

AP510-JH3

USB + CAN + DIO Expansion - Factory Automation Industrial PC

Part of the AP510 family — also available: AP510-8POE, AP510-CAN2, AP510-H1, AP510-H1B, AP510-H1BP, AP510-H7, AP510-JH2, AP510-JH2B, AP510-JH5, AP510-L2

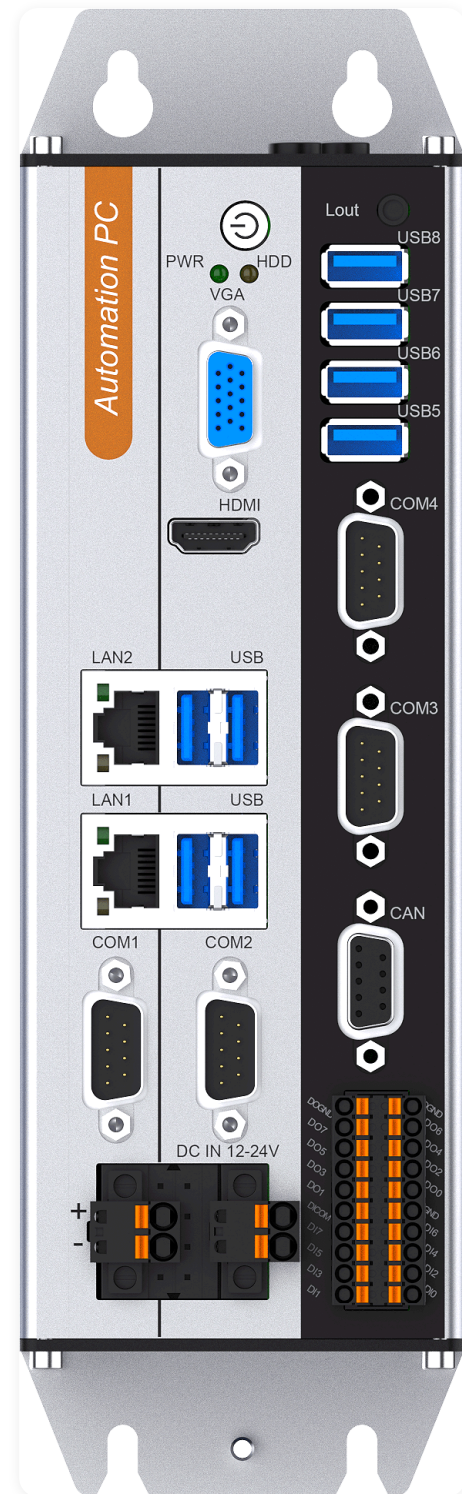
Product Overview

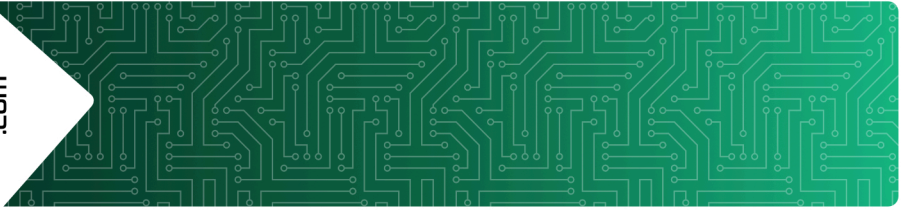
The AP510-JH3 is a factory-configured AP510 with the USB + CAN + DIO expansion card fitted. It combines four additional USB 3.0 ports, dual CAN bus channels, and 16 channels of isolated digital I/O for multi-sensor factory automation, AGV platforms, and data logging applications.

Built on the AP510 platform with Intel 10th/11th Gen Core processors (i3 to i9), dual storage slots, and full base I/O. See the AP510 platform datasheet for complete base specifications, wireless options, and CPU compatibility.

Product Highlights

- 4x USB 3.0 (external, Type A)
- CAN 2.0 A/B (DB9 connectors)
- 8x DI + 8x DO (isolated)
- Plus AP510 base I/O: 2x GbE, 4x USB 3.0, 4x RS232/RS485 (2 base + 2 expansion), VGA/HDMI
- Intel 10th/11th Gen Core i3/i5/i7/i9, LGA1200, up to 65W TDP
- Up to 32 GB DDR4, mSATA + M.2 SATA storage
- DC 12-24V, active cooling, -20 to 60°C
- Wall mount or DIN rail - 200 x 154.5 x 74.6 mm





Applications

Factory Automation

Multi-Sensor AGV

Data Logging

Fieldbus + Vision Hybrid

Warehouse Automation

Mobile Robots

Technical Specifications

Expansion Card I/O

USB 2.0 (Expansion)	4x USB 3.0 Type A (external)
CAN Bus	CAN 2.0 A/B, 1x DB9 female connector

