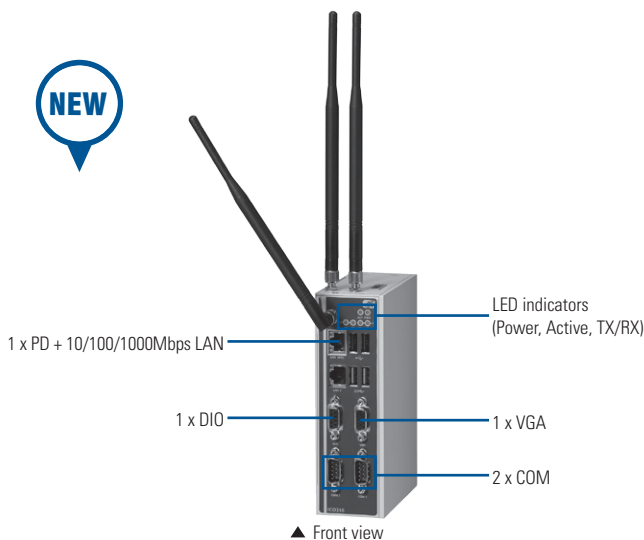


# ICO310

Robust Din-rail Fanless Embedded System with Intel® Celeron® Processor N3060/ N3160, 2 COM, 4 USB, 2 Gigabit LAN (1 PoE PD), DIO and RTC

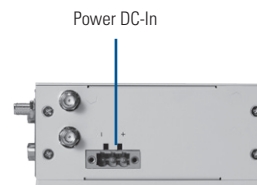


## Specifications

Standard Color	White																		
Construction	Extruded aluminum and heavy-duty steel, IP40																		
CPU	Intel® Celeron® processor N3060 (1.6 GHz/2-core) or N3160 (1.6 GHz/4-core)																		
System Board	SBC87887																		
System Memory	DDR3L SO-DIMM max. up to 8 GB																		
BIOS	AMI UEFI BIOS																		
System I/O Outlet	<table border="0"> <tr> <td>Serial Port</td> <td>2 x RS-232/422/485 (COM 1/2) with DB9 connectors Interface select by BIOS Supports Auto Flow Control in RS-485 mode LED indicator (TX/RX) for COM 1/2</td> </tr> <tr> <td>USB</td> <td>2 x USB 3.0 2 x USB 2.0</td> </tr> <tr> <td>RTC</td> <td>Battery onboard</td> </tr> <tr> <td>Storage</td> <td>1 x mSATA 1 x SATA SSD (or HDD)</td> </tr> <tr> <td>LAN</td> <td>2 x 10/100/1000 Mbps Ethernet 1 x PoE PD compliant with IEEE 802.3at standard through LAN 1 (ICO310-N3060-PD-DC, ICO310-N3160-PD-DC)</td> </tr> <tr> <td>Power Input</td> <td>DC terminal block: 12-24V DC-In PoE: IEEE 802.3at</td> </tr> <tr> <td>Display</td> <td>VGA</td> </tr> <tr> <td>Wireless</td> <td>2 x full-size Mini Card slot 1 x SIM socket 3 x Antenna (PS: One of Mini Card slot co-lay mSATA, so mSATA with wireless can be either one)</td> </tr> <tr> <td>DIO</td> <td>1 x DIO - DB9 8-bit programming connector - The voltage of TTL is 5V. - Without isolation function - The programming is as follow: 1. I/O sink current is 8-10mA (Output drive current ±50 mA) 2. Input/Output can programming</td> </tr> </table>	Serial Port	2 x RS-232/422/485 (COM 1/2) with DB9 connectors Interface select by BIOS Supports Auto Flow Control in RS-485 mode LED indicator (TX/RX) for COM 1/2	USB	2 x USB 3.0 2 x USB 2.0	RTC	Battery onboard	Storage	1 x mSATA 1 x SATA SSD (or HDD)	LAN	2 x 10/100/1000 Mbps Ethernet 1 x PoE PD compliant with IEEE 802.3at standard through LAN 1 (ICO310-N3060-PD-DC, ICO310-N3160-PD-DC)	Power Input	DC terminal block: 12-24V DC-In PoE: IEEE 802.3at	Display	VGA	Wireless	2 x full-size Mini Card slot 1 x SIM socket 3 x Antenna (PS: One of Mini Card slot co-lay mSATA, so mSATA with wireless can be either one)	DIO	1 x DIO - DB9 8-bit programming connector - The voltage of TTL is 5V. - Without isolation function - The programming is as follow: 1. I/O sink current is 8-10mA (Output drive current ±50 mA) 2. Input/Output can programming
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## Features

- Fanless design
- Supports Intel® Celeron® processor N3060 (1.6 GHz/2-core) or N3160 (1.6 GHz/4-core)
- 2 RS-232/422/485 ports
- 4 USB ports
- 2 isolated 10/100/1000Mbps Ethernet ports
- 1 PoE PD is compliant with IEEE 802.3at standard through LAN 1
- 1 DIO port
- 2 wireless (3G/GPRS & Wi-Fi)
- Supports 1 mSATA & SATA SSD (or HDD)
- Wide range 12-24V DC-In



