



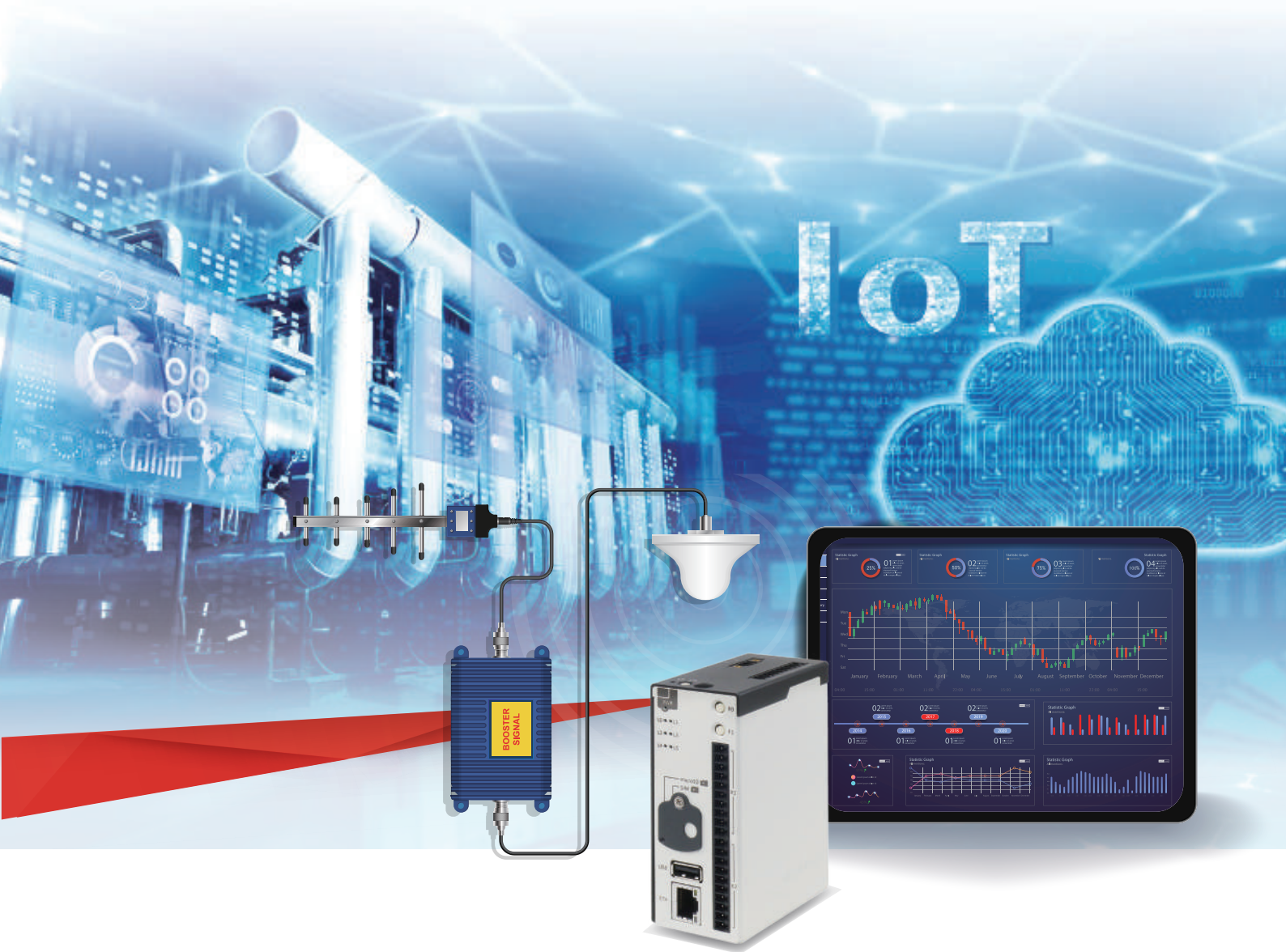
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**IGT-22-DEV**

# Industrial-grade IoT gateway Development Kit



- ▶ Industrial-grade IoT gateway
- ▶ 8 isolated digital inputs and 8 digital outputs
- ▶ Pre-loaded and configured IoT platform middleware

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## Introduction

Would you like to improve your daily operations? Did you know big data generated from daily operation offers valuable insights that you may otherwise overlook, and dramatically improve your operations?

