H3960
Vehicle Gateway

▍ *Overview*

H3960 Vehicle Gateway is an AI intelligent gateway based on high-performance multi-core 64-bit ARM processor. It realizes real-time acquisition and transmission of multi-channel HD video through 5G multi-module load balancing and bandwidth binding, and supports DSM camera and DSM fatigue driving analysis. It can also be combined with the iScan platform to provide users with a total turnkey vehicle solution.

▍ *Highlights*

Supports dual 5G FRER, as well as dual-module hot backup

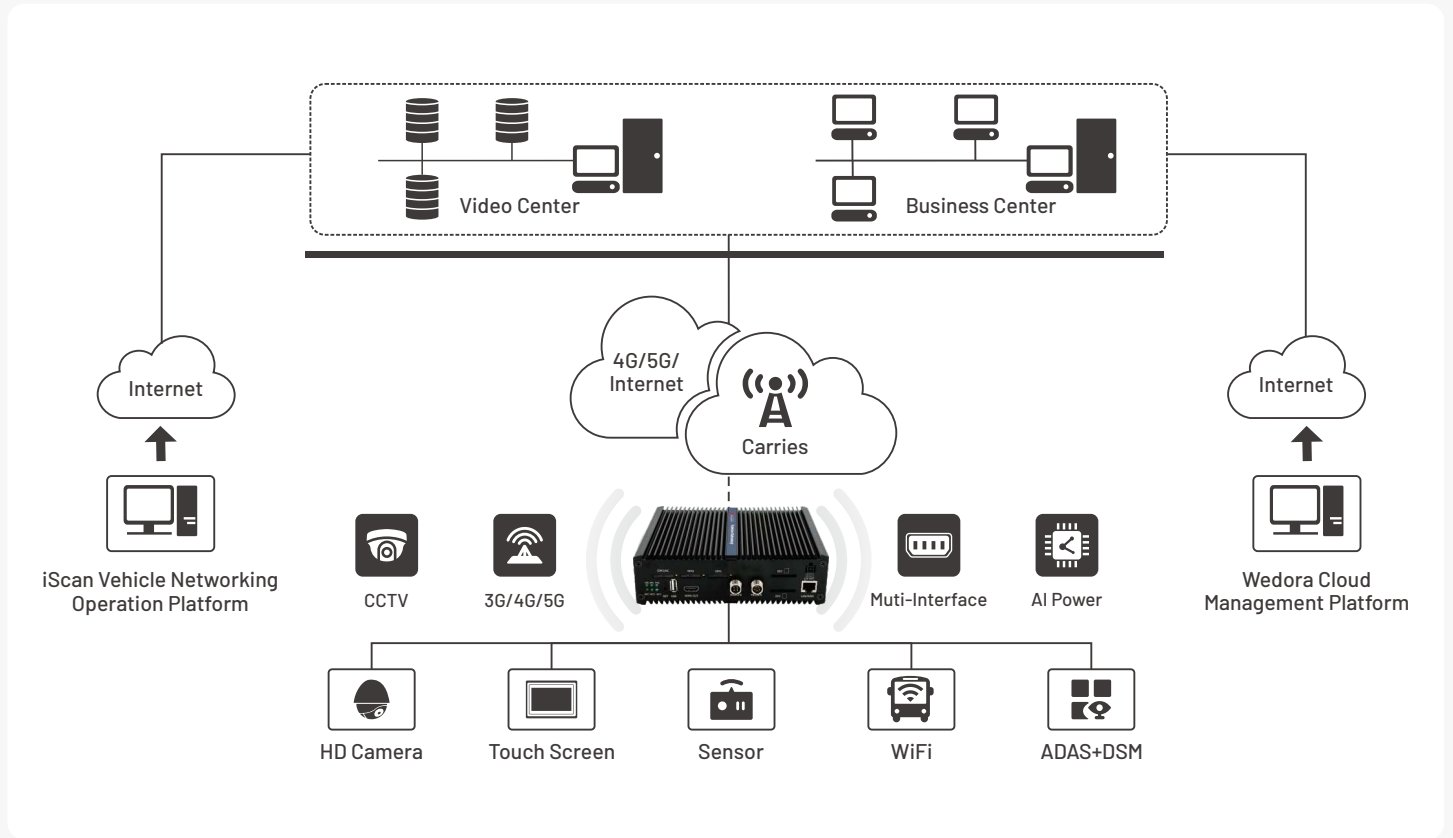**Support 4 channels of 1080P HD video collection**

Support mainstream communication protocols such as Modbus TCP/RTU, MQTT, etc.

