

The IIoT Gateway : IGX Series, a new breed of gateway with a modular design for multiple wireless backhauling capabilities, powered by an advanced data gathering and delivery multi-protocol aware edge processor. This allows IGX™ to be agile, and scale efficiently and rapidly to support billions of devices while keeping costs low.

### 1. Scalable Gathering Multi-Protocol Aware Middleware

With SkyLab's Innologix embedded, it provides support to connect various wireless/wired things and unifies different protocols to the IoT standard. Therefore reducing the cost of deployment, time to market, and unifying your system maintenance approach for all your IoT solutions.

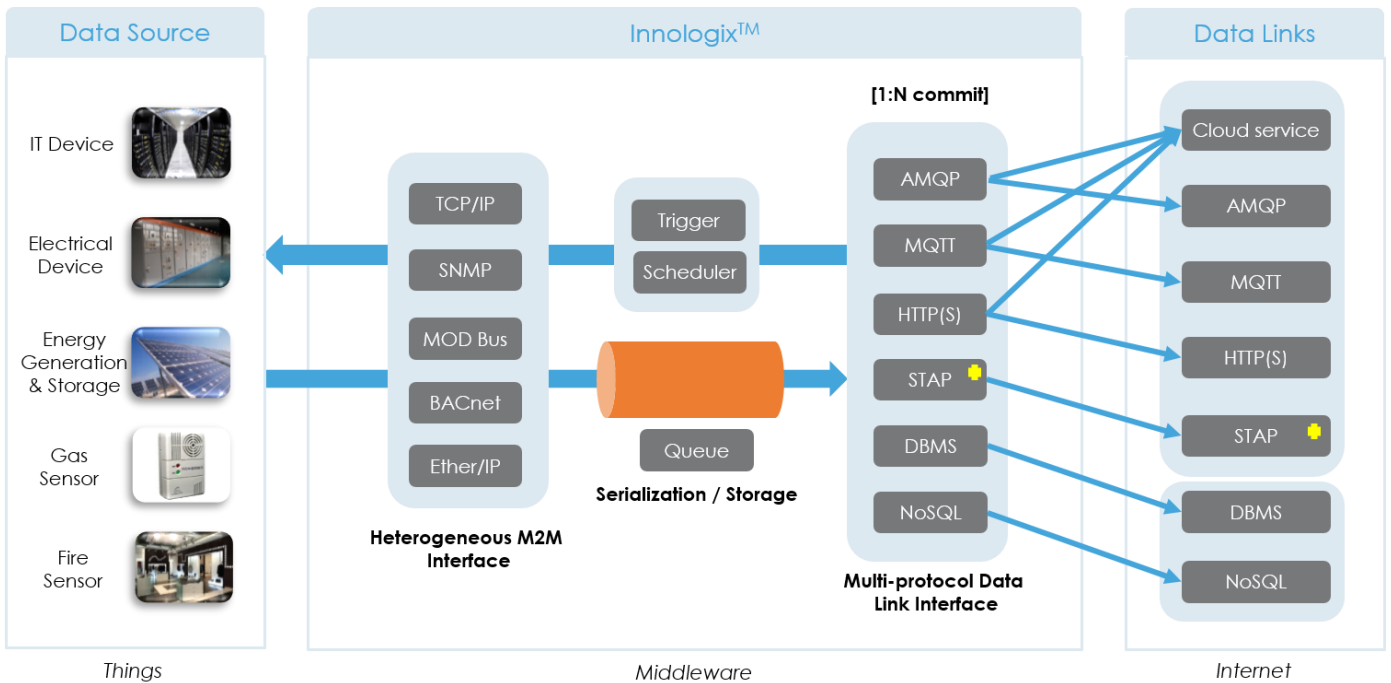
Innologix™ is a software PLC that provides interoperability not only at machine protocol level but also IoT gateway and platform levels. A platform agnostic middleware, Innologix™ provides guaranteed technology integration regardless of the IoT platform or machine protocol is used.

### 2. Wireless Backhaul

The SkyLab IGX IIoT Gateway interfaces can be easily connected with different types of backhauling technologies (Satellite, Microwave, Cellular, LPWAN, WiFi, Fiber, Copper).



## Use Case Scenario



## Key Benefits

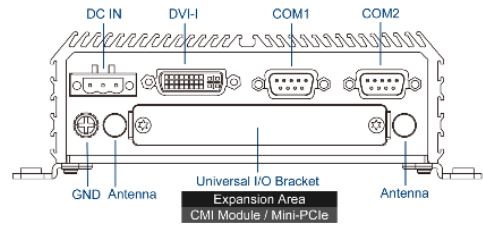
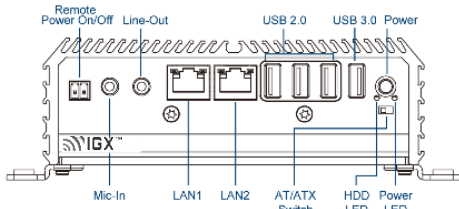
**Connectivity**  
 Heterogeneous protocols support diversity in field communication. WiFi/Cellular/Bluetooth ensure interoperability between systems. Flexible expansion modules available to support scalability.

