

# ICO310

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

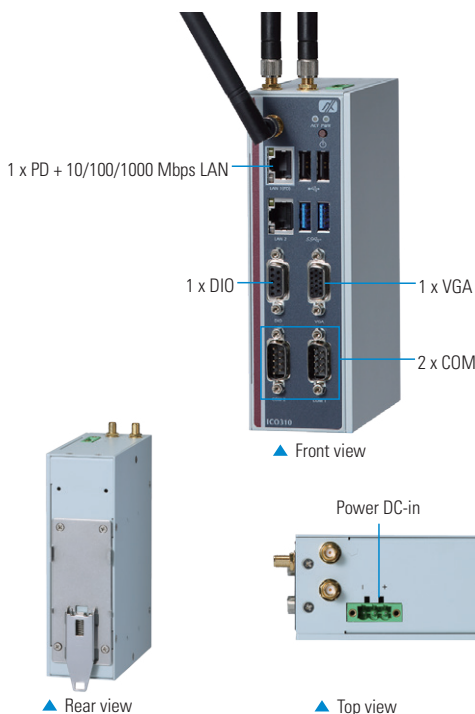
## Features

- Fanless design
- 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 10/100/1000 Mbps Ethernet ports
- 1 PoE PD compliant with IEEE 802.3at standard through LAN 1
- 1 DIO port
- Supports wireless (3G/GPRS & Wi-Fi)
- 1 mSATA & SATA SSD (or HDD)
- 12 ~ 24 VDC wide range power input



## 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	1 x DDR3L-1600 SO-DIMM, up to 8GB	
BIOS	AMI UEFI BIOS	
System I/O Outlet	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
	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 (Intel® i211AT) 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 PCI Express Mini Card slot 1 x SIM Card socket 3 x Antenna (PS: one of Mini Card slot co-lay mSATA, supports either mSATA or full-size PCI Express Mini Card slot)
	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



Watchdog Timer	255 levels, 1 ~ 255 sec.
System Indicator	Power, active, COMs (TX/RX)
Power Supply	Power Input Range: 12 ~ 24 VDC Power Input Rating: 12 ~ 24 VDC, 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)
Humidity	10% ~ 95%
Vibration Endurance	2 Gms (5 ~ 500Hz, amplitude 0.35 mm; operation/storage/transport)
Weight	1.0 kg (2.2 lb)/1.50 kg (3.3 lb)
Certificate	CE, FCC
Dimensions	48 mm (1.88") (W) x 110 mm (4.33") (D) x 155 mm (6.1") (H)
Mounting	DIN-rail, wall mount
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 and 2 GbE 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 GbE LAN and 1 PoE PD + LAN (-20°C ~ +60°C)
IC0310-N3160-PB-DC	Robust DIN-rail fanless embedded system with Intel® Celeron® processor N3160 (1.6 GHz/QC), 2 COM, 2 LAN and 1 DIO (-20°C ~ +60°C with power button)
IC0310-N3160-PD-DC	Robust DIN-rail fanless embedded system with Intel® Celeron® processor N3160 (1.6 GHz/4 core), 2 COM, 1 GbE LAN and 1 PoE PD + LAN (-20°C ~ +60°C)

### Optional

2.5" SATA SSD or HDD (with W.T. SSD or HDD)	
mSATA 16GB ~ 512GB (with W.T. mSATA)	
DDR3L SO-DIMM 2GB ~ 8GB (with W.T. memory)	
Wall mount kit	
8812C3000A0E	IC0300/310/320 wall mount bracket kit
PCI Express Mini Card slot: Wi-Fi/3G/4G	
8816N3234A0E	3G/GPS UC20G kit for tBOX (3G ANT) (E)
8816N3235A0E	3G/GPS UC20G kit for tBOX (3G/GPS ANT) (E)
8812C3003A0E	SparkLAN WPEA-152GN Wi-Fi kit ICO SFP (E)
8812C3004A0E	SparkLAN WPEA-251N Wi-Fi kit ICO SFP (E)
82606200390E	LTE Module SIERRA MC7304 kit for EU SFP
826N3230060E	tBOX series Bointec CPE902A Wi-Fi SFP

\*Specifications and certifications may vary according to various options.

## Dimensions

