

AGS100/AGS100T

Ultra-Compact IoT Gateway Fanless System Intel® Atom® x7/x5, Pentium® & Celeron® Processors



Rear I/O



Features

- Intel® Atom® x7-E3950/x5-E3940/x5-E3930 & Pentium® N4200 / Celeron® N3350 Series Processors
- Over/Under/Reverse voltage protection
- **Extended operating temperature from -40°C to 70°C**
- 9V~36V DC wide-range power input
- Supports DIN-rail mount & wall mount
- Supports TPM2.0 (AGS100T Only)
- 2x RS232/422/485 serial ports
- Rugged and fanless design

Specifications

| | |
|--------------------------|--|
| System Mainboard | IB801/ IB802T (F-1 Stepping) |
| CPU Type | Intel® Atom® x7-E3950/x5-E3940/x5-E3930 & Pentium® N4200/ Celeron® N3350 Series Processors |
| System Speed | Up to 2.5GHz |
| Memory | 1x 4GB DDR3L-1866 SO-DIMM, Max. 8GB |
| Rear Panel External I/O | 1x DVI-I + 1x DisplayPort 4x USB 3.0 ports 2x RJ45 Gigabit Ethernet port 3x LED indicators (HDD, WLAN, WWAN) 1x Power button with green LED (Silver Power button with Green LED for AGS100, Black Power button with Blue LED for AGS100T) 1x 3-pin DC-in terminal block for 9V-36V 1x Antenna hole for WLAN module |
| Left Panel External I/O | 2x RS232/422/485 port for COM#1/COM#2 1x Antenna hole for WLAN module 1x Line-out (AGS100 for 2W mono speaker, AGS100T for stereo output) |
| Right Panel External I/O | 1x SIM card slot |
| Expansion Slots | 1x Full-size Mini PCI-E socket (USB 2.0 + PCI-E + SATA) 1x 2230 M.2 E-Key socket for WLAN & BT (USB 2.0 + PCI-E) 1x 3042 M.2 B-Key socket for WWAN & SSD (USB 2.0 + SATA) |
| Storage | 1x mSATA socket (Mini-PCI-E) 1x 2242 M.2 B-Key socket for SSD |
| Construction | Aluminum & steel |
| Chassis Color | Silver & Gray |
| Mounting | DIN-rail mounting (DIN-rail mount kit included) Desktop or wall mounting (wall mount kit included) |
| Dimensions | 160mm (W) x 110mm (D) x 44mm (H) 6.3" (W) x 4.33" (D) x 1.73" (H) |
| Weight | 1kg |
| Operating Temperature | For E-series CPU: -40°C~70°C (-40°F~158°F) For N-series CPU: -20°C~60°C (-4°F~140°F) |
| Storage Temperature | -40°C ~ 85°C (-40°F~185°F) |
| Relative Humidity | 5~90% @ 45°C, (non-condensing) |
| Vibration | Operating: 2.0 grms / 5~500Hz / random operation (with IEC 60068-2-64) Non-Operating: 3.0 grms / 5~500Hz / random operation (with IEC 60068-2-64) |
| Shock | Operating: 30G/11 ms Duration (with MIL-STD-810G) Non-operating: 40G/11 ms Duration (with MIL-STD-810G) |
| Certification | CE / LVD / FCC Class-B / CCC (AGS100 Only) / UL |

