Sistema embedded > Sistema embedded per digital signage > Serie IDS

IDS-310-AL

Fanless Ultra Compact Size Digital Signage System

Features

» Fanless digital signage system with Intel® 14nm Apollo Lake on-board SoC

» Triple HDMI™ displays up to 4K resolution

» Two GbE LAN ports

» Full-size PCIe Mini slot and M.2 A-key slot for expansion

Specifications

Form factor	
SBC Form Factor	» CPU:
	Intel® Celeron® J3455 (up to 2.3GHz, quad-core, TDP 10W)
	Intel® Celeron® N3350 (up to 2.4GHz, dual-core, TDP 6W)
	» Chipset:
	SoC
	» System Memory:
	1 x 204-pin DDR3L SO-DIMM, 4 GB pre-installed (system max: 8GB)
	» Power:
	Input : 12V DC-in
	Consumption:
	12V @ 2.2A (Intel® Celeron® J3455 with 4GB memory)
	12V @ 1.9A (Intel® Celeron® N3350 with 4GB memory)
	» Reliability:
	Operating Shock: Half-sine wave shock 5G, 11ms, 100 shocks per axis
	Operating Vibration: MIL-STD-810G 514.6C-1 (mSATA)
	Safety/EMC: CE/FCC/BSMI
I/O Interface	
I/O Ports	» Display:
	3 x HDMI™ (up to 3840x2160@30Hz)
	» 3 x USB 3.2 Gen1
	» Ethernet:
	2 x RJ-45 PCIe GbE by RTL8111H controller
	» COM Port:
	1 x RS-232/422/485 with AFC (DB-9)
	» Audio:
	1 x Mic in, 1 x Line out
Expansion Slots	
Expansion Slots	M.2:

	1 x 2230 A key (PCIe x1/ USB 2.0)
	PCIe Mini:
	1 x Full-size (PCIe/ USB 2.0/ SATA) with SIM card slot
System	
Cooling method / System Fan	Fanless
Indicator&Buttons	
Buttons	1 x Power Button
	1 x Reset Button
	1 x AT/ATX Switch
Indicators	HDD
	Power
Physical Characteristics	
Construction	Extruded aluminum alloy
Color	
Color	Brown & Silver
Dimensions	
Dimensions	J1: 137 x 102.8 x 52.1 mm
	N1:137 x 102.8 x 38.1 mm
Weight	
Weight	J1: 950g/1.7kg
	N1:680g/1.4kg
Environment	
Operating Temperature	-20°C ~ 60°C with air flow (mSATA)
Humidity	10% ~ 95%, non-condensing

Ordering Information

IDS-310-AL-N1/4GB-R10	Fanless embedded system with Intel® Celeron® N3350 1.1GHz (up to 2.4GHz, dual dore, TDP 6W), pre-installed 4GB DDR3L memory, triple HDMI™ display, 12V DC and RoHS
IDS-310-AL-J1/4GB-R10	Fanless embedded system with Intel® Celeron® J3455 1.5GHz (up to 2.3GHz, quad dore, TDP 10W), pre-installed 4GB DDR3L memory, triple HDMI™ display, 12V DC and RoHS

Packing List

1 x VESA 75/100 Mounting kit	1 x Power Adapter
1 x Power Cord	

Fanless and Palm-size Digital Signage Platform

The IDS-310-AL is a fanless, compact-size digital signage system with Intel® Celeron® series processor. It could be installed in applications with limited space, and can avoid dust easily. It features triple HDMI™ ports to support 4K resolution for displaying independent content, like advertising promotion, restaurant menu or real-time traffic information. The IDS-310-AL also supports multiple I/O ports, including two LAN ports, three USB 3.2 Gen 1 ports, audio jacks and COM port. No doubt it has high flexibility; the IDS-310-AL reserves one M.2 A-key slot for Wi-Fi and Bluetooth module, and one full-size PCIe Mini slot for mSATA, I/O cards or 3G/4G modules. Moreover, optional module layer design is supported for extra 2.5" HDD storage expansion. This system can be your best choice for digital signage applications.
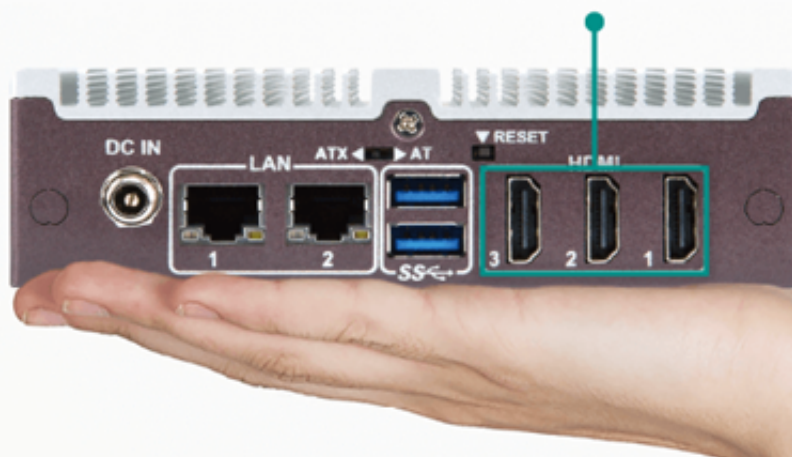
Dual CPU SKU for Different Requirement