If your answer to both questions is yes, then you must already know the importance of implementing the correct method for data acquisition continuity. However, you might not be familiar with or is unsure of the prerequisites or the preparation work that need to be done for data continuity and acquire the valuable big data which may later turn into one of your greatest assets. The Neosys IGT-22-DEV is an industrial-grade gateway development kit that provides the comprehensive resources you need for developing your gateway.

IGT-22-DEV provides a ready-for-use software environment featuring Debian Buster, Docker CE, Node-RED, Python3, GCC and IoT platform agent configured with sensors and cloud connection. With minimum provisioning on the IoT platform, a web-based dashboard becomes available and can be accessed on a desktop computer, tablet or mobile phone, wherever you may be. IGT series supports various programming languages, such as Python and GCC. On top of that, IGT-22-DEV has Node-RED pre-installed for intuitive graphical and local logic control of the built-in DO, allowing prompt responses. Unlike the standard IGT-22, the USB port of IGT-22-DEV is specifically set to OTG mode to provide serial and LAN functions over USB, so you can choose to connect to IGT-22-DEV with a USB cable.

Neosys IGT development kits not only demonstrate the capabilities of the IGT series but their ready-for-deployment and plug-and-play characteristics make them excellent choices for compatibility or performance evaluation without starting from scratch. It's undoubtedly the IIoT kit you want to get your hands on whether it is your first IoT project, bridging between digital and legacy devices, or a system compatibility test before actual implementation. The Neosys IGT development kits make your IIoT journey simple, effective and efficient.

## Specifications

System Core	
Processor	TI Sitara AM3352 1GHz Processor
Memory	1GB DDR3L SDRAMs
Storage	8GB
Power supply	1x 3-pin pluggable terminal block for 8~25VDC
I/O Interface	
Ethernet port	1x 10/100M Ethernet
Serial port	1x RS-232, 1x RS-485 with auto flow control
USB	1x USB2.0 as a device supporting RNDIS and ACM
Isolated DIO	8-CH isolated DI and 8-CH isolated DO
Console	1x 3-wire RS-232
User LEDs	6x user-programmable LEDs
User buttons	2x user-programmable buttons
mini-PCIe	1x mini PCI Express slot with external USIM socket for an optional cellular modem or WiFi module
Software	
Operating System	Debian 10 pre-installed
Development Tool	Node-RED / Python3.7.3 / GCC 8.3.0
Software	
Container	Docker CE
System Monitoring	Cockpit
IoT Platform Agent	Thingsboard-gateway
Supported Protocol	MQTT / Modbus RTU / Modbus TCP / OPC-UA / BLE / CAN / BACnet / ODBC / REST / HTTP / SNMP
Mechanical	
Dimension	41mm (W) x 104 mm (H) x 77 mm (D)
Weight	0.5Kg
Mounting	DIN-rail mounting
Environmental	
Operating Temperature	-25°C ~ 70°C, 100% CPU loading
Storage Temperature	-40°C ~85°C
Humidity	10%~90% , non-condensing
Vibration	Operating, 5 Grms, 5-500 Hz, 3 Axes (w/ SSD, according to IEC60068-2-64)
Shock	Operating, 50 Grms, Half-sine 11 ms Duration (w/ SSD, according to IEC60068-2-27)
EMC	CE/FCC Class A, according to EN 55032 & EN 55024

## Ordering Information

Model No.	Product Description
IGT-22-DEV	Industrial-grade IoT gateway development kit
Optional Wireless Accessories	
NSIO-LTE-7455	Cat. 6 LTE embedded socket modem
LTE CAT-4 option	Cat. 4 LTE module with one internal cable to SMA connector
WiFi and BT option	WiFi 802.11ac module with one internal cable to SMA connector
LTE Antenna option	Antenna 698-960/1710-2170/2300 -2700 Mhz, 50-ohm Impedance
WiFi Antenna option	Antenna WiFi 2.4G/5.8G 2dbi RP
Optional Power Supply Unit	
PA-60W-OW	60W AC/DC power adapter with 12V, 5A DC output, cord end terminals for terminal block, operating temperature: -30 to 60 °C.

### DISCLAIMER

Software packages are contributed by corresponding communities, and are provided "as is" with no warranty of any kind. Neosys is NOT responsible for training, debugging and maintaining the software packages.