

---

# Datasheet

## iBASE

### AGS102

**Fanless, Ultra-Compact IoT Gateway with DIN-Rail Mounting System**

**with Intel® Atom™ E3950/E3930, Pentium® N4200 and Celeron N3350 Processor**

The information contained in this document has been carefully researched and is, to the best of our knowledge, accurate. However, we assume no liability for any product failures or damages, immediate or consequential, resulting from the use of the information provided herein. Our products are not intended for use in systems in which failures of product could result in personal injury. All trademarks mentioned herein are property of their respective owners. All specifications are subject to change without notice.

---



## Features

- Supports Intel® Atom™ E3950/E3930 & Pentium® N4200/ Celeron® N3350 Series processors
- GPIO 4-in & 4-out with isolation function
- Over/Under/Reverse voltage protection
- **Wide-range operating temperature from -40°C to 70°C**
- 9V~36V DC wide-range power input
- Rugged and fanless design
- DIN-rail mount & Wall mount compatibility

## Specifications

System Mainboard	IB801
CPU Type	Intel® Atom™ E3950/E3930 & Pentium® N4200/ Celeron® N3350 Series processors
System Speed	Up to 2.5GHz
Memory	1x 4GB DDR3L-1866 SO-DIMM, Max. 8GB
Construction	Aluminum & Steel
Chassis Color	Sliver (Aluminum)
Rear Panel External I/O	1x DVI-I + 1x DisplayPort connector 4x USB 3.0 ports, 1x USB 2.0 port 2x RJ45 Gigabit Ethernet port 3x LED indicators (HDD, WLAN, WWAN) 1x power button with Green LED 1x 3-pins DC-in terminal block type for 9V-36V 1x Antenna hole for WLAN module 2x RS232 ports for COM#3/COM#4 1x 4-in & 4-out GPIO with isolation
Left Panel External I/O	2x RS232/422/485 ports for COM#1/COM#2 1x Antenna hole for WLAN module 1x Speaker-out connector
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 mSATA SSD
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)
Operating Temperature	<b>-40°C to 70°C (-40°F~158°F) (For E-series CPU)</b> <b>-20°C to 60°C (-4°F~140°F) (For N-series CPU)</b>
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

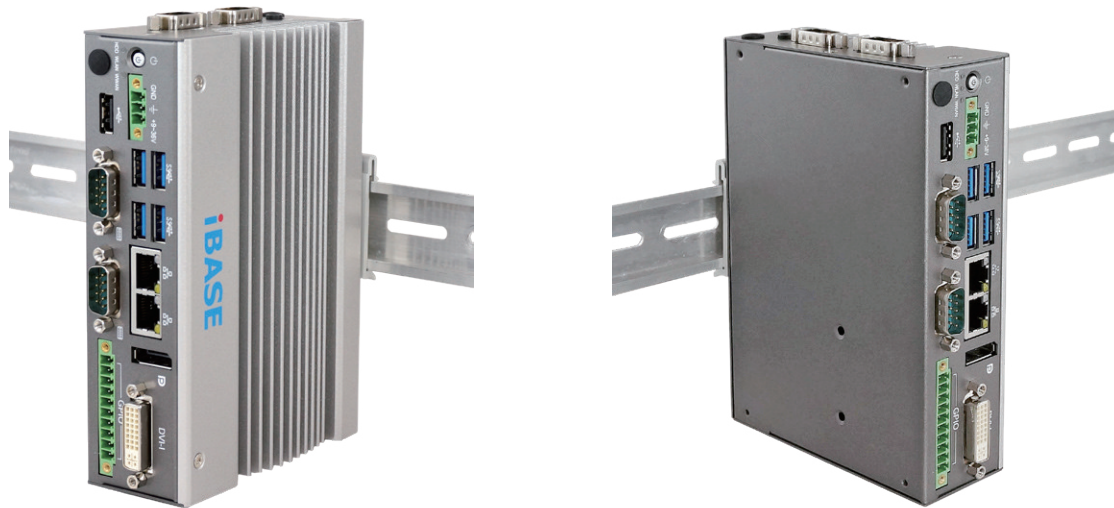
## Ordering Information

AGS102-I50	Fanless Din-rail system w/ Intel® Atom™ processor E3950, 4x COM, 1x 4GB DDR3L memory industrial-grade, 1x 64GB MLC industrial-grade mSATA SSD, w/o power adaptor
AGS102-I30	Fanless Din-rail system w/ Intel® Atom™ processor E3930, 4x COM, 1x 4GB DDR3L memory industrial-grade, 1x 64GB MLC industrial-grade mSATA SSD, w/o power adaptor
AGS102-420 (MOQ)	Fanless Din-rail system w/ Intel® Pentium® processor N4200, 4x COM, 1x 4GB DDR3L memory industrial-grade, 1x 64GB MLC industrial-grade mSATA SSD, w/o power adaptor
AGS102-335	Fanless Din-rail system w/ Intel® Celeron® processor N3350, 4x COM, 1x 4GB DDR3L memory industrial-grade, 1x 64GB MLC industrial-grade mSATA SSD, w/o power adaptor

