

## AP510-JH5

10x Serial + DIO + Relay Expansion - Heavy Industrial 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-JH3, AP510-L2

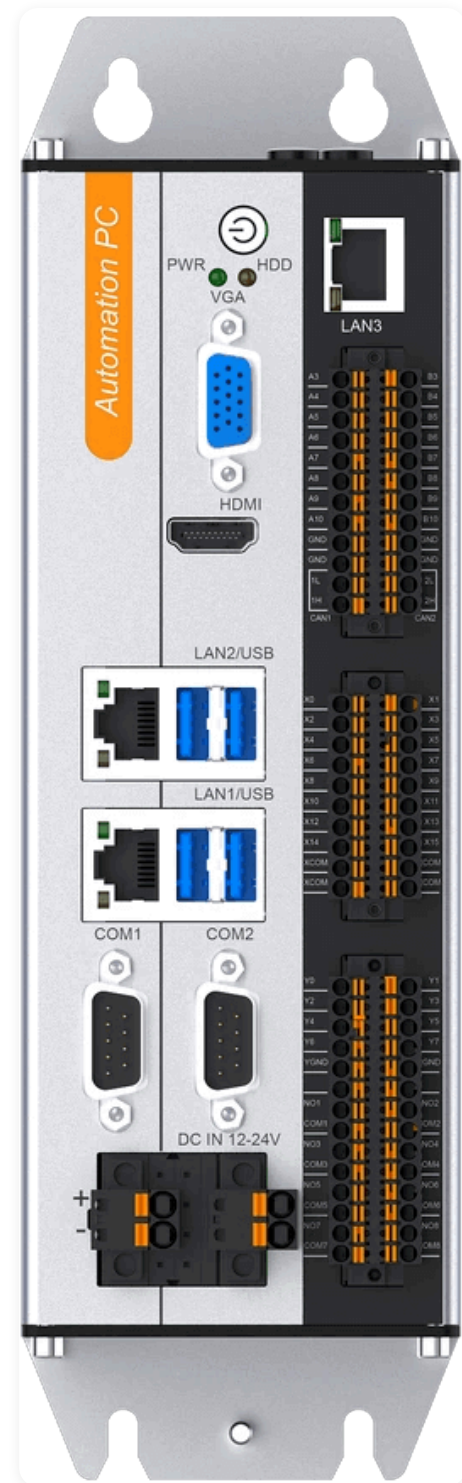
### Product Overview

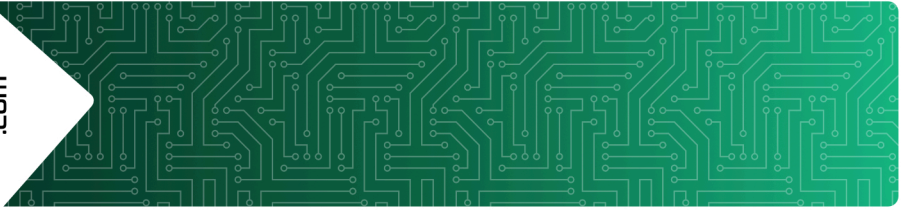
The AP510-JH5 is a factory-configured AP510 with the 10x Serial + DIO + Relay expansion card fitted. Eight isolated RS232/RS485 ports, dual CAN bus, 24 channels of digital I/O, and eight relay. The most I/O-dense variant for heavy industrial serial networks and Modbus RTU multi-device polling.

Built on the AP510 platform with Intel 10th/11th Gen Core processors (i3 to i7), dual storage slots, and full base I/O. See the AP510 platform datasheet for complete base specifications, wireless options, and CPU compatibility.

### Product Highlights

- 8x RS232/RS485
- 1x GbE additional (3 total including base)
- CAN 2.0 A/B
- 16x DI + 8x DO (isolated)
- 8x Relay DO
- 2x miniPCIe + 1x M.2 KEY-E 2230 expansion
- Plus all AP510 base I/O: 2x GbE, 4x USB 3.0, 2x RS232/RS485, VGA/HDMI
- Intel 10th/11th Gen Core i3/i5/i7, LGA1200, up to 65W TDP
- DC 12-24V, active cooling, -20 to 60°C
- Wall mount or DIN rail - 200 x 154.5 x 74.6 mm





