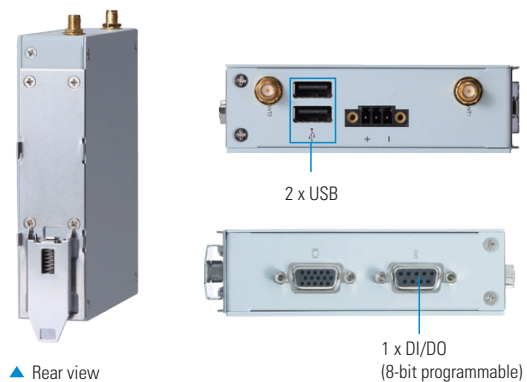


# ICO120-83D

Robust DIN-rail Fanless Embedded System with Intel® Celeron® Processor N3350, COM or CAN, 2 LAN, 2 USB and DIO

## Features

- Extreme cost-effective with fanless and cableless design
- Intel® Celeron® processor N3350, reliable F1 stepping version CPU
- 1 COM or CAN, 2 USB, 2 GbE LAN
- 8-bit programmable DIO for IoT gateway applications
- Wide operating temperature range from -20°C to +70°C
- 12 to 24 VDC wide range power input
- OVP, UVP, OCP, RPP power protection design
- Supports SocketCAN
- AMS.AXView intelligent remote monitoring software for IIoT
- Microsoft Azure IoT Edge certified



## Specifications

|                     |  |  |
|---------------------|--|--|
| Standard Color      | Silver   |  |
| Construction        | Extruded aluminum and heavy-duty steel, IP30                                     |  |
| CPU                 | Intel® Celeron® N3350 2C @1.1 GHz, TDP: 6W                                       |  |
| Chipset             | SoC integrated   |  |
| System Memory       | 1 x DDR3L-1866 SO-DIMM, up to 8GB  |  |
| BIOS                | AMI  |  |
| TPM                 | TPM 2.0  |  |
| System I/O Outlet   | Serial   | 1 x DB9 RS-232/422/485*  |
|                     | CAN  | 1 x DB9 CANBus 2.0 A/B, supports SocketCAN*  |
|                     | Display  | 1 x VGA  |
|                     | USB  | 2 x USB 2.0  |
|                     | Ethernet   | 2 x RJ-45 isolated* 10/100/1000 Mbps Ethernet (Intel® i211-AT)<br>*isolation voltage: 1.5 kV |
|                     | DIO  | 1 x DB9 8-bit programmable DIO   |
|                     | Others   | 2 x Antenna opening  |
| Extension Interface | 1 x Full-size Rev. 1.2 PCI Express Mini Card slot:<br>• USB/PCIe with SIM socket |  |
|                     | 1 x Half-size Rev. 1.2 PCI Express Mini Card slot:<br>• mSATA/USB/PCIe           |  |
| Storage             | SATA Drive   | 1 x mSATA (occupied 1 x PCI Express Mini Card slot)  |
|                     | eMMC   | Optional   |
| Watchdog Timer      | 255 levels, 1 to 255 sec.  |  |

|                       |   |  |
|-----------------------|---|--|
| Power                 | Power Supply  | 1 x Terminal block, 12 to 24 VDC   |
|                       | Power Consumption   | 12 to 24 VDC, 1.39-0.72A   |
|                       | System Indicator  | 1 x LED indicator for SATA drive activity<br>1 x LED indicator for power |
| Operating Temperature | -20°C to +70°C (-4°F to +158°F) with W.T. peripheral**              |  |
| Humidity              | 0% to 95%   |  |
| Vibration Endurance   | 2 Gms with storage (5 to 500Hz, X/Y/Z direction; random, operating) |  |
| Weight (net/gross)    | 0.3 kg (0.67 lb)/0.45 kg (0.99 lb)                                  |  |
| Certifications        | CE (Class A), FCC (Class A)   |  |
| EMC                   | CE/FCC  | EN 55032 (Class A), EN 55024, FCC part 15 B (Class A)                    |
| Dimensions            | 31 mm (1.22") (W) x 100 mm (3.93") (D) x 125 mm (4.92") (H)         |  |
| EOS Support           | Windows® 10 IoT, Linux  |  |
| Software Support      | AMS.AXView  |  |

\* See Ordering information

\*\* Wide Temperature. All W.T. supported products have to be sorted by Axiomtek.

## Ordering Information

| Standard   |   |
|--|---|
| ICO120-83D-N3350-COM-DIO-DC<br>(P/N: E22C120106)               | Robust DIN-rail fanless embedded system with Intel® Celeron® N3350 processor, 1 COM, 2 LAN, 2 USB and 1 DIO, operating temperature from -20 to 70°C, and TPM 2.0 reserved                                 |
| ICO120-83D-N3350-CAN-DIO-DC<br>(P/N: E22C120107)               | Robust DIN-rail fanless embedded system with Intel® Celeron® N3350 processor, 1 CANbus 2.0 A/B, 2 LAN, 2 USB and 1 DIO, operating temperature from -20 to 70°C, TPM 2.0 reserved, and SocketCAN supported |
| E22C120108_ICO120-83D-N3350-COM-DIO-DC-WT<br>(P/N: E22C120108) | Robust DIN-rail fanless embedded system with Intel® Celeron® N3350 processor, 1 COM, 2 LAN, 2 USB and 1 DIO, operating temperature from -40 to 70°C, and TPM 2.0 reserved                                 |

| Optional              |  |  |
|-----------------------|--|--|
| Communication Modules | 8812C300GA0E                               | 3G UC20GKit tBOX/ICO (20) (E)                        |
|                       | 8812C300HA0E                               | 3G/GPS UC20GKit tBOX/ICO (20) (E)                    |
|                       | 8812C1200A0E                               | AP12356 Wi-Fi kit for tBOX/ICO (E)                   |
|                       | 8812C1201A0E                               | AP12356 WT Wi-Fi kit for tBOX/ICO (E)                |
|                       | 8816N8108A0E                               | LTE MC7430 (EU) kit for tBOX (E)                     |
|                       | 8816N8104A0E                               | LTE MC7455 (US) kit for tBOX810 (E)                  |
|                       | 8812C3008A0E                               | LTE SIM7100C (TW) with extent antenna for ICO300 (E) |
| AC to DC Adapter      | 8812C300IA0E                               | LTE SIM7100JC kit for ICO (20) JPN SFP (E)           |
|                       | 8812C300EA0E                               | LTE SIMCOM SIM7100C (TW) for ICO300 SFP (E)          |
|                       | 8812C300DA0E                               | LTE SIMCOM SIM7100E (EU) for ICO300 SFP (E)          |
| 50956A24040E          | Adapter 12V36W FSP036-RHBN3 with wire type |  |

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

## Dimensions

