IGT-33V/ IGT-34C

TI Sitara™ AM3352 ARM-based Industrial IoT Gateway with Analog Inputs and Pre-installed Debian

Key Features

· **Industrial grade ARM-based system with pre-installed Debian**
· **Built-in isolated analog input and DI/O channels**
· **Dual LAN and COM ports for expend**
· **12 to 25V wide-range DC input and 802.3at PoE+ PD**
· **-25°C to 70°C wide temperature operation**

CE FC

Introduction

Neousys IGT-30 series, equipped with AM3352 from Texas Instrument's Sitara AM335x family, is an ARM-based Box PC aimed at Industrial Internet of Things (IIoT) Gateway and Industry 4.0 applications. As required by any industrial applications, IGT-30 series is shipped as a ready system pre-installed with Debian and in compliance with common industrial certifications such as CE/FCC, shock and vibration. It has a power input range of 12 to 25 VDC and a wide operating temperature from -25°C to 70°C to ensure IGT-30 series continues to function under harsh industrial conditions.

IGT-33V/ 34C have rich I/Os for users to connect to a raviety of industrial sensors and devices. It features one USB 2.0 port, dual 10/100M LAN ports and two COM ports (one RS-485, one configurable RS-232/422/485). In addition, IGT-33V/ 34C also integrate analog and digital ports, such as eight 0-10V voltage inputs for IGT-33V and four 4-20mA current inputs for IGT-34C. There are also two built-in isolated digital inputs for button/switch and six digital outputs for actuators or modules controll. User can easily build their own private serial automation or IIoT system.

Communication wise, IGT-30 series has a mini PCIe slot and a USIM holder allowing it to transmit acquired data and system status via 3G, 4G or WiFi (mini PCIe WiFi module). There is an opening on top of IGT-30 series for users to mount the SMA connector of the wireless module. In terms of storage, IGT-30 series has dual microSDHC slots, one internal and one external. This design allows users to separate system/ user data and can expedite in OS deployment for mass production. Inherited from IGT-20, IGT-30 series provides six LED indicators and two function buttons that can be programmed by users. The function buttons can act as controls for IGT-30 series and exclude the need for external input devices, such as keyboard/ mouse.
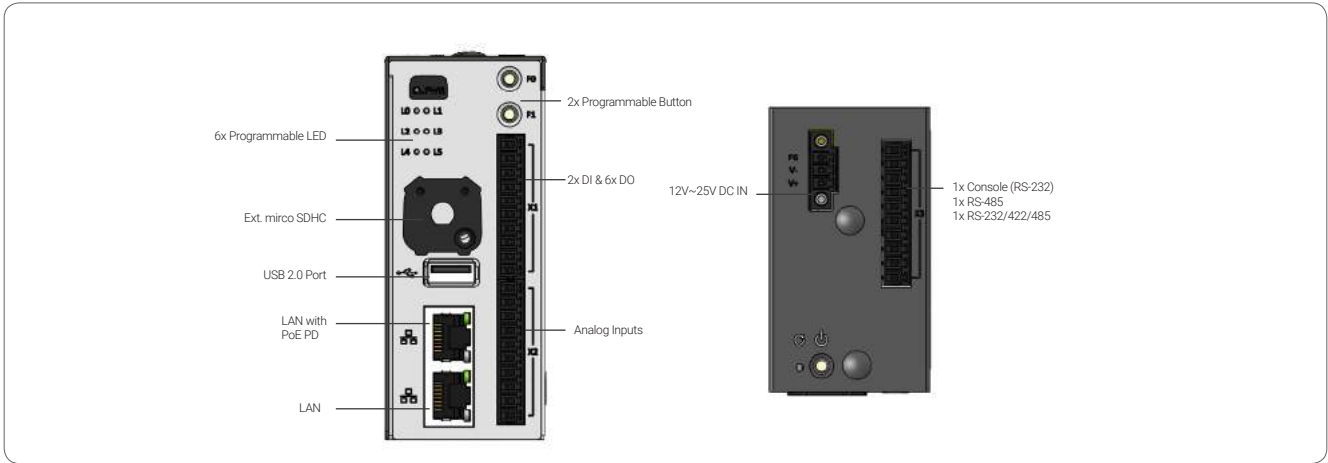
Specifications

	IGT-33V	IGT-34C
System Core		
Processor	TI Sitara AM3352 1GHz processor	
Memory	1GB DDR3L SDRAM	
Front-panel I/O Interface		
Ethernet	2x 10/100 LAN, 1 with PoE PD	
USB 2.0	1x USB 2.0	
SD Card	1x external T-flash socket support miscro SDHC	
Function Buttons	2x user programmable buttons	
User LEDs	6x user programmable LEDs	
Isolated DIO	2x digital input 6x digital output	
Analog Input	8x 16 bit 0-10V/ ±5V/ ±10V Voltage Input	4x 16 bit 4-20mA/ 0-20mA Current Input
Top I/O Interface		
DC-in	1x DC-input connector	
Power Button	1x power button	
Reset Button	1x reset button	
Console	1x RS-232 as Console Port	
Serial Port	1x RS-232/422/485 1x RS-485	
Antenna Hole	2x antenna hole for WiFi and 3G/LTE	