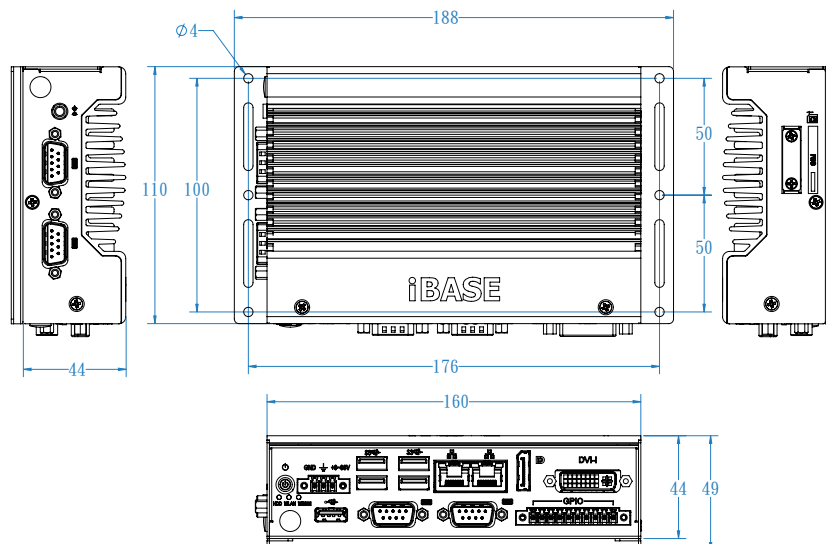
#### Intel® Entry Processor Ultra Low Power Reference Table

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

#### DIN-rail Mounting



#### Dimensions and Drawing



- 1 Embedded Systems
- 2 CPU Modules
- 3 Disk-Size SBCs
- 4 Motherboards
- 5 CPU Cards

Our company network supports you worldwide with offices in Germany, Austria, Switzerland, Great Britain and the USA. For more information please contact:

## Headquarters

### Germany



#### FORTEC Elektronik AG

Lechwiesenstr. 9  
86899 Landsberg am Lech

Phone: +49 8191 91172-0  
E-Mail: [sales@fortecag.de](mailto:sales@fortecag.de)  
Internet: [www.fortecag.de](http://www.fortecag.de)

## Fortec Group Members

### Austria



#### FORTEC Elektronik AG

##### Office Vienna

Nuschinggasse 12  
1230 Wien

Phone: +43 1 8673492-0  
E-Mail: [office@fortec.at](mailto:office@fortec.at)  
Internet: [www.fortec.at](http://www.fortec.at)

### Germany



#### Distec GmbH

Augsburger Str. 2b  
82110 Germering

Phone: +49 89 894363-0  
E-Mail: [info@distec.de](mailto:info@distec.de)  
Internet: [www.distec.de](http://www.distec.de)

### Switzerland



#### ALTRAC AG

Bahnhofstraße 3  
5436 Würenlos

Phone: +41 44 7446111  
E-Mail: [info@altrac.ch](mailto:info@altrac.ch)  
Internet: [www.altrac.ch](http://www.altrac.ch)

### United Kingdom



#### Display Technology Ltd.

5 The Oaks Business Village  
Revenge Road, Lordswood  
Chatham, Kent, ME5 8LF

Phone: +44 1634 672755  
E-Mail: [info@displaytechnology.co.uk](mailto:info@displaytechnology.co.uk)  
Internet: [www.displaytechnology.co.uk](http://www.displaytechnology.co.uk)

### USA



#### Apollo Display Technologies, Corp.

87 Raynor Avenue,  
Unit 1 Ronkonkoma,  
NY 11779

Phone: +1 631 5804360  
E-Mail: [info@apolloDisplays.com](mailto:info@apolloDisplays.com)  
Internet: [www.apolloDisplays.com](http://www.apolloDisplays.com)