Digital Inputs 8x DI, isolated

Digital Outputs 8x DO, isolated

Base Unit I/O (included)

Ethernet 2x Intel GbE LAN (2 total GbE ports with expansion)

USB 4x USB 3.0, 1x USB 2.0 Type A (internal, for dongle)

Serial 4x COM (DB-9), RS232/RS485 selectable, ESD protected (2 base + 2 expansion)

Display HDMI (3840 x 2160 @ 60Hz) + VGA (1920 x 1200 @ 60Hz)

Expansion Slot 1x miniPCIe with SIM holder (Wi-Fi 7 / 4G LTE optional)

Watchdog 1-255 levels programmable

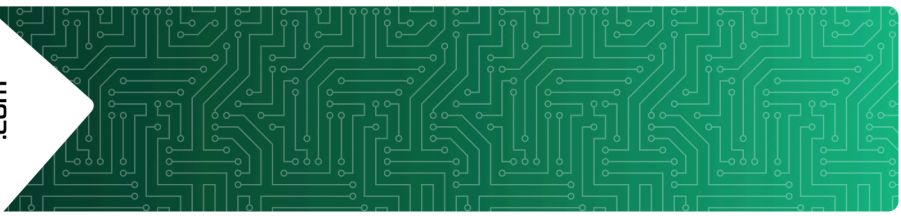
System

Processor Intel Core 10th/11th Gen i3/i5/i7/i9, LGA1200 socket, up to 65W TDP

RAM 2x SO-DIMM DDR4, up to 32 GB

Storage 1x mSATA + 1x M.2 (B Key, 2280) SATA

OS Support Windows 10/11 (Pro, IoT, LTSC), Ubuntu, Debian



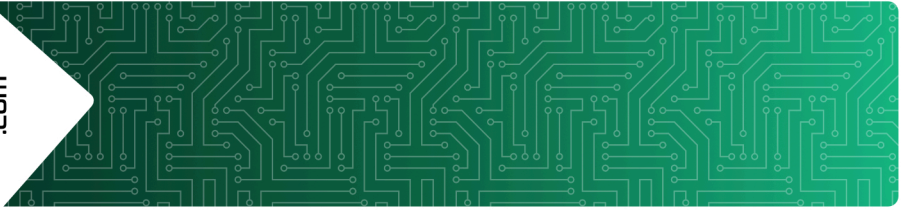
Technical Specifications (cont.)

Power & Environment

Power Input	DC 12-24V \pm 10%, overcurrent, overvoltage and polarity protection	Operating Temperature	-20°C to 60°C (-4°F to 140°F) with airflow
Power Consumption	Max. 120W	Vibration / Shock	1.5 Grms (IEC 60068-2-64) / 20G, 11ms (IEC 60068-2-27)
Cooling	Active cooling - embedded fan	EMC	CE / FCC Class A

Chassis

Dimensions	200 mm (L) x 154.5 mm (W) x 74.6 mm (H)	Mounting	Wall mount or DIN rail
Weight	Approx. 2.4 kg	Construction	Aluminium-magnesium alloy



Model Numbers

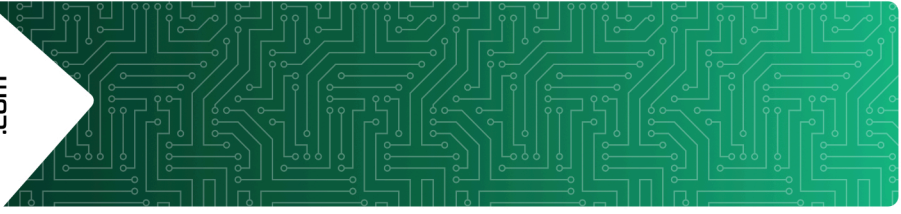
AP 5 1 X - JH3

Code	Meaning
5	Modular platform (active cooling, expansion bay)
1	First generation
X	CPU class (3 = i3, 5 = i5, 7 = i7, 9 = i9)
JH3	USB + CAN + DIO expansion card

Example: AP515-JH3 = Gen 1, Core i5, USB + CAN + DIO

Ordering Information

Part Number	Description
AP513-JH3	Intel Core i3 - USB + CAN + DIO - multi-sensor factory automation, AGV
AP515-JH3	Intel Core i5 - USB + CAN + DIO - multi-sensor factory automation, AGV
AP517-JH3	Intel Core i7 - USB + CAN + DIO - multi-sensor factory automation, AGV



Ordering Information (cont.)

Part Number	Description
AP519-JH3	Intel Core i9 - USB + CAN + DIO - multi-sensor factory automation, AGV

Specifications are subject to change without notice. E&OE.

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For full base platform specifications, wireless options, and CPU compatibility, refer to the AP510 platform datasheet.

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