IGT-20

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

CE FC

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**

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.

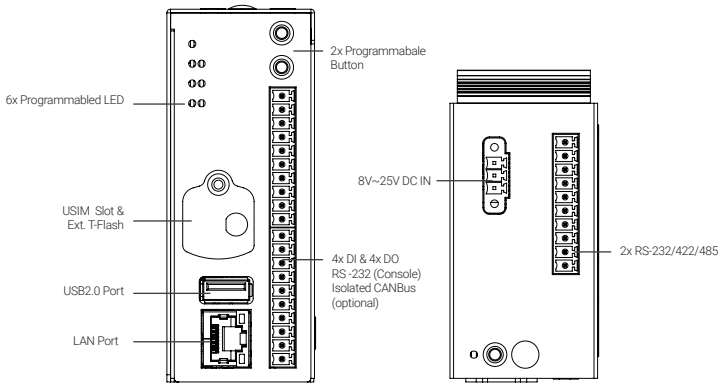
Specifications

System Core	
Processor	TI Sitara AM3352 1GHz Processor
Memory	1GB DDR3L SDRAM
DC Input Range	8~25V DC
Front-panel I/O Interface	
Ethernet	1x 10/100M Ethernet
SD Card	1x external T-flash socket support SDHC
SIM Card	1x external SIM socket
USB	1x USB2.0
Isolated DIO	4-CH isolated DI and 4-CH isolated DO
Console	1x 3-wire RS-232
User LEDs	6x user programmable LEDs
User Buttons	2x user programmable buttons
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
Antenna Hole	1x antenna hole for Wifi and 3G/LTE

Internal I/O Interface	
mPCIe	1x Full size mPCIe with USB 2.0 only
SD Card	1x internal T-flash socket support SDHC
Software	
Operating System	Debian 8 pre-installed
Mechanical	
Dimension	41mm(W) x 77mm(D) x 104mm(H)
Weight	0.4 Kg
Mounting	DIN-Rail mounting
Environmental	
Operating Temperature	-25°C ~ 70°C*
Vibration	5Grms
Shock	50Grms
EMC	CE/FCC Class A

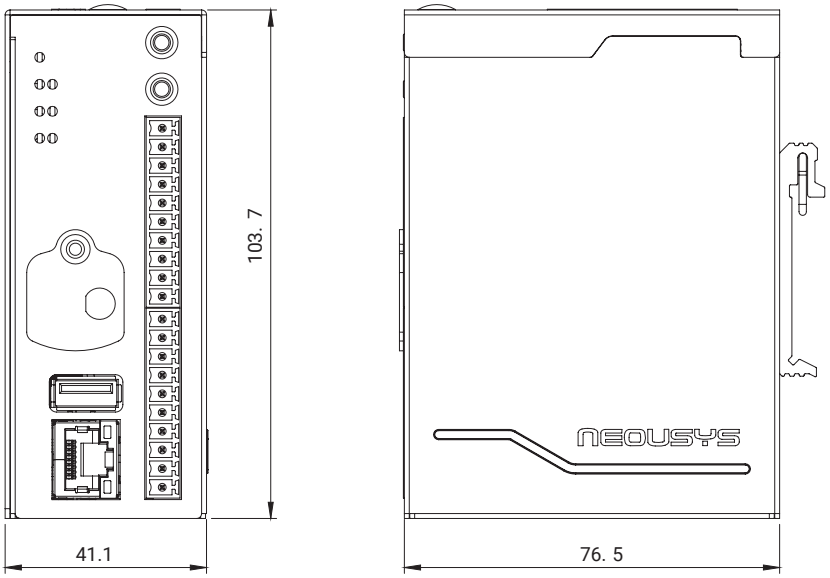
** For sub-zero operating temperature, a wide temperature microSD module is required.*

Appearance



Dimensions

Unit : mm



Ordering Information

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