



45-600 Series HDMI HDBaseT™ KVMX

- HDBaseT technology with 4K resolution
- HDBaseT™ Audio supporting all standard formats
- Up to 80 km link distance
- Auto detection of HDMI resolution
- Standard USB 1.1/2.0

The 45-600 HDMI HDBaseT™ KVMX (Keyboard Video Mouse eXtender) link enables secure, remote CPU location with extended range and sustained transfer rate using a HDBaseT technology over fiber communications link for ultra-high resolution video and audio, Ethernet, Controls and USB peripheral data.

The solution offers distance of up to 80 kilometers between server and workstation, display or control room with minimal latency.

What is HDBaseT™ ?

HDBaseT is a connectivity standard for distribution of uncompressed ultra-high-definition multimedia content.

Video

HDBaseT™ delivers Ultra HD (4K2K@30Hz with YCbCr 4:4:4 and 4K2K@60Hz with YCbCr 4:2:0) formats of up to 1080p@60Hz@48 b/pixel, and 3D – to a network of devices, or over a point-to-point connection. HDBaseT™ support all key features of HDMI 2.0, including HPD, 5V, CEC, EDID and HDCP.

Audio

As with video, HDBaseT™ Audio is transparently transported directly from the HDMI chipset, thus supporting all standard formats, such as Dolby Digital, DTS, Dolby TrueHD, DTS HD-Master Audio and more.

Ethernet*

HDBaseT™ supports 100 Mbps Ethernet capabilities.

Controls

HDBaseT™ delivers a variety of multipurpose control signals, including Consumer Electronic Controls (CEC), RS-232, USB (VS2310 only), and infrared. Since HDBaseT™ also supports an Ethernet channel, IP-based control can be employed as well. This

opens up endless possibilities for equipment manufacturers, from remote device control to fully managed networks. The control plane supports additional bandwidth of up to 250 Mbps for applications requiring extra capacity.

Power**

As part of its 5Play™ feature-set, HDBaseT™ supports transmission of up to 100W of DC power over the same CATx cable.

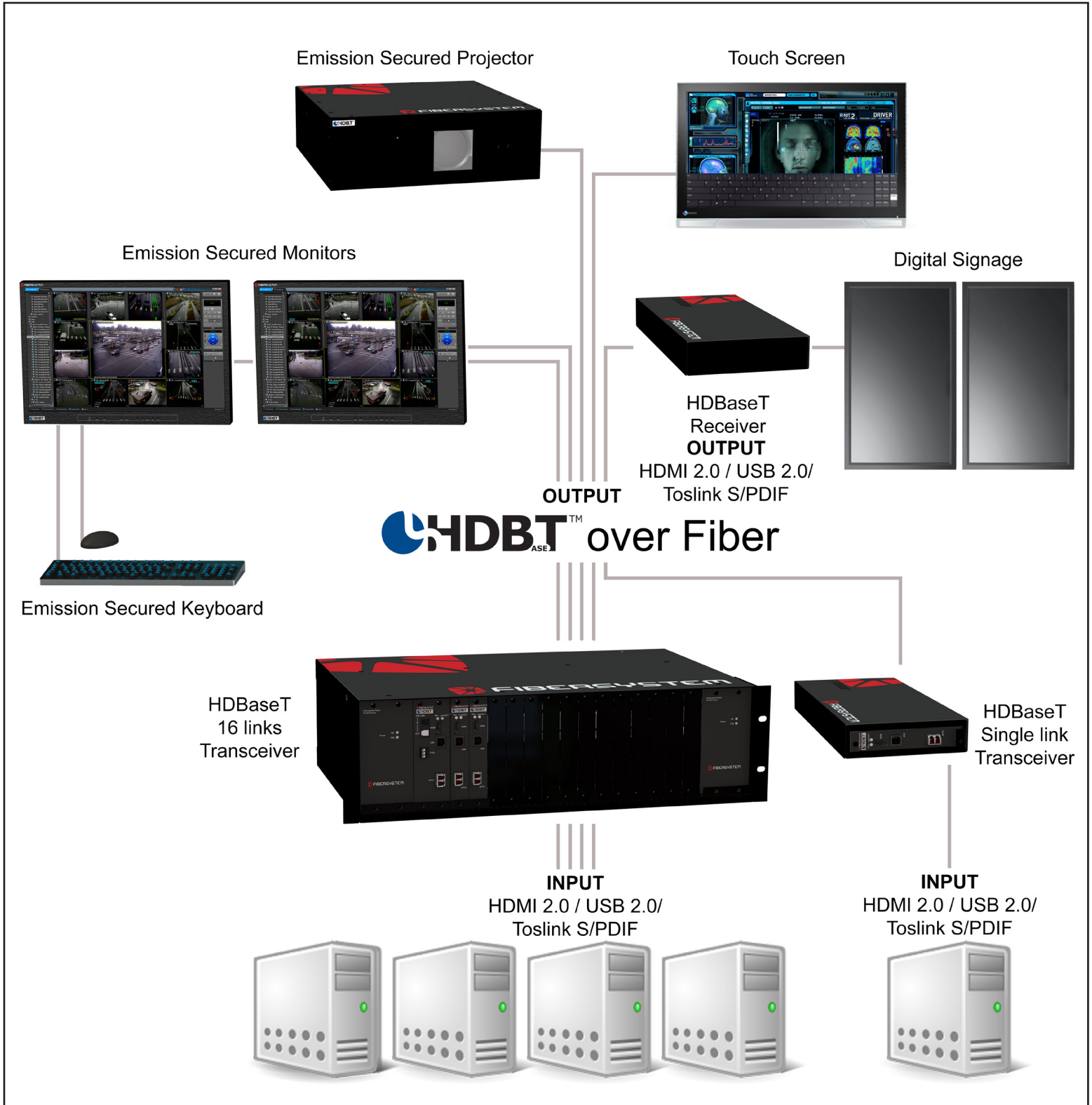
USB

HDBaseT supports native USB 2.0, and can be configurable either as USB Host or Device. USB expands the functionality supported by HDBaseT to include KVM switches (keyboard-video-mouse), touch-screen functionality, industrial PCs and USB extensions.