Support DSM driving behavior detection, support safety driving alarms

Topology Diagram

Video Center

Business Center

4G/5G/Internet

Carries

Internet

iScan Vehicle Networking Operation Platform

CCTV

3G/4G/5G

Muti-Interface

AI Power

Internet

Wedora Cloud Management Platform

HD Camera

Touch Screen

Sensor

WiFi

ADAS+DSM

5G Smart Ambulance

5G Smart Unmanned Vehicle

5G Smart Logistics Vehicle

5G Intelligent Unmanned Mining Truck

Appearance

SIM*3

SD Card Slot*2

SIM3/NC   SIM2   SIM1

SD1

12V OUT
12V OUT

ONL WiFi PWR

NET1 NET2   RST   USB

SD2

LAN/WAN

LED*6   USB

RST   HDMI

AHD/CH5

MIC/SPK

LAN/WAN

5G Antenna*4

GND

DI-IN

164.3mm

55.5mm

5G1-1 5G1-2 5G1-3 5G1-4 5G2-1 5G2-2   5G2-3 5G2-4

4G1-1 4G1-2

DC-IN

LAN1-3

CH1-4

WiFi-1

RS232/RS485 DI DO CAN
12VOUT

WiFi-2

GPS

LAN1-3

CH1-4

WiFi-1

RS232/RS485

WiFi-2 GPS

235.0mm
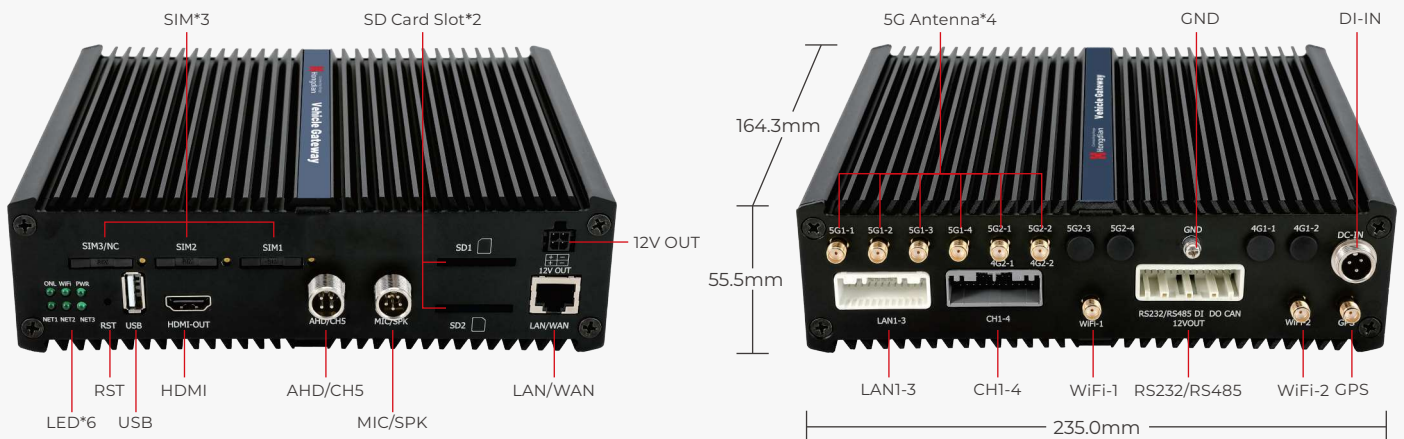
█ Specification

Hardware

CPU	Quad core ARM Cortex-A7 @1.5GHz	**NPU**	2Tops
Memory	2GB	**Built-in storage**	8GB

Cellular Interface

Modem	1 × LTE Cat1 or 1 × 5G NR SA/NSA	**SIM**	1×Mini SIM (2FF)
Number of Antennas	4	**Connector**	SMA-K

Wireless Interface

Standards	802.11b/g/n/ac, AP or station modes		
Frequency Bands	2.4 GHz	**Speed**	150Mbps
Security	WEP, WPA, WPA2	**Encryption**	64/128 AES, TKIP
Antennas	1	**Connector**	SMA-K

GNSS Interface

Number of Antennas	1	**Connector**	SMA-K

Peripheral Interface

Ethernet	1 × LAN 10/100Mbps	**Serial**	2 × RS-232 + 1 × RS-485 serial port
TF Card	2 × SD Card	**USB**	1 × USB2.0
IO	2 × DO, 7 × DI	**CAN**	1
Audio	Audio IN/OU		

Software

Video Code	H.265/H.264/VP9 4K@60fpsHD video decoding, H.265/H.264/VP9 1080P@100fpsHD videoencoding
Image processing	BMP, JPG, PNG, GIF
AI algorithm	Support DSM driving behavior detection, support safety driving alarms such as speeding and fatigue
Network	Muit-DNN, APN, VPDN, QoS, 5G LAN

Power Supply and Consumption

Connector	4 pin socket	**Voltage Input**	DC 12~36V
Power Consumption	Idle: 400mA@12V DC, Data transceiving: 1.5A@12V DC		

Others

Reset Button	Yes	**Hardware Watchdog**	Yes
LED Indicators	6 indicators for PWR, WiFi, 4G, NET1, NET2, NET3, ONL		

Physical Characteristics

Ingress Protection	IP30	**Housing & Weight**	Metal, about 1200g (Dual 5G Module)
Dimension	235×164.3×55.5(mm)	**Installations**	Wall-mounting
Operating Temperature	-30 ~ +75 °C	**Storage Temperature**	-40 ~ +80 °C
Relative Humidity	5~95		