The IDS-310 series has two SKUs, one is integrated with a dual-core CPU, Intel® Celeron® N3350, and one with a quad-core CPU, Intel® Celeron® J3455, to offer different computing performance for various requirements. Both of the platforms support wide range operating temperature from -20°C to 60°C , and adopt same hardware design to reduce product verification time and time-to-market.

Pass Mark

N3350	1,128
J3455	2,153

Data courtesy Pass mark

52.1 mm

Intel® Celeron® J3455
(up to 2.3GHz, quad-core, TDP 10W)

Pass Mark (Single Core)

N3350	769
J3455	785

38.1 mm

Intel® Celeron® N3350
(up to 2.4GHz, dual-core, TDP 6W)

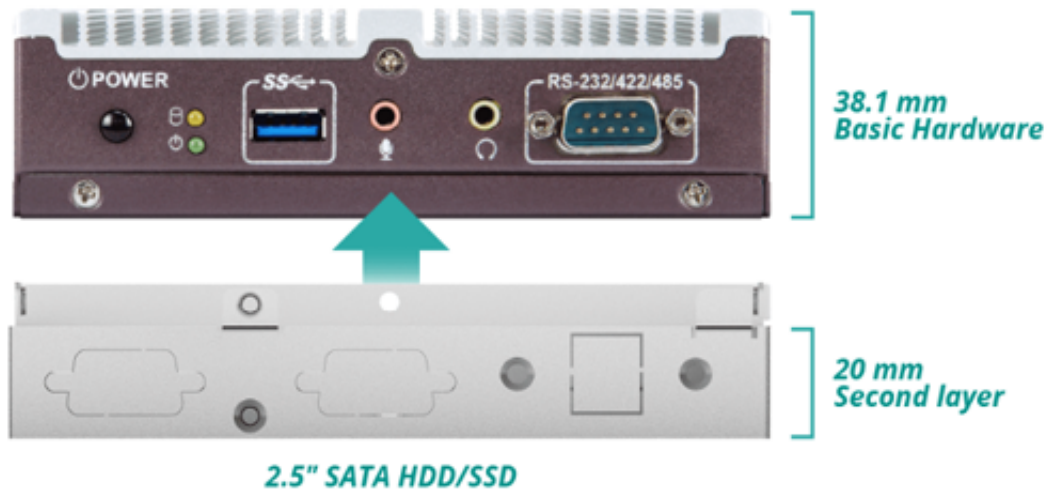## Small but Complete in Every Detail

The IDS-310 features three independent HDMI™ display ports supporting up to 4K resolution, and its palm-size design allows it to be installed in an extremely limited space. It supports two LAN ports for advanced management, network security or surveillance. Moreover, three USB 3.2 ports and COM ports enable connection to a wide range of peripherals like RFID payment system, barcode reader, credit card reader or receipt printer. The IDS-310 also provides one M.2 A-key slot for Wi-Fi and Bluetooth modules, and one full-size PCIe Mini slot for 3G/4G modules.
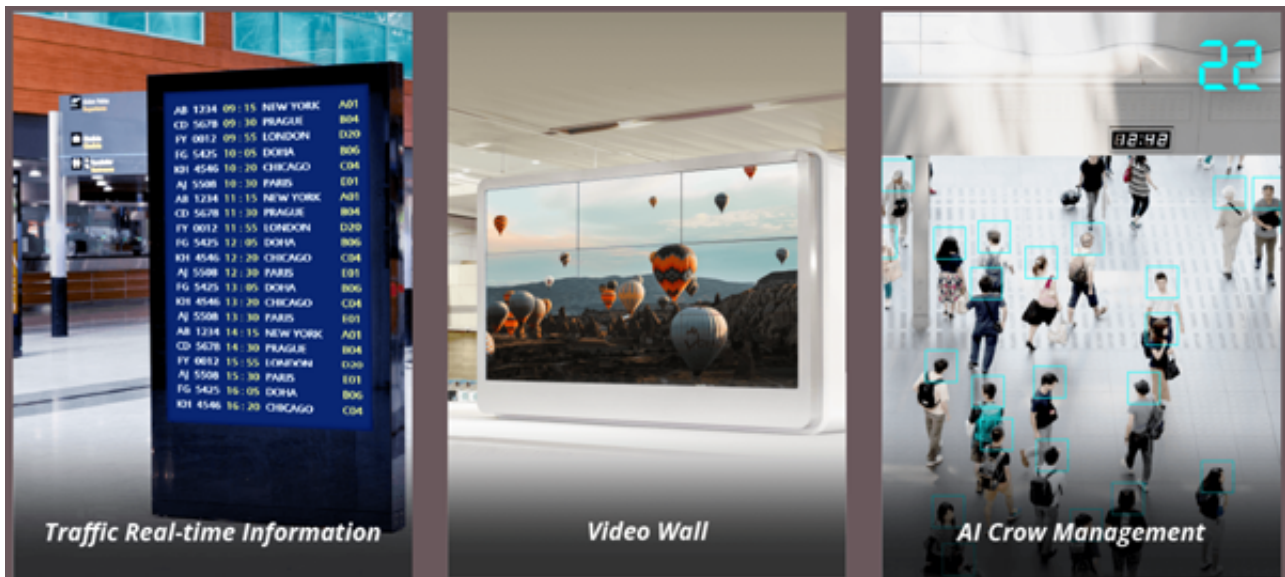
Triple 4K HDMI Display

Modular Design for High Expansion

The IDS-310 supports SATADOM as a basic storage option. For requirements of larger storage capacity, its modular design offers dual-layer chassis to contain a 2.5" HDD for more flexible HDD/S SD selection.

