

Agora Ruggedized Computing Device



By harnessing the power of edge computing and data analytics, Agora is the portal to edge intelligence. With an open, secure and scalable platform, AgoraSM edge IoT solutions enable operators to reduce nonproductive time, minimize HSE risk, enhance production and lower total operating costs.

At the center of the platform is the ruggedized edge computing device, which collects, analyzes and transmits data from field devices to the enterprise in real time. Edge Apps—domain-specific workflows and algorithms—are deployed to the system to enable insights to be derived on location.



Design and Operation

The computing device is designed to operate in the most challenging and remote environments. Built on industry standards, the ruggedized system meets all environmental requirements for temperature and shock and vibration. The enclosure of the computing device is NEMA 4X IP 66 certified for outdoor use.

The computing device connects to field devices from any vendor or manufacturer using standard industrial protocols.



Intrinsically Secure

The computing device is designed to minimize hardware vulnerability. The physically hardened system allows only necessary services to run and disables all other ports. Its robust security policy ensures that only approved applications can run on the device. For an extra layer of security, the system utilizes an advanced configuration that only permits outbound connections to known and trusted internet locations.

Each computing device is deployed in a unique and highly trusted manner. This approach safeguards the device and eliminates the risk associated with default configurations and credentials. The hardware-based root of trust utilizes the TPMv2.0 cryptographic chip to deliver secure communications with the cloud—minimizing the chances of attackers compromising the device and gaining access to critical data. Federation and secure hardware tokens ensure that only authorized entities can access data and perform actions.

Agora Computing Device Technical Specifications

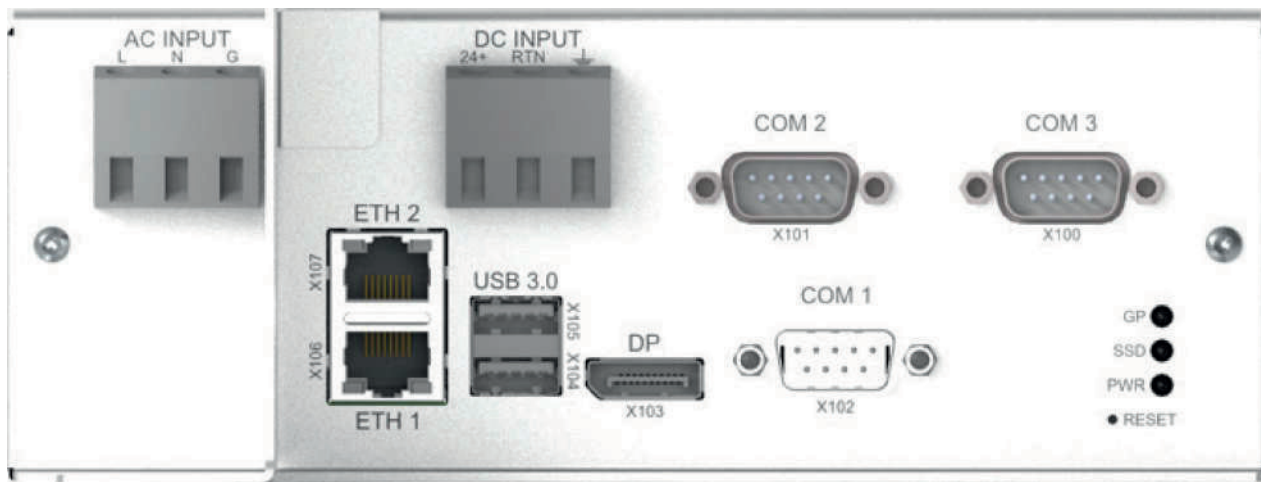
		Agora Computing Device v.403_A
Model No.		001-0156-03
Processor / RAM / Storage		Intel Atom E3950 Quad Core 2.0 GHz 8 GB DRAM 32 GB (eMMC) / 128 GB (SSD)
Security Chip		TPM 2.0 (with secure/measured boot support)
I/O		2x 1 GB Ethernet 2x RS485 / 422, 1x RS232 2x USB 3.0 1x Display port
Operating Temperature		-40°C to +60°C
Power Consumption		<20 W
Operating System		Linux Debian LTS
Connectivity	Northbound	Ethernet
	Southbound	Ethernet Serial (2x RS485, 1x RS232)
Power Source		AC 100-240 V, 50/60 Hz or 24 VDC
Dimension / Weight		12" x 9.5" x 4.25" / 7lb
Certification and Compliance		CE, FCC, cULus, WEEE
Material	Enclosure	Hot compression molded fiberglass reinforced polyester
	Cable Gland	Brass, Nickel Plated
	RF Connector	Brass, Nickel Plated
EQ Standards		WS / WL Surface Vibration Qualification
Hazardous Zone Rating		C1D2
Enclosure Protection Rating		NEMA 4X (IP66)
Applications		Container Based

