

HX310

OnLogic Helix 310 Intel® Elkhart Lake Industrial Edge Computer

Helix 310 harnesses the enhanced power and capabilities of the latest Intel Celeron® and Pentium® processors (formerly Elkhart Lake) in a low profile fanless system built for the challenges of the IoT Edge.





Built For The Edge With Intel Elkhart Lake

Like all of the systems in the innovative Helix Series, the Helix 310 was built to thrive at the edge. Powered by the Dual-Core Intel Celeron N6211, or Quad-Core Intel Pentium J6426 processors, which have been specifically engineered for IoT applications, Helix 310 offers a unique combination of features, power and connectivity, making it an ideal Industrial IoT gateway, edge device or embedded controller.

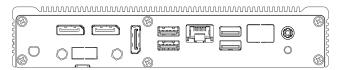
The Flexibility of Hybrid Fanless

At less than 1.5" tall, the Helix 310 can be installed in almost any industrial application, with support for DIN, and wall mounting. Its advanced industrial design, 12-24 V power input, and the absence of any moving parts dramatically improve the lifespan and reliability of the system. The Helix 310's modularity makes it well suited to any Industrial IoT or Industry 4.0 project.

The Connectivity You Need

The Helix 310 features a well-equipped I/O coastline and available ModBay expansion. Standard I/O includes 3 USB 3.2 & 3 USB 2.0 ports, 1 DB9 (RS-232/422/485) optionally configurable as CAN (COM can be configured on request), 3 DisplayPorts, 1 Gb LAN port (2 LAN available when equipped with a Pentium CPU) and SIM Slot for use with available 4G LTE connectivity. OnLogic's unique ModBay allows you to add DIO, CAN Bus or additional COM, LAN or wireless antennas.







System	
Processor	Intel Celeron N6211 or Pentium J6426
Processor Speed	1.20 GHz to 3.0 GHz
Processor Socket	Onboard (BGA)
Processor Generation	Elkhart Lake
Processor Cores	2 4
Graphics/GPU	Intel UHD Graphics
Memory Type	DDR4 SO-DIMM (non-ECC)
Memory Capacity	32 GB
Memory Speed	3200 MHz
Memory Slot Count	2
Number of Displays Supported	3

Rear I/O	
Ethernet	1 Gb LAN (2 Gb LAN optional with Pentium J6425)
USB	2 USB 3.2 2 USB 2.0
Power	1 Barrel Jack with 12~24 V input (terminal block optional)
Other	3 Full size DisplayPort 1.4 with CEC support by optional add-on module

Front I/O	
USB	1 USB 2.0 1 USB 3.2
Port Punchouts	3 Antenna holes (right side) 1 Kensington Lock Serial
Other	1 Power LED button 1 3.5 mm Audio headset (mic-in, line-out) 1 2FF-Sim slot 1 Serial port (optional)

Expansion & Features		
Expansion Options	1 M.2 2230 E-key (Wi-Fi)(PCle/USB 2.0)	
Storage Options	1 M.2 B-Key 2242/2260/2280 slot 1 M.2 2280 M-Key slot	
LAN Controller	1x Intel GPY115 or 2x Intel GPY115	
Input Voltage	9 - 24 VDC	
Power Input	DC jack 4-pin terminal block (optional)	

Mechanical		
Dimensions (WxHxD)	196 x 36.75 x 120.8 mm 7.72" x 1.45" x 4.76"	
Mounting Options	DIN-mount VESA-mount Wall-mount	
Case Type	Fanless	
Case Material	Aluminum	
Port Punchouts	6 Antenna holes	
Hardware Type	Edge Devices and IoT Gateways	

Environmental & Regulatory		
Operating Temperature	0 - 50°C	
Operating Humidity	0% - 90%	
Certifications	FCC 47 CFR Part 15 CE WEEE Directive (2002/96/EC) Low Voltage Directive (2014/35/EU) Electromagnetic Compatibility Directive (2014/30/EU) Radio Equipment Directive (2014/53/EU) - For configurations with wireless transmitters RoHS 3 (2015/863/EU) REACH EN 55024 EN 55032 EN 55032 EN 61000-3-2 EN 61000-3-2 EN 61000-4-2 EN 61000-4-2 EN 61000-4-5 EN 61000-4-5 EN 61000-4-6 EN 61000-4-6 EN 61000-4-8 EN 61000-4-1 EN 62368-1	
Warranty	2 Year Limited Warranty on parts and services	



HX310 Dimensional Drawings

Expanded Industrial Edge Computer

All measurements in mm