38.1 mm
Basic Hardware

20 mm
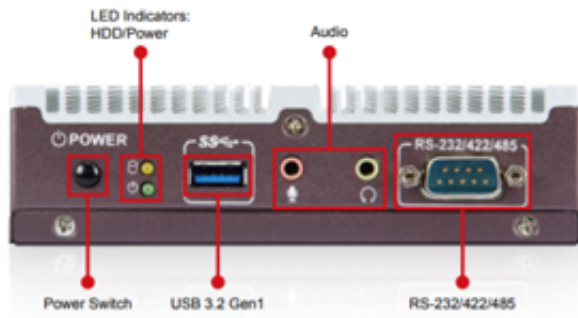Second layer

2.5" SATA HDD/SSD

Advanced Multi-Display Digital Signage

Advanced multi-display digital signage can make people easily and quickly get the information they need. The IDS-310 is designed with small form factor, allowing it to be installed in narrow spaces, such as the wall or ceiling of an aisle. With its rich I/O design, it can be connected with different devices to offer various functions, such as payment system, IP camera, card readers and so on. Furthermore, people counting and video promotion display can be set up with IP camera via USB or LAN ports to deliver information in real-time, and it can also maintain service quality and safety of customers to avoid unnecessary injuries. Enterprises can not only monitor the live images of specific entrances and exits, but use these data to analyze consumer activities daily, weekly, monthly or within certain periods, as a reference for operation management.
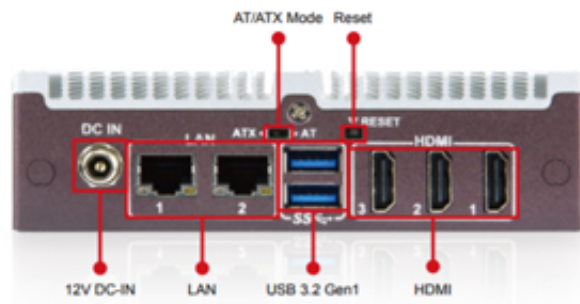

Traffic Real-time Information

Video Wall

AI Crow Management

I/O and Dimensions (Unit: mm)

Front View

LED Indicators:
HDD/Power

Audio

⏻ POWER

SS←

RS-232/422/485

Power Switch   USB 3.2 Gen1   RS-232/422/485

Rear View

AT/ATX Mode   Reset

DC IN   LAN   ATX ← → AT   RESET   HDMI

12V DC-IN   LAN   USB 3.2 Gen1   HDMI

Dimensions (Unit: mm)

IDS-310-AL-N1

IDS-310-AL-J1