**Security**  
 Master IGX™ Device Registration with Administrator Authorization using DLC™. Automated Device Certificate Exchange using X509, Sub-Device Authorization - PLC, Sensor, Meter & Inverter. Data Protection includes remote lock, deactivation & encryption. DLC™ provides secure data transmissions (TLS). User Permissions & Device Auditing using DLC™ Platform

**Scalability**  
 Utilizing cutting edge Enterprise level private cloud technologies allows IGX™ to be agile, scale efficiently & rapidly to support billions of devices while keeping costs low.

**Industrial Quality**  
 Proven ruggedness assures operation in harsh conditions such as high temperatures & mobility.

**Manageability**  
 Centralized Remote Management using DLC™ offers remote manageability of IGX™ devices (and sub-devices) & enhances system reliability. From DLC™, you can remotely monitor, configure and update single devices or groups of devices. This secure portal allows you to rapidly deploy & manage a large number of remote locations.



## Systems

Processor	Intel® Atom™ Processor E3826 (1M Cache, Up to 1.46 GHz SoC, 7W TDP)
BIOS	AMI 64 Mbit SPI BIOS
Memory	1x DDR3L 204-pin SO-DIMM, 4GB (1066/1333MHz, un-buffered and non-ECC type)
Graphics	Integrated Intel® HD Graphics - Two Independent Display
Audio	Realtek® ALC888S - High Definition Audio
I/O	1x DVI-I Connector, Up to 1920 x 1080 2x GbE LAN Ports (Support Wake On Lan, Teaming, Jumbo Frame, PXE), RJ45 - GbE1: Intel® I210-AT - GbE2: Intel® I210-AT 2x RS-232/422/485 with Auto Flow Control, DB9 1x USB 3.0 & 3x USB 2.0 (Type-A) 1x Mic-in and 1x Line-out, Phone Jack 3.5mm 1x ATX Power On/Off Switch Button 1x AT/ATX Mode Switch 1x Remote Power On/Off Connector, 2-Pin Terminal Block
Storage	32 GB (2.5" SATA HDD Bay or mSATA) (Shared by 1x Mini-PCIe socket)
Security	Master IGX™ Device Registration with Administrator Authorization using DLC™ Device Certificate Exchange using X509 Sub-Device Authorization (PLC, Sensor, Meter, Inverter) Data Protection: Remote Lock, Deactivation, Encryption DLC™ provides secure data transmissions (TLS) User Permissions and Device Auditing using DLC Platform
Expansion	1x CMI Interface for CMI Modules 2x Full-size Mini-PCIe (Supports Wireless & I/O Expansion) 1x SIM Socket 1x Universal I/O Bracket 2x Antenna Holes
Other Function	Instant Reboot Technology (0.2 sec) Watchdog Timer: - Software Programmable Supports 1~255 sec. System Reset
Operation System	SkyLab Proprietary OS based off of Linux

## Environmental

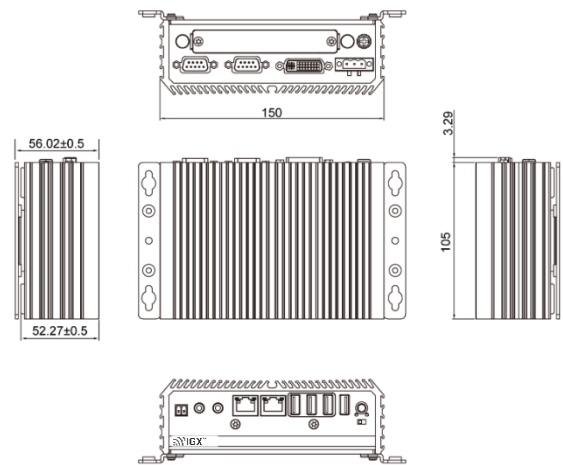
Operating Temp.	-25°C to 70°C (With extended temperature peripherals; Ambient with Air Flow by IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
Storage Temp.	-40°C to 85°C
Relative Humidity	95% @ 40°C RH (Non-Condensing)
Shock	50 Grms (With SSD According to IEC 60068-2-27, Half Sine, 11ms Duration)
Vibration:	Random: 5 Grms (With SSD According to IEC 60068-2-64, 5~500Hz, 1 hr/axis)

## Qualification

Certifications	CE, FCC Class A
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## Mechanical

Construction	Extruded Aluminium with Heavy Duty Metal
Mounting	VESA/Wall Mounting
Weight	0.86kg
Dimensions	150 (W) x 105 (D) x 56.02 (H)mm



## ABOUT SKYLAB

SKYLAB'S INDUSTRIAL IOT SOLUTION enables secured and efficient data harvesting over a large scale network. Empowering our customers' complex Industrial IoT deployment seamlessly and securely, SkyLab's Data Logistics Cloud™ is a network agnostic solution that comprises of the following features; multiprotocol data harvesting middleware, Industrial IoT security solutions, real-time integrated dashboard, advanced data transport acceleration and Industrial IoT inventory management system. Our uniquely designed solution aims to address mission critical topics such as "SECURITY, LATENCY AND SCALABILITY" for the Utilities, Mobility, Manufacturing and Government segments' complex Industrial IoT operations.

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