

Product: 444K-727 HDBaseT TX/RX

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



Distribute high resolution UHD HDMI video together with IR and RS232 over a single CAT 6 screened twisted pair cable up to 70m

The **444K-727** is a flexible and cost effective HDBaseT pair solution for extending 18Gbps HDMI, bidirectional IR, full duplex RS232 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 70m away over CAT 6/6A STP/FTP.

The **444K-727** 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 4-**Play** of the HDBaseT specification the receiver extender also provides the pass through of wide band bidirectional InfraRed signals and full duplex RS232 up to 115Kbaud. 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-727** can connect to any other product in the **4Konnect** range as an extender or into or out of a matrix.

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



Product: 444K-727 HDBaseT TX/RX

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 O 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

8

Maximum audio channels

Maximum sample rate per channel 192 kHz Sample size 16-24 bits

Power

DC Voltage External24V 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 O-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

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TECHNICAL SPECIFICATION

Control - RS232

Connector 3pin Phoenix
Signal type Full duplex
Signal level +/- 5V
Baud rate 115200
Data bits 8

Stop bits 8
Parity None

Pinout 1-RX, 2-0V, 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 $1 \times Cat 6/6A$ screened twisted pair cables Connectors $1 \times Cat 6/6A$ 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 70m shielded twisted pair CAT 6 or CAT 6A

PANEL DRAWING





specifications are subject to change without notice

DESIGN

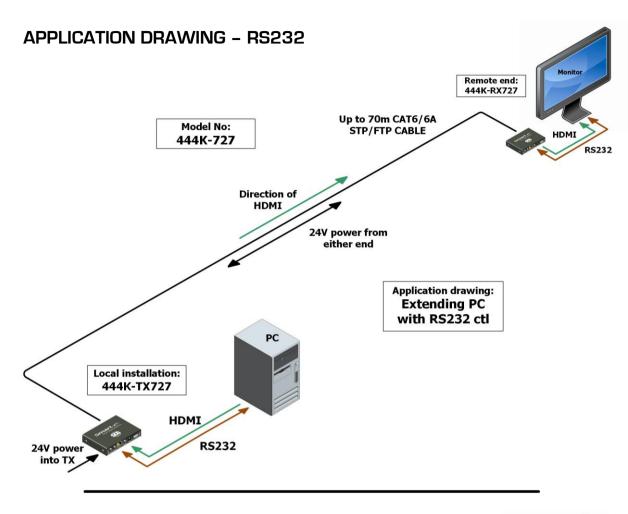
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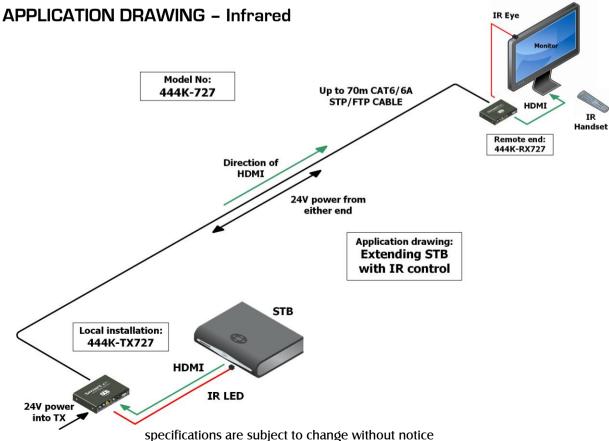
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