The Agora Computing Device is available in multiple performance levels. It has also been deployed with two alternate power options:

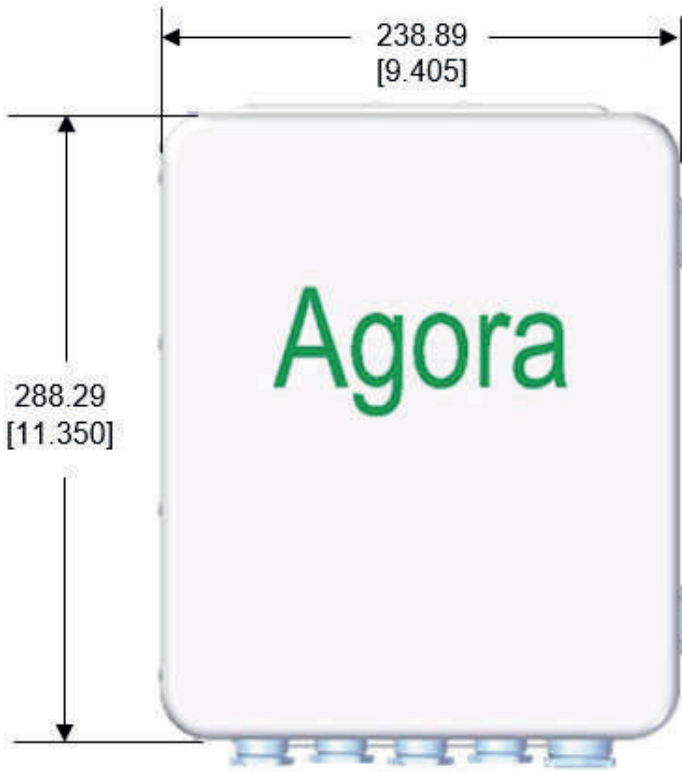
- The system without the battery option has been deployed in the field together with an UPS
- In addition, it is also possible to connect the system to a solar panel

Agora Computing Device Connections Overview

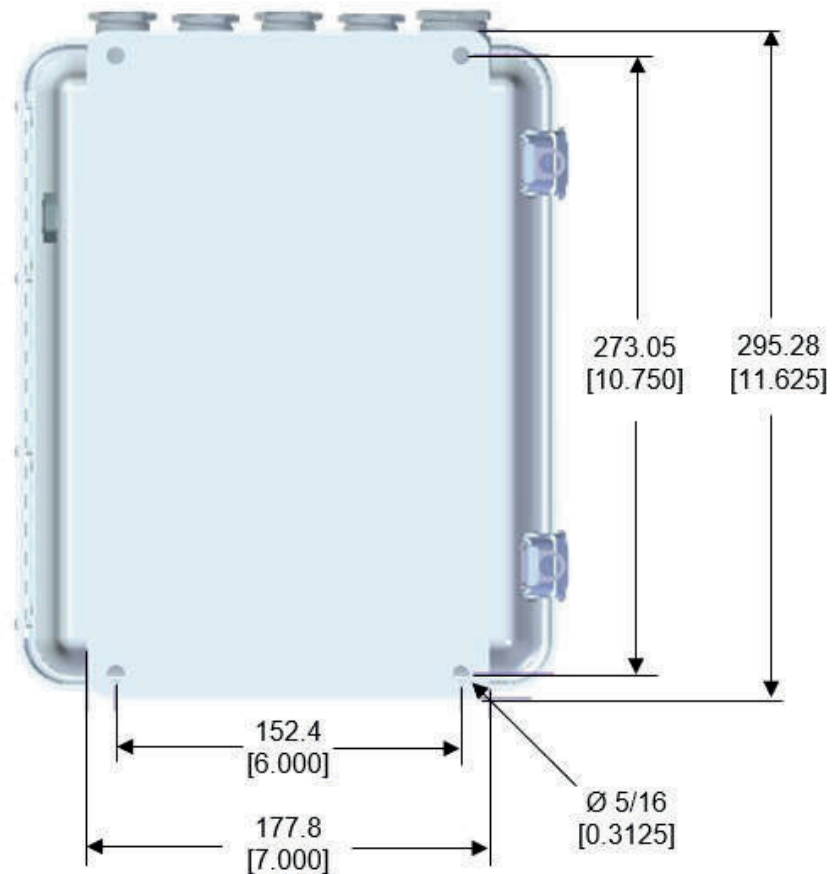
Front Inside Face View



Agora Computing Device Dimensions



Bottom Up Back View



Agora Computing Device Dimensions

