

# ThinkCentre M90n-1 Nano IoT 11AH000WMC

**Product**

ThinkCentre M90n-1 Nano IoT

**Region**

EET

**Country/Region**

Czech Republic

**Machine Type**

11AH

**TopSeller**

TopSeller

**Processor**

Intel Core i3-8145U (2C / 4T, 2.1 / 3.9GHz, 4MB)

**Chipset**

Intel SoC platform

**Graphics**

Integrated Intel UHD Graphics 620

**Memory**

4GB Soldered DDR4-2666

**Storage**

128GB SSD M.2 2242 PCIe NVMe

**Optical**

None

**Speaker**

1Wx1

**Ethernet**

RTL8111K + RTL8111HN, 2x RJ45

**WLAN + Bluetooth**

Intel 9560 11ac, 2x2 + BT5.0

**I/O Box**

None

**Chassis Intrusion Switch**

Chassis Intrusion Switch

**Kensington Cable Lock**

None

**Adapter Cage**

None

**Dust Filter**

None

**VESA Mount**

VESA Mount

**Color**

Black

**Stand**

None

**Keyboard**

Calliope Wireless Keyboard, Czech

**Mouse**

Calliope Wireless Mouse

**Power Supply**

65W 88% Adapter

**TUV Low Noise**

None

**Monitor Cable**

None

**System Management**

None

**Operating System**

Windows 10 Pro 64, Czech / English

**Bundled Software**

None

**Base Warranty**

3-year, Onsite

**Bundled Service**

None

**EAN / UPC**

0193638404453

**End of Support**

2025-08-02

**Announce Date**

2019-07-02

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# ThinkCentre M90n-1 Nano IoT Platform Specifications

Product Specifications Reference (PSREF)



