

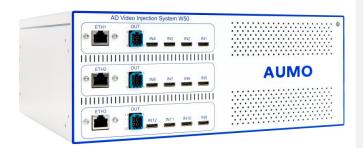
12-way In-vehicle video injection system W50

Solution for hardware of Auto Pilot DATA in the loop





12-way In-vehicle video injection system W50



I. Key parameters:

Product Introduction:

12-way In-vehicle video injection system W50, is a solution for hardware of Auto Pilot Data in Loop, is

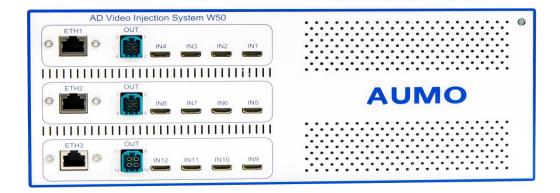
independently developed by ALINX Electronic Technology (Shanghai) Co., Ltd. It meets the requirements for inputting 12-way HDMI to 12-way GMSL2 video injection, with the characteristics of high integration, high reliability and so on. The W50 supports the simulation software to export the video signal through the HDM I cable and inject the video signal into the domain controller through the GMSL cable and carry out the auto pilot test and verification. Server level can run for a long time, support a variety of configuration use, like desktop level, HIL platform. The product has passed the joint deployment test of many vehicle manufacturers, and its performance and stability fulfil the strict requirements of the clients and get the highly recognition of the customers.

Item	Content	Item	Content
Serializer	Simulate MAX96717 / MAX96717F / MAX9295A / MAX96715	Corresponding Deserializer	Support MAX96712 / MAX9296A and so on.
GMSL Output	Support 4096×2160@30fps output	GMSL Channels	12-way GMSL video output
HDMI Input	Support 4096×2160@30fps input	HDMI Channels	12-way HDMI video input
Video format	YUV422、RAW12	Serializer rate	3G / 6G
Ethernet	Three Ethernet interfaces, support gPTP timestamp synchronization with an accuracy of less than 1m	Cable length	Under GMSL1 mode can reach 40m (3Gbps) Under GMSL2 mode can reach 20m(6Gbps)
Upgrade	Support the upgrade of PC firmware	FAKRA	4-in-1 Amphenal Z code mini-Fakra
Working temperature	0°C∼70°C	Storage temperature	-40℃~85℃
Working Humidity	10%~90%	Storage Humidity	0~90%
Power supply	220V power	Weight	2Kg
Size	Length* Width *Height: 300*120*286 (mm)	MTBF	5 years

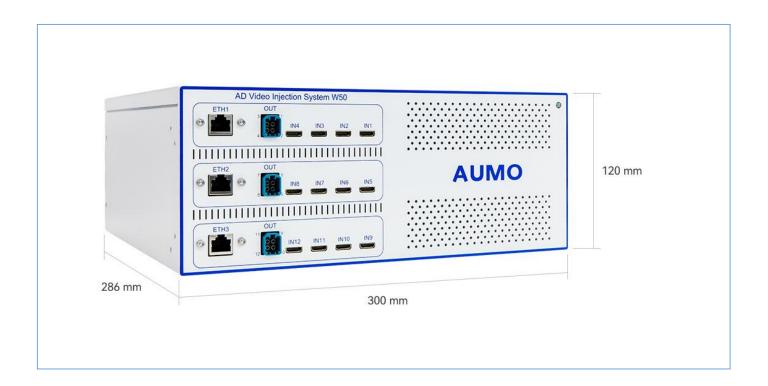


II. Interface description:

The W50 supports the software simulation to export the video signal through the HDMI cable and inject the video signal into the domain controller through the GMSL cable to carry out the auto pilot test and verification. The product has passed the joint debugging test of a number of automobile manufacturers, and its performance and stability meet the strict requirements of the client and get the full recognition of the customers.



III. Size and Structure:





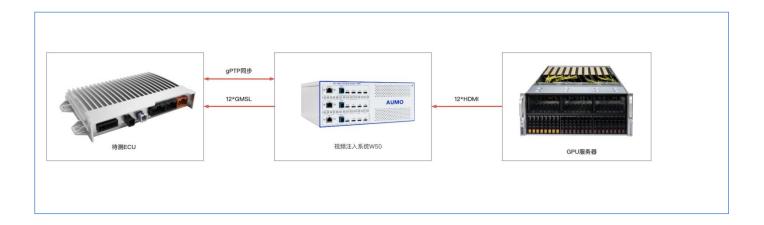


IV. Power consumption test:

Item	Power Consumption (W)	Remark
Static power consumption	21.43	
Dynamic power consumption	49.43	

V. Typical cases:

The GPU server inputs the simulation scenario to the W50 through the 12-channel HDMI interface, and the W50 analog camera data is injected into the simulation data to the ECU to be tested through the 12-channel GMSL camera interface and the Ethernet interface gPTP.





Version control:

Version	Time	Description
1.0	2023/11/10	Initial version