

Rugged Industrial Edge Controller for Real-Time Operations



ASRock Industrial iEP-5020G Series Wide-temp industrial IoT controller with real-time computing

ASRock —Industrial— × intel ai

The iEP-5020G Series is a rugged industrial IoT controller engineered to deliver reliable performance in demanding edge environments. Powered by the Intel Atom® x7433RE Processor, it supports real-time computing with Intel® Time Coordinated Computing (Intel® TCC) and TSN, making it ideal for automation, robotics, and precision control. Designed for wide-temperature operation (-40°C ~ 70°C for Basic/5LAN/8DIO SKU), it ensures stability in harsh industrial settings. The platform integrates versatile connectivity, including multiple 1G/2.5G LAN ports with PoE options, RS-232/422/485, USB 3.2, isolated digital I/O, and expansion for Wi-Fi, 4G LTE, and 5G modules. Security is enhanced with TPM 2.0 and ECC memory support. With its compact design, flexible mounting, and robust industrial features, the iEP-5020G empower businesses to deploy real-time edge intelligence, reduce downtime, and optimize operations, differentiating itself as a trusted solution for mission-critical IoT applications.

***Deployed in
real factories
to enable
modular,
scalable
industrial
automation***

Intel Products and Technologies

Accelerating AI and Analytics at the Edge



Intel Atom®
Processors

Intel® Time Coordinated Computing (Intel® TCC)

Key Features

Empowered by Intel.



Real-Time
Computing



Rugged
Reliability



Versatile
Connectivity



Secure &
Expandable

ASRock Industrial iEP-5020G Series



Product Specifications

CPU	Intel Atom® x7433RE, 4C, 1.5GHz, 9W
Graphics	Intel® UHD Graphics
Memory	1 x DDR5 4800MHz SO-DIMM, up to 16GB (In-Band ECC)
Storage	1 x M.2 (Key M, 2280) with PCIe Gen3x2
Wireless Network	1 x M.2 (Key B, 3042/3052) with PCIe Gen3x1 and USB 3.2 Gen1x1 for 4G LTE/5G
LAN	2 x Intel® Ethernet Controller I210-AT (RJ45 connector) 1 x Intel® Ethernet Controller I226-IT (RJ45 connector), support TSN/TCC 2 x Intel® Ethernet Controller I210-AT for 5LAN SKU (RJ45 connector) 2 x Intel® Ethernet Controller I210-AT for PoE SKU (RJ45 connector), PoE output max.15.4W/port, each port supports IEEE 802.3AF PoE.
Operating / Storage Temp.	-40°F~158°F or 122°F (w/ airflow 0.5~0.8m/s) / -40°F~185°F
Dimension (W x D x H)	58mm x 125mm x 157mm
Weight	Basic SKU : 1.43kg / PoE SKU : 1.75kg / 5LAN SKU : 1.65kg / 8DIO SKU : 1.50kg
OS	Windows, Linux

Learn More

[ASRock iEP-5020G Series](#)

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