	IGT-33V	IGT-34C
Internal I/O Interface		
SD Card	1x internal T-flash socket support micro SDHC	
mPCIe	1x full size mPCIe	
SIM Card	1x internal SIM socket	
Software		
Operating System	Debian 9 pre-installed	
Power Supply		
DC Input Range	12~25V DC	
PoE+ PD	IEEE 802.3at PoE+ PD	
Mechanical		
Dimension	43mm (W) x 77mm (D) x 104mm (H)	
Weight	0.5 Kg	
Mounting	DIN-rail mount	
Mechanical		
Operating Temperature	-25°C~70°C *	
Storage Temperature	-40°C~85°C	
Humidity	5Grms	
Shock	50Grms	
EMC	CE/FCC Class A, according to EN55032 & EN55024	

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

Appearance

- 6x Programmable LED
- Ext. mirco SDHC
- USB 2.0 Port
- LAN with PoE PD
- LAN
- 2x Programmable Button
- 2x DI & 6x DO
- Analog Inputs
- 12V~25V DC IN
- 1x Console (RS-232)
- 1x RS-485
- 1x RS-232/422/485

Dimensions

Unit : mm

104

43

77
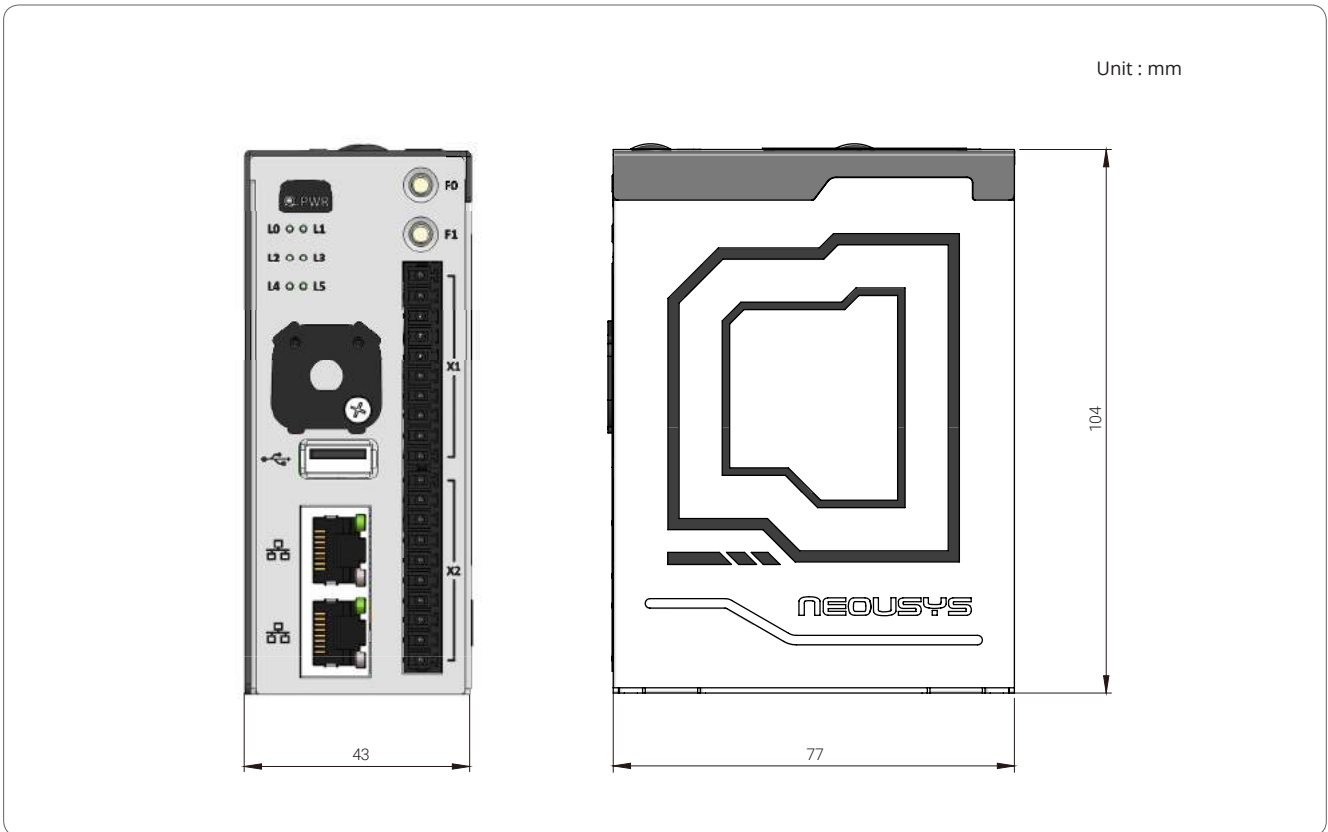
Ordering Information

Model No.	Product Description
IGT-33V	Industrial grade ARM-based IoT gateway with 0-10V analog inputs, dual LAN and PoE PD enable
IGT-34C	Industrial grade ARM-based IoT gateway with 4-20mA analog inputs, dual LAN and PoE PD enable

Optional Cellular Module

NSIO-LTE-7455	Cat. 6 LTE embedded socket modem