## Applications

Modbus RTU Gateway

Legacy SCADA

Process Control

Multi-Drop RS485

Building Automation

Water Treatment

## Technical Specifications

### Expansion Card I/O

**RS485 (Expansion)** 8x RS232/RS485, isolated

**Additional Ethernet** 1x Intel GbE (3 total including base)

**CAN Bus** CAN 2.0 A/B

**Digital Inputs** 16x DI, isolated

**Digital Outputs** 8x DO, isolated

**Relay Outputs** 8x Relay DO

### Base Unit I/O (included)

**Ethernet** 2x Intel GbE LAN (3 total GbE ports with expansion)

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

**Serial** 2x COM (DB-9), RS232/RS485 selectable, ESD protected

**Display** HDMI (3840 x 2160 @ 30Hz) + VGA (1920 x 1200 @ 60Hz)

**Expansion Slot** 2x miniPCIe slots + 1x M.2 KEY-E 2230 slot

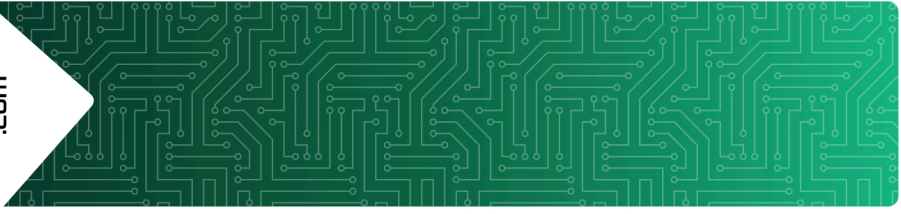
**Watchdog** 1-255 levels programmable

### System

**Processor** Intel Core 10th/11th Gen i3/i5/i7, 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



## Technical Specifications (cont.)

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

### 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

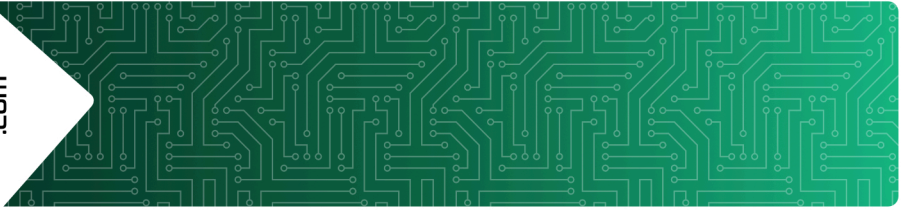
### Chassis

**Dimensions** 200 mm (L) x 154.5 mm (W) x 74.6 mm (H)

**Mounting** Wall mount or DIN rail

**Weight** Approx. 2.3 kg

**Construction** Aluminium-magnesium alloy



## Model Numbers

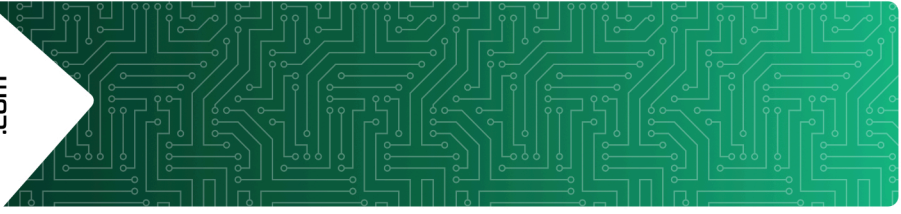
AP 5 1 X - JH5

Code	Meaning
5	Modular platform (active cooling, expansion bay)
1	First generation
X	CPU class (3 = i3, 5 = i5, 7 = i7)
JH5	10x Serial + DIO + Relay expansion card

Example: AP515-JH5 = Gen 1, Core i5, 10x Serial + DIO + Relay

## Ordering Information

Part Number	Description
AP513-JH5	Intel Core i3 - 10x Serial + DIO + Relay - heavy industrial, Modbus RTU gateway
AP515-JH5	Intel Core i5 - 10x Serial + DIO + Relay - heavy industrial, Modbus RTU gateway



## Ordering Information (cont.)

Part Number	Description
AP517 - JH5	Intel Core i7 - 10x Serial + DIO + Relay - heavy industrial, Modbus RTU gateway

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

All trademarks and product names mentioned are the property of their respective owners.

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

© 2026 Bowmonk Ltd. Techeonix is a trading name of Bowmonk Ltd, Diamond Road, Norwich, NR6 6AW, United Kingdom.