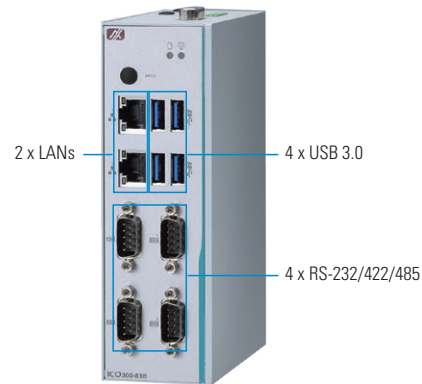


# ICO300-83B NEW

Robust DIN-rail Fanless Embedded System with Intel® Celeron® Processor N3350/  
Pentium® Processor N4200, Isolated COM, LAN and DIO Option

## Features

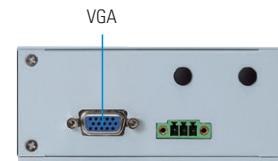
- Cost-effective with fanless and cableless design
- Intel® Celeron® processor N3350/Pentium® processor N4200
- 2 or 4 isolated COM, 4 USB, 2 GbE LAN
- 8-bit programmable DIO for IoT gateway applications (optional)
- Wide operating temperature range from -40°C to +70°C
- 12 to 24 VDC wide range power input
- OVP, UVP, OCP, RPP power protection design
- AXView 2.0 intelligent remote monitoring software for IIoT



▲ Front view



▲ Rear view



▲ Top view

## Specifications

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standard Color    | Silver                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Construction      | Extruded aluminum and heavy-duty steel, IP40                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| CPU               | Intel® Celeron® processor N3350 (1.1 GHz, Dual Core)<br>Intel® Pentium® processor N4200 (1.1 GHz, Quad Core) (by request)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| System Board      | SBC8783B                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| System Memory     | 1 x DDR3L-1866 SO-DIMM, up to 8GB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| BIOS              | AMI UEFI BIOS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| System I/O Outlet | <div>Serial</div> <div>4 x isolated RS-232/422/485 (ICO300-83B-4I COM)</div> <div>2 x isolated RS-232/422/485 (ICO300-83B-2I COM)</div> <div>4 x RS-232/422/485 (ICO300-83B-4 COM)</div> <div>COM port support High-speed mode up to 1.5M baud rate</div> <div>Interface select by BIOS</div> <div>Supports Auto Flow Control in RS-485 mode</div> <div>USB</div> <div>4 x USB 3.0</div> <div>RTC</div> <div>Battery onboard</div> <div>Storage</div> <div>2.5" SATA drive (9.5 mm height)</div> <div>mSATA shared with mPCIe slot</div> <div>LAN</div> <div>2 x 10/100/1000 Mbps Ethernet (Intel® i211-AT for ICO300-83B)</div> <div>(Intel® i210-IT for ICO300-83B-WT)</div> <div>Display</div> <div>1 x VGA or 1 x HDMI (optional)</div> <div>DIO</div> <div>1 x DI/DO (8-bit programmable, DB9 female connector)</div> <div>Voltage is 5V TTL-level</div> <div>ESD protection corresponds to IEC6100-4-2 (± 8KV (Air); ± 4KV (contact))</div> <div>Programming:</div> <div>I/O sink current is 10mA (max.)</div> <div>Input/output can be programming</div> <div>Power Input</div> <div>1 x DC power input with terminal block</div> |

|                       |                                                                                                                                                                    |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Extension Interface   | 1 x Full-size PCI Express Mini Card slot with SIM slot (for wireless module)<br>1 x Full-size PCI Express Mini Card slot with mSATA (for wireless module or mSATA) |
| Watchdog Timer        | 255 levels, 1 to 255 sec.                                                                                                                                          |
| System Indicator      | Power, Active                                                                                                                                                      |
| Power Supply          | 12 to 24 VDC, 2.82 to 1.34A (ICO300-83B-N3350)<br>12 to 24 VDC, 3.27 to 1.62A (ICO300-83B-N4200)<br>Protection: OVP (±20%), reverse protection                     |
| Operating Temperature | -20°C to +70°C (-4°F to +158°F)<br>-40°C to +70°C (-40°F to +158°F) (ICO300-83B-WT)                                                                                |
| Humidity              | 10% to 95%                                                                                                                                                         |
| Vibration Endurance   | 2 Gms (5 to 500Hz, amplitude 0.35 mm; operation/storage/transport)                                                                                                 |
| Weight (net/gross)    | 1.0 kg (2.2 lb)/1.50 kg (3.3 lb)                                                                                                                                   |
| Certifications        | CE, FCC                                                                                                                                                            |
| Dimensions            | 48 mm (1.88") (W) x 110 mm (4.33") (D) x 155 mm (6.1") (H)                                                                                                         |
| EOS Support           | Windows® 10 IoT, AXView 2.0<br>Linux support package (by request)                                                                                                  |

