


Rugged Embedded

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# IGT-20

Industrial Grade ARM-based Smart Wireless IoT Gateway Device with ARM Cortex A8, Dual T-Flash (microSD), and pre-installed Debian



### Key Features

- Industrial grade ARM-based system with pre-built Debian
- Compact Size, designed for wireless gateway application
- Operating temperature from -25°C to 70°C
- 8 to 25V wide-range DC input
- Rich Local I/O, such as USIM Slot, USB, 10/100M LAN, and RS-232/422/485

CE FCC

## Introduction

IGT-20 is an industrial grade system for gateway application, based on AM3352, the TI Sitara AM335x family, with pre-installed Debian. Unlike some SoMs provided as a PCB board, IGT-20 is shipped as a full system of industrial grade, compliant with certain common industrial certification, CE/FCC, shock and vibration. Besides, it takes a wide range of power input ranging from 8 to 25VDC. This also distinguishes itself from SoMs, which usually accepts only 5VDC.

IGT-20 equips with one USB2.0, one 10/100M LAN, two configurable RS-232/422/485, and one optional CAN Bus port. These cover a large portion of interfaces of industrial sensors. Additionally, there are 4 built-in isolated digital input channels, which accepts discrete signals from, for example proximity, sensors, as well as buttons. There are also four built-in isolated digital output channels to control actuators and indicators. Having a mini PCIe slot and an USIM holder, IGT-20 can transmits acquired data and system status via 3G, 4G or WiFi technologies with an additional mini PCIe module. There is an antenna hole on top of IGT-20, enabling users wiring the SMA connector from the wireless module to the chassis. Regarding to the storage, IGT-20 takes a dual-microSD design. This not only enables users to separate system and user data, but also expedites OS deployment of mass production of users. As a gateway, there are six built-in user programmable LED indicators can reveal the status of IGT-20. Moreover, users can take advantage of the two user programmable buttons to manipulate IGT-20 even if no monitor and no keyboard/mouse.

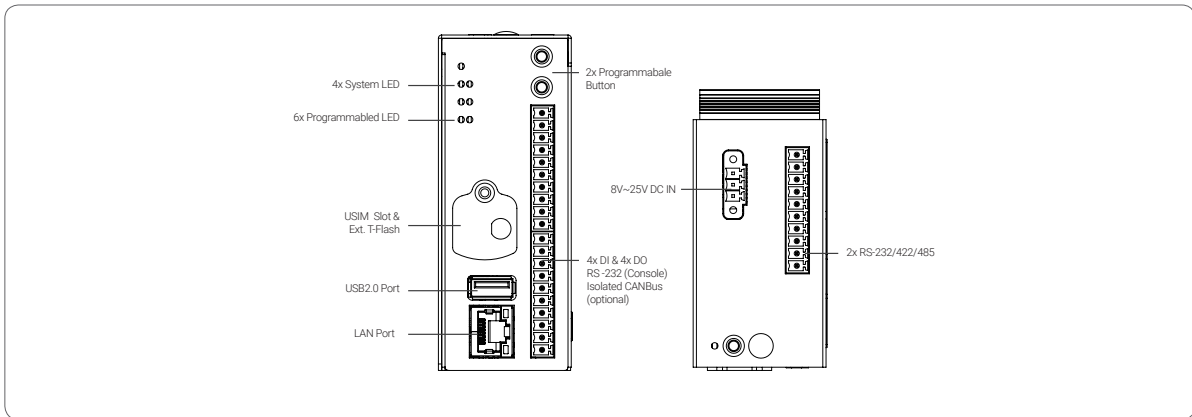
## Specifications

System Core		Internal I/O Interface	
Processor	Ti Sitara AM3352 1GHz Processor	mPCIe	1x Full size mPCIe with USB 2.0 only
Memory	1GB DDR3L SDRAM	SD Card	1x internal T-flash socket support SDHC
DC Input Range	8~25V DC	<b>Software</b>	
<b>Front-panel I/O Interface</b>		Operating System	Debian 8.6 pre-installed
Ethernet	1x 10/100M Ethernet	<b>Mechanical</b>	
SD Card	1x external T-flash socket support SDHC	Dimension	41mm(W) x 77mm(D) x 104mm(H)
SIM Card	1x external SIM socket	Weight	0.4 Kg
USB	1x USB2.0	Mounting	DIN-Rail mounting
Isolated DIO	4-CH isolated DI and 4-CH isolated DO	<b>Environmental</b>	
Console	1x 3-wire RS-232	Operating Temperature	-25°C ~ 70°C
User LEDs	6x user programmable LEDs	Vibration	5Grms
User Buttons	2x user programmable buttons	Shock	50Grms
Antenna Hole	1x antenna hole for Wifi and 3G/LTE	EMC	CE/FCC Class A
<b>Top I/O Interface</b>			
DC-in	1x DC-input connector		
Power Button	1x power button		
Reset Button	1x reset button		
Serial Port	2x Software Configurable RS-232/422/485		
mSATA	1x internal half-sized mSATA (SATA + USB)		

