KVM100S

Industrial-grade KVM Signal Long Line Driver

Transmitter(TX)

Receiver(RX)

Product Features

- HDMI video signal input, HDMI+VGA dual port video output
- Support parallel cascade connection and daisy-chain stacking signal channel switch
- USB-HID protocol pass-through without third party driver

- Customizable Hot Key function channel switch
- Excellent EMC electromagnetic compatibility performance
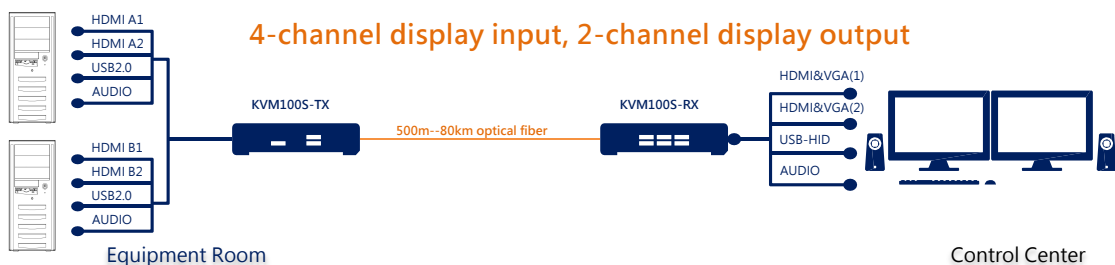- Meet the use in the high altitude environment of 5500m

Product Overview

KVM100S is a KVM signal long line driver developed for industrial automation and rail transit industry applications. Its core uses high-speed FPGA chip for signal acquisition and coding, and then uses single-mode and multi-mode optical fiber as the carrier to transmit high-definition audio and video and control signals (including USB, 3.5 mm stereo audio, HDMI video, etc.) according to optical modules with different communication distances, remote transmission and control within the range of 500 meters to 80 kilometers can be realized. The minimum working unit of KVM100S consists of a transmitter (TX) and a receiver (RX). The transmitter and receiver are designed in a compact structure, which is convenient to be installed on the operation console or in a compact space.

Transmitter (TX) Port Configuration			Receiver (RX) Port Configuration		
Category	Description	Qty.	Category	Description	Qty.
HDMI Video Input	HDMI-A physical resolution 1920*1080	2	HDMI Video Output	HDMI-A physical resolution 1920*1080	1
USB Input	USB2.0-A Socket	2	VGA Video Output	DB 15 Socket (hole) female	1
Audio Input	3.5mm Audio Socket	2	USB Input	USB2.0-A Socket	2
Fiber Interface	SFP Socket, Optional SC or LC (single and dual fiber) optical module	1	Audio Loop	3.5mm Audio Socket	1
Console Port	DB 9 Socket (pin), Equipment condition monitoring (optional function)	1	Fiber Interface	SFP Socket, Optional SC or LC (single and dual fiber) optical module	1
/	/	/	Cascade syn. switch port	RJ45	2
/	/	/	Channel Switch	Manual micro-touch button switch	1
/	/	/	Remote Switch	3.5mm Socket	1
Dimensions	210*206*44.4 mm（W*D*H）		Dimensions	210*206*44.4 mm（W*D*H）	
Power Supply	C13 Socket, AC Input 100VAC-240V AC±20%·50/60Hz				

