

Intel® N5105 with embedded LoRaWAN Dual 2.5GbE SFP+ 8xGPIO GPS/Wifi6/5G IIOT/IOT Gateway

🔗 <https://www.pondesk.com/product/MNHO-139>

Features

- Fanless Industrial IOT, LoRA Gateway, Network Appliance
- Powered by Intel® Celeron® N5105 quad-core processor
- Supports 1 x SODIMM DDR4 memory up to 16GB.
- Embedded 128GB eMMC storage
- Support 1 x 2.5" SATA SSD storage
- Embedded LoRaWAN option for long-range IoT communication.
- Dual 2.5GbE LAN ports (Intel® i226-V) with Wake-On-LAN and PXE support.
- Dual 10G SFP+ ports for high-speed networking.
- Support WiFi-6E, 5G/4G & GPS/GNSS modules
- HDMI 2.0 and DP 1.4b high-resolution display ports.
- 3 x USB 3.0 & 1 x USB 2.0 Type-A ports
- 2 x Micro-SIM slots for cellular connectivity.
- 1 x RS232 & 1 x RS232/RS422/RS485 COM port
- 4 GPI/4 GPO (Isolated through MOSFET)
- Supports DC-IN 9V-24V (screw-locking jack & Phoenix 2-pin connector)
- Supports Windows 10/11, Windows 10/11 IoT, Linux/Ubuntu etc.



Specifications

Processor

Intel® Celeron® N5105
4 Core, 4 Threads
4 MB L3 Cache, 2.90 GHz

Memory

Support up to 16GB
SODIMM DDR4 2933MHz
non-ECC Memory
Single Memory Slot

Storage

Support 1 x 2.5" SATA SSD Support
Embedded eMMC up to 128GB

Display

1 x HDMI 2.0
1 x DP 1.4B
Integrated Intel® UHD Graphics
Support 4K

Expansion Slots

1 x mini PCIe slot (USB interface)
1 x M.2 2230 for WiFi/BT
1 x M.2 3042/3052 B-Key (For 4G/5G WWAN)

Front I/O Interfaces

Phoenix 2-pin 9V-24V DC-IN
10 pin GPIO port
2 x SIM Slot
1 x Reset Switch
1 x Power Switch
1 x Lora Reset
1 x HDD LED, 1 x Power LED
4 x Antenna Ports

Rear I/O Interfaces

2 x Intel® i226-V 2.5GbE LAN
2 x 10Gig SFP+ ports
1 x RS232, 1 x RS232/RS422/RS485 COM
3 x USB 3.0, 1 x USB 2.0
1 x HDMI 2.0, 1 x DP 1.4B
DC In 9V-24V (Screw Locking Jack)

OS

Support Windows 10/11/Server
Support Linux, Firewalls etc.

CPU Advanced Technologies

Intel® Speed Shift Technology
Intel® 64
Enhanced Intel SpeedStep® Technology
Thermal Monitoring Technologies Intel®
Identity Protection Technology Intel® AES
New Instructions
Intel® OS Guard
Intel® Boot Guard
Intel® Virtualization Technology (VT-x)
Intel® Virtualization Technology for Directed
I/O (VT-d)
Intel® VT-x with Extended Page Tables
(EPT)

Onboard I/O

1 x mini PCIe Slot
1 x M.2 2230 E-key
1 x SATA connector
1 x M.2 3042/3052 slot
1 x SODIMM DDR4
1 x USB2.0 Header
1 x 5pin Lora Header
1 x 4pin FAN Header 12V

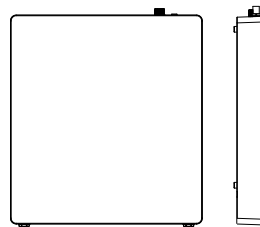
Power & Working Environment

Power Type: External Power Adapter
Power Adapter Input: AC 100-240V ~
50-60Hz
System Power Input: DC In 9V-24V
Operating Temperature: -20°C to +60°C
Storage Temperature: -40°C to +85°C
Relative Humidity: 5% - 95% (non-
condensing)
Vibration: 0.5g rms/5-500HZ/random/
operating

Others

BIOS: UEFI BIOS
Compliance: CE, FCC, UKCA, RoHS, WEEE
Dimensions: 162 x 109 x 37 mm

Dimensions



162mm x 109mm x 37mm (L*W*H)

Package

MODEL # MNHO-139

- 1 x Mini PC
- 1 x Power Adapter
- 1 x Power Cord
- 1 x SATA Cable

Optional

WiFi/4G LTE

802.11 b/g/n/AX Wi-Fi 6
5G Sub-6 (up to 4Gbps)
4G LTE CAT-12 M.2 (600Mbps)
4GB/8GB/16GB DDR4 Memory
256GB/512GB/1TB/2TB 2.5-Inch SSD
Dual Channel GNSS Module

(Antennas are optional with module)