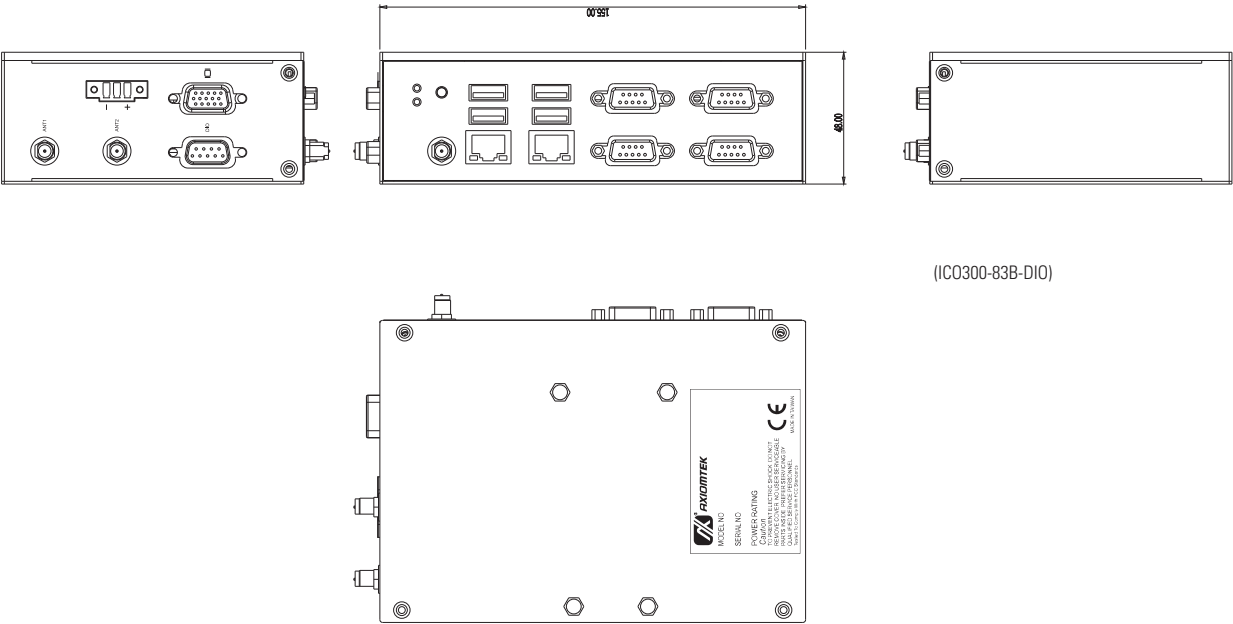
Ordering Information

| Standard                                               |                                                                                                                                                |
|--------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| IC0300-83B-N3350-4COM-DC<br>(P/N: E22C300121)          | Robust DIN-rail fanless embedded system with Intel® Celeron® processor N3350, 4 COM, 2 LAN, 4 USB and VGA (-20°C to +70°C)                     |
| IC0300-83B-N3350-4COM-WT-DC<br>2018 Q3 available       | Robust DIN-rail fanless embedded system with Intel® Celeron® processor N3350 , 4 COM, 2 LAN, 4 USB and VGA (-40°C to +70°C)                    |
| IC0300-83B-N3350-2ICOM-DC<br>(P/N: E22C300127)         | Robust DIN-rail fanless embedded system with Intel® Celeron® processor N3350, 2 isolated COM, 2 LANs, 4 USB and VGA (-20°C to +70°C)           |
| IC0300-83B-N3350-4ICOM-DC<br>(P/N: E22C300123)         | Robust DIN-rail fanless embedded system with Intel® Celeron® processor N3350 1.1 GHz , 4 isolated COM, 2 LANs, 4 USB and VGA (-20°C to +70°C)  |
| IC0300-83B-N3350-4ICOM-WT-DC<br>(P/N: E22C300119)      | Robust DIN-rail fanless embedded system with Intel® Celeron® processor N3350, 4 isolated COM, 2 LANs, 4 USB and VGA (-40°C to +70°C)           |
| IC0300-83B-N4200-4ICOM-WT-DC<br>(P/N: E22C300120)      | Robust DIN-rail fanless embedded system with Intel® Pentium® processor N4200, 4 isolated COM, 2 LANs, 4 USB and VGA (-40°C to +60°C)           |
| IC0300-83B-N3350-2ICOM-HDMI-DC<br>(P/N: E22C300124)    | Robust DIN-rail fanless embedded system with Intel® Celeron® processor N3350 1.1 GHz , 2 isolated COM, 2 LANs, 4 USB and HDMI (-20°C to +70°C) |
| IC0300-83B-N3350-4ICOM-WT-HDMI-DC<br>(P/N: E22C300126) | Robust DIN-rail fanless embedded system with Intel® Celeron® processor N3350 1.1 GHz , 4 isolated COM, 2 LANs, 4 USB and HDMI (-40°C to +70°C) |
| IC0300-83B-N3350-4COM-HDMI-DC<br>(P/N: E22C300128)     | Robust DIN-rail fanless embedded system with Intel® Celeron® processor N3350, 4 COM, 2 LAN, 4 USB and HDMI (-20°C to +70°C)                    |

| Optional        |                                            |
|-----------------|--------------------------------------------|
| mSATA           | 4GB and above                              |
| 2.5" SATA drive |                                            |
| DDR3L SO-DIMM   | 2GB to 8GB                                 |
| 8812C3000A0E    | IC0300/310/320 wall mount bracket kit      |
| 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)   |

\* Specifications and certifications may vary based on different requirements.

Dimensions



(IC0300-83B-DIO)