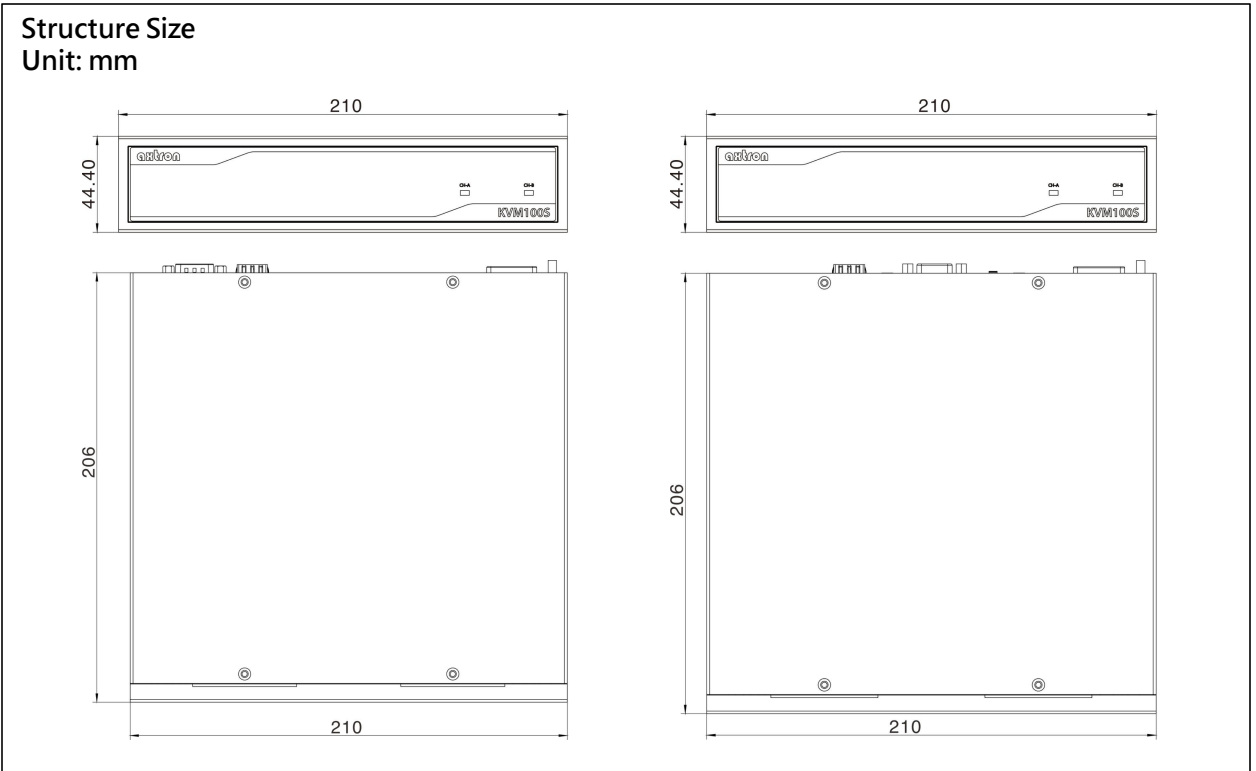| Environmental Parameters					
Operating Temperature	-25~60℃	Storage Temperature	-40~80℃	Vibration Shock	IEC 60068-2-6 1Grms
Humidity	5~95%@45℃ non-condensing	Altitude	≤5500m	MTBF	≥100000H
Product Certification	CE,FCC,KC,UL,PSE,UKCA,RoHS				

Application Scenario

4-channel display input, 2-channel display output

HDMI A1
HDMI A2
USB2.0
AUDIO

HDMI B1
HDMI B2
USB2.0
AUDIO

KVM100S-TX

500m--80km optical fiber

KVM100S-RX

HDMI&VGA(1)
HDMI&VGA(2)
USB-HID
AUDIO

Equipment Room

Control Center

KVM100S

Structure Size
Unit: mm

Transmitter (TX) & Receiver (RX) Front View

Transmitter (TX) & Receiver (RX) Rear View

Order Information: (Single-mode LC port optical module is configured by default)

Product Model	Material Number	Configuration	Fiber Interface	Optical Fiber Type	Extended Distance	Optical Fiber Requirement
KVM100S	M202300103	1U Transmitter built-in functional module * 1, Receiver * 1, preset EDID, Maximum video resolution 1920*1080, Transmitter with dual HDMI video input (internal switching function), Reveiver VGA+HDMI dual display(copy) output, Support USB-HID peripherals, AC Input	SC & LC Single fiber bidirectional	Single mode & Multi-mode	500m~80km Optional	OM4
Accessories List	HDMI-HDMI video cable（type A）*2, USB-USB type A data cable*2, 3.5mm audio signal cable (male)*2, National standard C13 plug power cord*2, Product use manual * 1, Qualified certificate * 1, Device Functional Conformance Checklist * 1, 2.5mm² WDZB-RYJyellow-green grounding wire*2, LC-LC Single-mode fiber optic patch cord*1					