

# IGT-20

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



### 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

### 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 covers 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 SIM holder with USB 2.0 only
Memory	1GB DDR3L SDRAM	SD Card	1x internal T-flash socket support SDHC
DC Input Range	8~25V DC	Mechanical	
Front-panel I/O Interface		Dimension	41mm(W) x 77mm(D) x 104mm(H)
Ethernet	1x 10/100M Ethernet by Integrated	Weight	0.4 Kg
SD Card	1x external T-flash socket support SDHC	Mounting	DIN-Rail mounting
SIM Card	1x external SIM socket	Environmental	
USB	1x USB2.0	Operating Temperature	-25°C ~ 70°C
Isolated DIO	4-CH isolated DI and 4-CH isolated DO	Vibration	5Grms
Console	1x RS-232	Shock	50Grms
Antenna Hole	1x antenna hole for Wifi and 3G/LTE	EMC	CE/FCC Class A
Top I/O Interface			
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		

### Order Information

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