Ordering Information

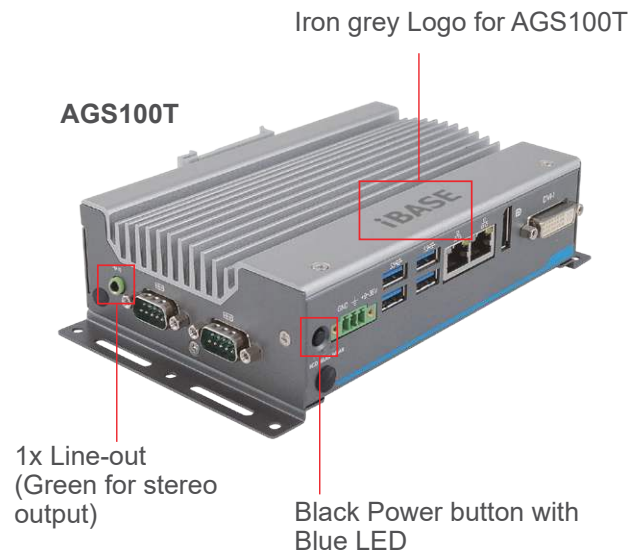
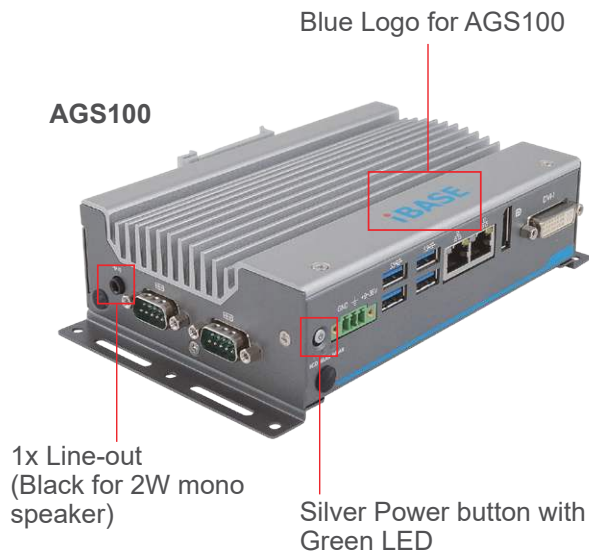
| | |
|----------------------------------|---|
| AGS100-I50/ AGS100T-I50 | Fanless DIN-rail System supports TPM2.0 (AGS100T Series only) w/ Intel® Atom® Processor x7-E3950, 2x COM, 1x 4GB DDR3L industrial-grade memory, 1x 64GB MLC industrial-grade mSATA SSD, w/o power adaptor |
| AGS100-I40/ AGS100T-I40 | Fanless DIN-rail System supports TPM2.0 (AGS100T Series only) w/ Intel® Atom® Processor x5-E3940, 2x COM, 1x 4GB DDR3L industrial-grade memory, 1x 64GB MLC industrial-grade mSATA SSD, w/o power adaptor |
| AGS100-I30/ AGS100T-I30 | Fanless DIN-rail System supports TPM2.0 (AGS100T Series only) w/ Intel® Atom® Processor x5-E3930, 2x COM, 1x 4GB DDR3L industrial-grade memory, 1x 64GB MLC industrial-grade mSATA SSD, w/o power adaptor |
| AGS100-420/ AGS100T-420 (MOQ) | Fanless DIN-rail System supports TPM2.0 (AGS100T Series only) w/ Intel® Pentium® Processor N4200, 2x COM, 1x 4GB DDR3L industrial-grade memory, 1x 64GB MLC industrial-grade mSATA SSD, w/o power adaptor |
| AGS100-335/ AGS100T-335 | Fanless DIN-rail System supports TPM2.0 (AGS100T Series only) w/ Intel® Celeron® Processor N3350, 2x COM, 1x 4GB DDR3L industrial-grade memory, 1x 64GB MLC (industrial-grade) mSATA SSD, w/o power adaptor |
| 60W power adaptor (optional) | 60W (12V@5A) power adaptor (bare wire type) Compatible with IEC62368-1/EN62368-1 |
| Optional Accessories | WiFi/BT antenna kit, 4G/LTE antenna kit, GPS antenna kit |

AGS100/AGS100T

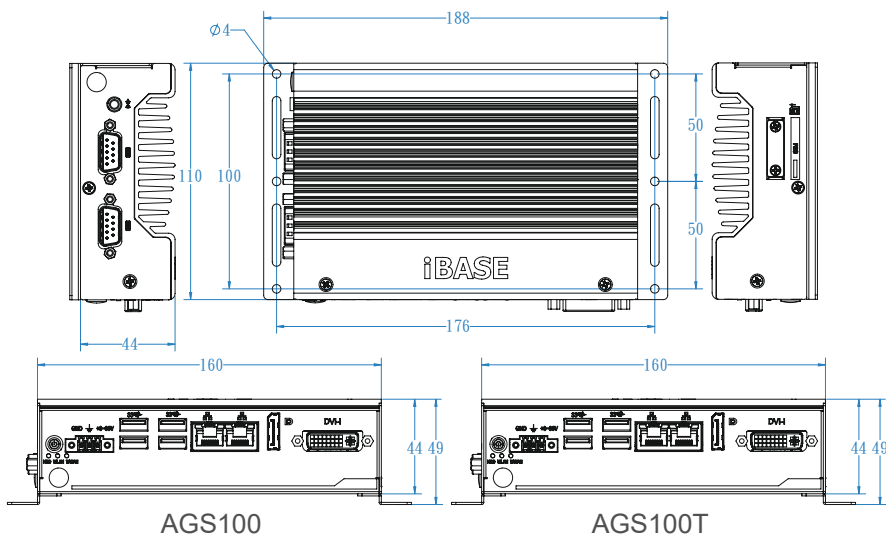
Intel® Entry Processor Ultra Low Power Reference Table

| Processor Number | Intel® Pentium® Processors - 14 nm Apollo-Lake SoC Platform | Intel® Celeron® Processors - 14 nm Apollo-Lake SoC Platform | Intel® Atom® Processors - 14nm Apollo-Lake-I SoC Platform | | |
|---|---|---|---|----------|----------|
| | N4200 | N3350 | x7-E3950 | x5-E3940 | x5-E3930 |
| Base Freq (GHz) | 1.1 | 1.1 | 1.6 | 1.6 | 1.3 |
| Intel® Turbo Boost Technology 2.0 (GHz) | 2.5 | 2.4 | 2.0 | 1.8 | 1.8 |
| Last Level Cache | 2M | 2M | 2M | 2M | 2M |
| Cores/Threads | 4/4 | 2/2 | 4/4 | 4/4 | 2/2 |
| Memory Speed (DDR3L) | 1866 | 1600 | 1866 | 1866 | 1866 |
| TDP | 6W | 6W | 12W | 9.5W | 6.5W |

Product View



Dimensions and Drawing



DIN-rail Mounting