* Ethernet communication is not supported in the Fibersystem HDBaseT KVMX. This is a requirement when using the KVMX in an emission secured installation. Ethernet communication support can be added upon customer request.

** Power is not supported over fiber optical links

45-600 User Scenarios



Top Left/Middle: Emission secured “EMSEC” System with no Compromising Emanation signals (Swedish norm RÖS, NATO norm TEMPEST); Screens, Projector, Keyboard and Mouse.

Top Middle: Hospital installation connected to IP Class 67 Touch Screen

Top Right: Digital Signage installation

Applications



Industrial Applications

Where the console needs to be close to the process or the computers can't be fitted near the operator due to heat, dust, space constraints or other reasons.



Hospital Environment

where computers are placed in a separate location in order to maintain a healthy environment for the patients.



Emission Secured Systems

Emission secured "EMSEC" System with no Compromising Emanation signals (Swedish norm RÖS, NATO norm TEMPEST) for government organizations and companies who seek to protect their sensitive information.



Security Center

when the highest security standard and efficient connectivity over fiber optics is required.



Digital Signage

for efficient installations of Digital Signage to the highest standards.

Fibersystem HDMI HDBaseT™ KVMX with Sound and Remote Reset function

- KVM (Keyboard Video Mouse)
- Sound Toslink S/PDIF IN/OUT
- Remote Reset
- Intended to be used in the Fibersystem 19 inch Rack Solution
- 8 pcs fits into the Fibersystem 19 inch Rack Solution



Fibersystem HDMI HDBaseT™ KVMX

- KVM (Keyboard Video Mouse) IN
- Intended to be used in the Fibersystem 19 inch Rack Solution or in the One Slot Casing
- 16 pcs fits into the Fibersystem 19 inch Rack Solution



Fibersystem One Slot Casing

- Built in Power Supply



Fibersystem HDMI HDBaseT™ Receiver

- KVM (Keyboard Video Mouse)
- Sound Toslink S/PDIF IN/OUT
- Remote Reset



Fibersystem 19 inch Rack Solution

- Redundant Power Supplies

Optional

- QNX RealTime OS version 6.5.0
- HTTP-based (Web-browser) interface for configuration/ administration
- RTC (real time clock) support
- NTP (NetworkTimeProtocol) support
- SNMPv2 (SNMPv1 compatible) and Web 2.0 (json)
- interface for access of sensor data
- Logging
- Syslog

- I2C bus enabled for:
 - Fan speed
 - Current
 - Voltage
 - Temperature (three locations on the back-plane)
 - Card module slot state (Unoccupied/Occupied/Power error)



Technical Data

Fiber optic link

Wavelength 850nm/1300nm/1550nm. The fiber optic component is of type SFP, where "P" stands for "Pluggable". The type of SFP is selectable to match the distance in the application.

Fiber optical connector LC

Optical system budget Depends on type of SFP.

Typical distance The typical distance in multimode fiber is up to 300m. For single mode fiber depending on the selected type of SFP, the distance is up to 80 km.

HDMI

Video Resolution 640x480 pixels up to 4096 x 2160 pixels (4K2K@30Hz with YCbCr 4:4:4 and 4K2K@60Hz with YCbCr 4:2:0)

Connector HDMI Type A

USB

USB support USB 1.1/2.0

Connector Type B

TOSLINK (60-00-6932)

Audio Format Supports all standard formats, such as Dolby Digital, DTS, Dolby TrueHD, DTS HD-Master Audio and more.

Connectors Two (2)JIS F05 (JIS C5974-1993 F05), IN and OUT

Remote Restet (60-00-6932)

Connector Screw type terminal block, pluggable

Power Supply

AC 100VAC to 240VAC 47-440 z

AC-connector IEC 320, 3 pin

Power consumption 25W

Environmental

Temperature range Operating, +10 to +40 C C. Storage, 0 to +70 C.

Relative humidity Operating, 5 to 95 % . Storage, 5 to 95 % non condensing.

CE

Compliance EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4, EN55022

Safety EN 60950

Dimensions and Weight

Physical size (60-00-6932) 115 (H), 40 (W), 195 (D) mm
4.5 (H), 1.6 (W), 7.7 (D) inch

Physical size (60-00-6934) 115 (H), 20 (W), 195 (D) mm
4.5 (H), 0.8 (W), 7.7 (D) inch

Weight (60-00-6932) 0.25 kg / 0.55 lbs.

Weight (60-00-6934) 0.15 kg / 0.33 lbs.

Ordering information:

Partnumber	M-Number	Description
60-00-6932	M3199-994929	HDMI HDBaseT KVMX 45-600 Series: KVM, Sound Toslink IN/OUT, Remote Reset
60-00-6934	M3199-994939	HDMI HDBaseT KVMX 45-600 Series: KVM
60-00-6406	F3785-000080	One Slot Casing
60-00-6938		HDMI HDBaseT Receiver
60-00-6918	M3196-001800	19 Inch Rack Solution 50-502 Series with SNMP
60-00-6944	M3196-992819	19 Inch Rack Solution 50-502 Series without SNMP

This brochure may be subject to change without prior notice.