Processor	Intel® Celeron® or 8th Generation Intel Core™ i3 Processor						Manageability Security chip Security features	None Discrete TPM 2.0, TCG Certified ● Security slot (in rear for optional Kensington® MicroSaver® cable) ● Chassis intrusion switch ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement									
	Processor	Cores / Threads	Frequency Base/Max(GHz)	Cache	Memory Support (Up to)	Integrated Graphics											
	Celeron 4205U	2 / 2	1.8G	2 MB	DDR4-2133	UHD 610											
	Core i3-8145U	2 / 4	2.1G / 3.9G	4 MB	DDR4-2400	UHD 620											
Memory	4GB / DDR4-2666* / soldered to systemboard, no sockets, non-ECC * System automatically clocks down for the processors with lower memory controller																
Storage	Support up to two M.2 SSD <i>Some:</i> M.2 2280 SSD / PCIe NVMe, PCIe 3.0 x 4* <i>Some:</i> M.2 2242 SSD / PCIe NVMe, PCIe 3.0 x 2 <i>Some:</i> Intel Optane™ Memory H10 with Solid State Storage, M.2 2280, PCIe NVMe 3.0 x 4 (not support Celeron) * M.2 SSD / Optane with SSD in PCIe 3.0 x 2 M.2 slot can only run at PCIe 3.0 x2 RAID 0/1 support (RAID preset only available via special bid model)						Keyboard	<i>Some:</i> Lenovo Calliope Keyboard (USB connector), black <i>Some:</i> Lenovo Traditional Keyboard (USB connector), black <i>Some:</i> Lenovo Calliope Wireless Keyboard (2.4GHz via USB receiver), black									
RAID							Mouse	<i>Some:</i> Lenovo Calliope Mouse (USB connector), black <i>Some:</i> Lenovo Fingerprint Mouse (USB connector), Windows Hello support, black <i>Some:</i> Lenovo Calliope Wireless Mouse (2.4GHz via USB receiver), black									
Optical	None						Mechanical	Nano (fanless 0.55L), black color; metal case Four M.2 slots: two for M.2 SSD (one PCIe 3.0 x4 and one PCIe 3.0 x2), one for WLAN, and one for WWAN									
Graphics	Intel UHD Graphics 610/620 in processor, uses main memory, DirectX® 12, one DisplayPort™, one USB 3.1 Type-C Gen2 with display function, up to 2 independent displays; <i>Max resolution:</i> 4096x2304 (DP)@60Hz; 4096x2304 (Type-C)@60Hz; Optional DP to VGA dongle, DP to HDMI dongle, Type-C to VGA dongle, Type-C to HDMI dongle, Type-C to DP dongle						<table border="1"> <thead> <tr> <th></th> <th>Dimensions (WxDxH)</th> <th>Weight (Approx. )</th> </tr> </thead> <tbody> <tr> <td>M90n-1 Nano IoT (fanless, 0.55L)</td> <td>7.05" X 3.46" X 1.36" 179mm X 88mm X 34.5mm</td> <td>1.58 lb (0.72 kg), vary by config</td> </tr> <tr> <td>With I/O box</td> <td>7.05" X 3.46" X 2.41" 179mm X 88mm X 61.3mm</td> <td>2.65 lb (1.2 kg), vary by config</td> </tr> </tbody> </table>			Dimensions (WxDxH)	Weight (Approx. )	M90n-1 Nano IoT (fanless, 0.55L)	7.05" X 3.46" X 1.36" 179mm X 88mm X 34.5mm	1.58 lb (0.72 kg), vary by config	With I/O box	7.05" X 3.46" X 2.41" 179mm X 88mm X 61.3mm	2.65 lb (1.2 kg), vary by config
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Monitor cable							Mounting	<i>Some:</i> VESA mount bracket kit, supports VESA 75mm <i>Some:</i> VESA mount bracket kit with adapter holder, supports VESA 75mm <i>Some:</i> DIN rail mount bracket kit									
Chipset	Intel SoC (System on Chip) platform						Floor Stand	None									
Front ports (Std.)	2x USB 3.1 Gen2, 1x USB 3.1 Type-C Gen 2, one headphone / microphone combo jack (3.5mm), 2x serial						Power supply	<i>Some:</i> 65 watts AC/DC adapter*, autosensing, 88% PSU <i>Some:</i> 65 watts AC/DC adapter (wide temperature)*, autosensing, 88% PSU (only for Machine Type 11AS) * Not for the models with I/O box									
Rear ports (Std.)	<i>With Celeron:</i> 1x USB 2.0, 1x USB 3.1 Type-C Gen 2 (with display function, support power-in [20V, > 45W]), 1x ethernet (RJ-45), 1x DisplayPort <i>With Core i3:</i> 1x USB 3.1 Gen2, 1x USB 3.1 Type-C Gen 2 (with display function, support power-in [20V, > 45W]), 2x ethernet (RJ-45), 1x DisplayPort						Limited warranty	<i>Some:</i> <b>1-year, limited onsite service</b> / service upgrades available <i>Some:</i> <b>3-year, limited onsite service</b> / service upgrades available									
I/O box*	Optional I/O box, connect to the USB 3.1 Type-C Gen 2 port of M90n-1 Nano, extends 2x serial, 2x ethernet (RJ-45, I/O box is equipped with Realtek RTL8153B, gigabit ethernet), 1x DI (Digital Input) connector, 1x DO (Digital Output) connector * Depending on many factors, actual data transfer speed may be lower than theoretical speed						Preload	<b>Preloaded operating system</b> <i>Some:</i> Windows® 10 Pro 64-bit <i>Some:</i> Windows 10 Home 64-bit <i>Some:</i> Windows 10 IoT Enterprise (only available via special bid model)									
Audio support	Realtek ALC233VB / internal speaker (1watt)						Environment	ENERGY STAR® 7.1*, EPEAT™ Silver rating (North America)*, ErP Lot 3, TCO 8.0*, TUV ultra low noise verified (on some models), RoHS, WEEE, REACH * Not for the models with I/O box									
WLAN	<i>Some:</i> 11ac wireless, M.2 Card, Realtek RTL8822CE (dual band), Wi-Fi + Bluetooth 5.0 combo adapter, 1x1 <i>Some:</i> 11ac wireless, M.2 Card, Realtek RTL8822CE (dual band), Wi-Fi + Bluetooth 5.0 combo adapter, 2x2 <i>Some:</i> 11ac wireless, M.2 Card, Intel Wireless-AC 9462 (dual band), Wi-Fi + Bluetooth 5.0 combo adapter, 1x1 <i>Some:</i> 11ac wireless, M.2 Card, Intel Wireless-AC 9560 (dual band), Wi-Fi + Bluetooth 5.0 combo adapter, 2x2 <i>Some:</i> 11ac wireless, M.2 Card, Intel Wireless-AC 9560 (dual band), Wi-Fi + Bluetooth 5.0 combo adapter, Intel vPro technology support, 2x2						MIL-SPEC test	MIL-STD-810H* (Low Pressure [Altitude], High Temperature, Low Temperature, Temperature Shock, Humidity, Sand and Dust, Vibration, Shock, Solar Radiation) * Not for the models with I/O box									
Bluetooth	<i>Some:</i> Bluetooth 5.0 wireless, integrated in Wi-Fi + BT combo adapter						Accessories	For compatible accessories, please go to <a href="http://smartfind.lenovo.com">http://smartfind.lenovo.com</a>									
Ethernet	<i>With Celeron:</i> Gigabit ethernet, Realtek RTL8111K, 1x RJ-45, Wake on LAN® <i>With Core i3:</i> Two gigabit ethernet, Realtek RTL8111K and RTL8111HN, 2x RJ-45 Wake on LAN®																

Note: The specifications above may not be available in all regions.

Lenovo, January 2020

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