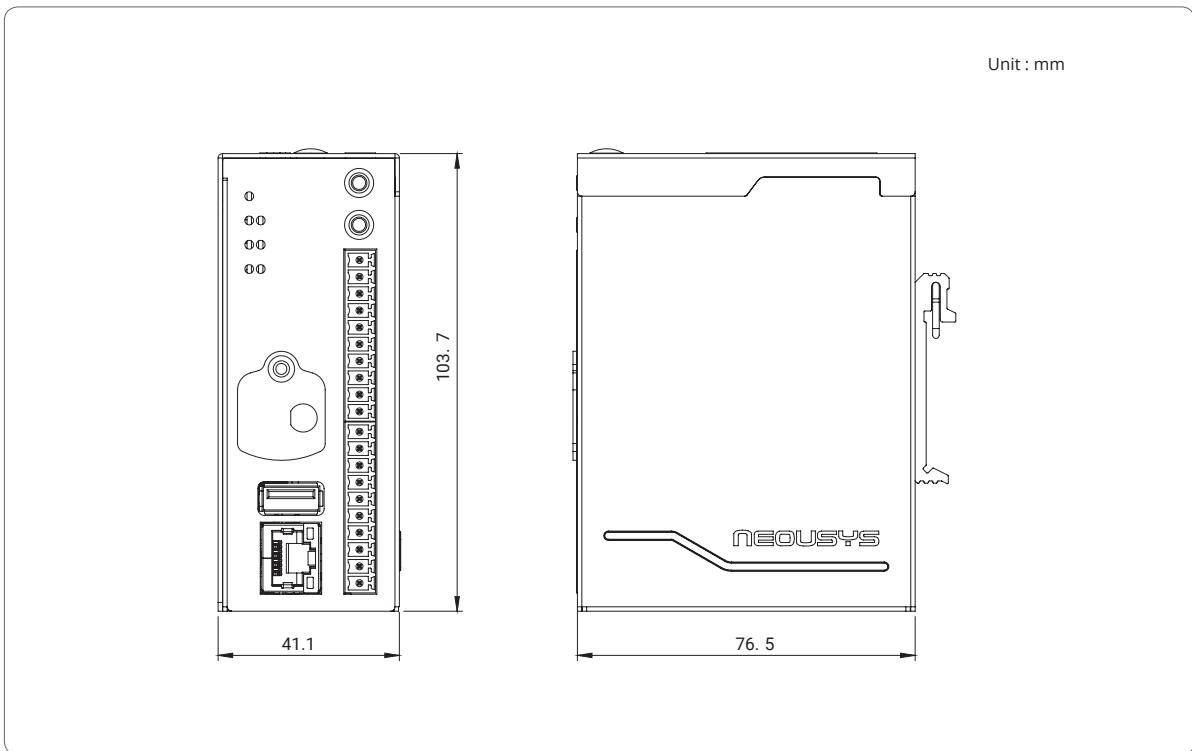
IGT-20

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## Appearance



## Dimensions



## Ordering Information

Model No.	Product Description
IGT-20	Industrial grade ARM-based IoT Gateway

## Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

### US

[sales@assured-systems.com](mailto:sales@assured-systems.com)

Sales: +1 347 719 4508  
Support: +1 347 719 4508

1309 Coffeen Ave  
Ste 1200  
Sheridan  
WY 82801  
USA

### EMEA

[sales@assured-systems.com](mailto:sales@assured-systems.com)

Sales: +44 (0)1785 879 050  
Support: +44 (0)1785 879 050

Unit A5 Douglas Park  
Stone Business Park  
Stone  
ST15 0YJ  
United Kingdom

VAT Number: 120 9546 28  
Business Registration Number: 07699660