Watchdog Timer	255 levels, 1-255 sec.
System Indicator	Power, active, COMs (TX/RX)
Power Supply	Power Input Range: 12-24VDC Power Input Rating: 12-24VDC, 2.09-1.09A Power Protection: DC Version OVP, Reverse protection
Operating Temperature	-20°C ~ +60°C (-4°F ~ +140°F) *The frequency of CPU will down when system operating temperature over 55°C (ICO310-N3060, ICO310-N3060-PD, ICO310-N3160) or over 50°C (ICO310-N3160-PD)
Storage Temperature	-40°C ~ +85°C (-49°F ~ +185°F)
Humidity	10% ~ 95%
Vibration Endurance	2g @ 5 ~ 500Hz, amplitude 0.35 mm (operation/storage/transport)
Weight	1.0 kg (2.2 lb)/1.50 kg (3.3 lb)
Certification	CE, FCC
Dimensions	48 mm (1.88") (W) x 110 mm (4.33") (D) x 155 mm (6.1") (H)
Mounting	Din-rail mounting Wall mounting
OS Support	Windows® 7 Embedded Windows® 8 Embedded Windows® 8, Windows® 10 Linux support package
Remote Management Software	AXView 2.0 Intelligent Remote Management Solution for IoT

\* mSATA and wireless can be either one.

## Ordering Information

### Standard

IC0310-N3060-DC	Robust din-rail fanless embedded system with Intel® Celeron® processor N3060 (1.6 GHz/2-core), 2 COM, 2 LANs (-20°C ~ +60°C)
IC0310-N3060-PD-DC	Robust din-rail fanless embedded system with Intel® Celeron® processor N3060 (1.6 GHz/2 core), 2 COM, 1 LAN, 1 PoE PD+LAN (-20°C ~ +60°C)
IC0310-N3160-DC	Robust din-rail fanless embedded system with Intel® Celeron® processor N3160 (1.6 GHz/4-core), 4 COM, 2 LANs (-20°C ~ +60°C)
IC0310-N3160-PD-DC	Robust din-rail fanless embedded system with Intel® Celeron® processor N3160 (1.6 GHz/4 core), 2 COM, 1 LAN, 1 PoE PD+LAN (-20°C ~ +60°C)

### Optional

2.5" SATA SSD or HDD (with W.T. SSD or HDD)

mSATA 16 GB ~ 512 GB (with W.T. mSATA)

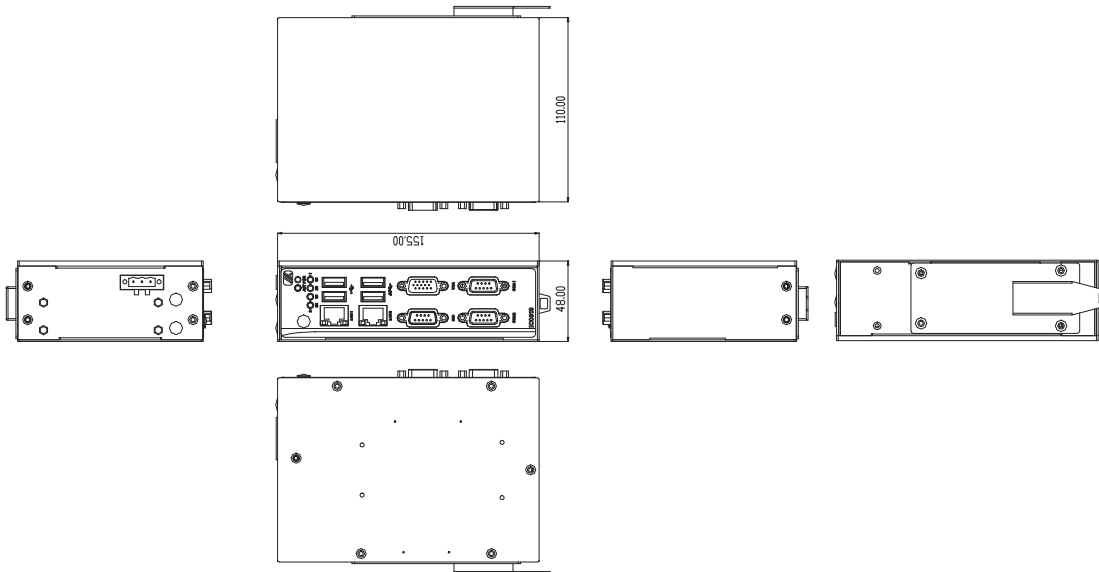
DDR3L SO-DIMM 2 GB ~ 8 GB (with W.T. memory)

Wall mounting kit

Wireless (3G/GPRS or Wi-Fi) module

\*Specifications and certifications are based on options and may vary.

## Dimensions



Overview

Embedded Systems

Embedded Systems for Transportation

3

Embedded Field Controllers

Industrial Firewall

Digital Signage Solutions

Embedded MicroBoxes

Industrial Barebone Systems

Industrial Chassis

Backplanes

Power Supplies

Peripherals & Accessories

