



# NUC. Evolved.

The ML100 represents the next generation of small form factor industrial computing, packing Intel processing into our toughest ever NUC enclosure.

## Compact Versatility

The ML100 Series blends high-performance IPC engineering with Intel's NUC form factor, resulting in a computer as versatile as it is compact.

## Smart Design, Smart Gateway

Long lifecycle components, high performance cooling, and a forward thinking approach to enclosure architecture make the ML100 the ideal innovation platform.



## Multi-screen Capable

Despite its diminutive size, the ML100 Series offers a full range of I/O connectivity, including USB 3.0, Gb LAN, and dual high definition video ports.

# ML100G-53

## Industrial Fanless Intel® 11th Gen Tiger Lake NUC

The ML100G-53 industrial Intel Tiger Lake NUC offers quad-display support, Intel Iris® Xe graphics and the protection of OnLogic Hardshell™ Technology.



### Powerful Processing Built For AI

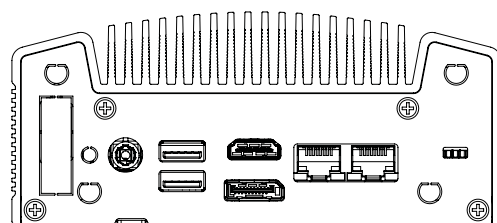
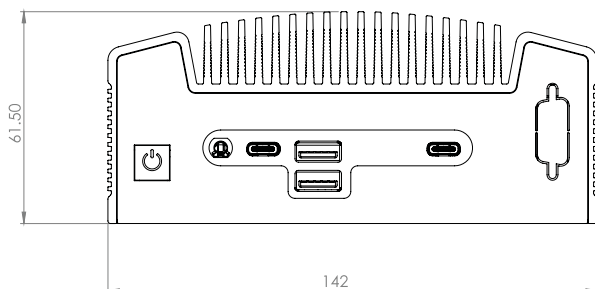
The ML100G-53 is powered by your choice of the Dual-Core Intel® Celeron® 6305E or Core™ i3-1115G4 processors, or the Quad-Core i5-1135G7 or i7-1165G7 processors (all formerly known as Tiger Lake). Built for high performance computing, AI applications and flexible multitasking, the M100G-53 also boasts impressive graphics capabilities thanks to Intel's new Iris® Xe Graphics engine (available on the i5 and i7), and up to 32GB of dual channel DDR4 memory. Meanwhile, onboard TPM helps to ensure your data is secure.

### Engineered To Survive At The Edge

Solid-state industrial components and the removal of moving parts significantly extend the lifespan of the system while versatile mounting options allow the ML100G-53 to fit into space-constrained applications. Our Hardshell™ Fanless Technology is optimized for reliable passive cooling and protects the system from dust, debris, chemical and moisture ingress. Power input of 12-19 VDC, a wide operating temperature range, and a variety of installation options, mean you can install the ML100G-53 wherever you need it.

### Quad-Display Capable

The ML100G-53 is designed to power your project with versatile connectivity and impressive networking capabilities. 4 x USB 3.2 Gen 2 (Type-A), 2 x USB 3.2 Gen 2 (Type-C), HDMI and Display-Port support up to 4 simultaneous 4k displays. One Gigabit LAN port and one 2.5 Gigabit LAN port provide blazing fast data transfer to your network or the cloud, while onboard COM lets you connect legacy equipment.





System	
Processor	Intel 11 Gen (Tiger Lake-UP3)
Processor Speed	1.8 GHz 4.10 GHz 4.20 GHz 4.70 GHz
Processor Socket	Onboard (BGA)
Processor Generation	Tiger Lake
Processor Cores	2 4
Chipset	Intel MCP
Graphics/GPU	Intel UHD Graphics Intel Iris XE Graphics
Memory Type	DDR4
Memory Capacity	32 GB
Memory Speed	3200 MHz
Memory Slot Count	1
Number of Displays Supported	4

Rear I/O	
USB	2x USB 3.2 Gen 2 (Type A) ports
Video	1x DisplayPort connectors 1x HDMI port
Other	1x1 Gb LAN ports 1x 2.5 Gb LAN ports 1x DC jack
Power Input	DC jack

Front I/O	
USB	2x USB 3.2 Gen2 (Type-A) 2x USB 3.2 Gen2 (Type-C, Supports DP1.4 display output)
Audio Input / Output	1x Headphone & microphone jack
Port Punchouts	2x Antenna holes
Other	1x Optional COM port

Expansion & Features	
Expansion Options	1x M.2 2230 E-key
Storage Options	1x M.2 2242/60/80 M-key (SATA)
LAN Controller	Intel I219LM with 10/100/1000 Mbps Intel I225LM with 10/100/1000/2500 Mbps
System Monitoring	Infinion SLB9670VQ2.0
Input Voltage	12 - 19 VDC
Power Input	DC jack

Mechanical	
Dimensions (WxHxD)	142 x 62 x 111 mm 5.6" x 2.4" x 4.4"
Mounting Options	DIN-mount (included) VESA-mount Wall-mount
Case Type	Compact Fanless
Case Material	Aluminum Extrusion Steel

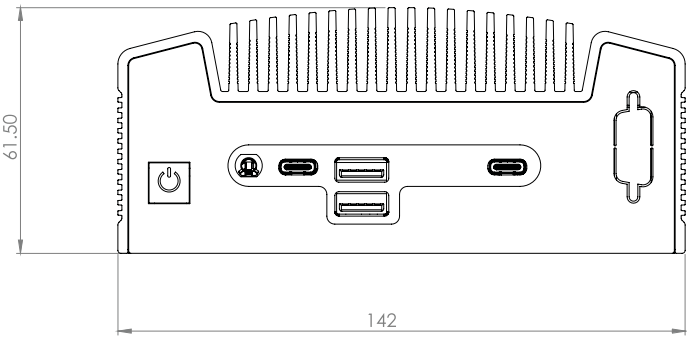
Environmental & Regulatory	
Operating Temperature	0 - 50°C

Other	
Warranty	2 Year Limited Warranty on parts and services

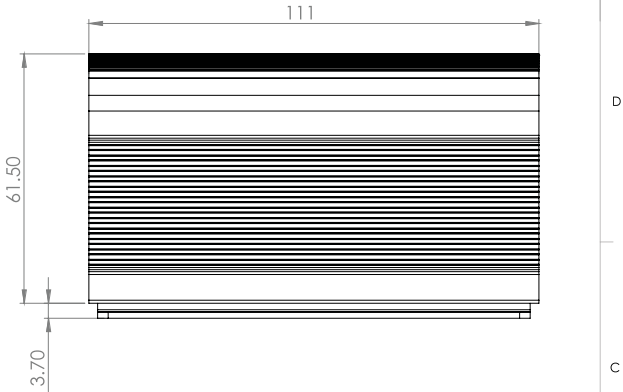
# ML100G-53 Dimensional Drawings

DIN and Wall Mounting

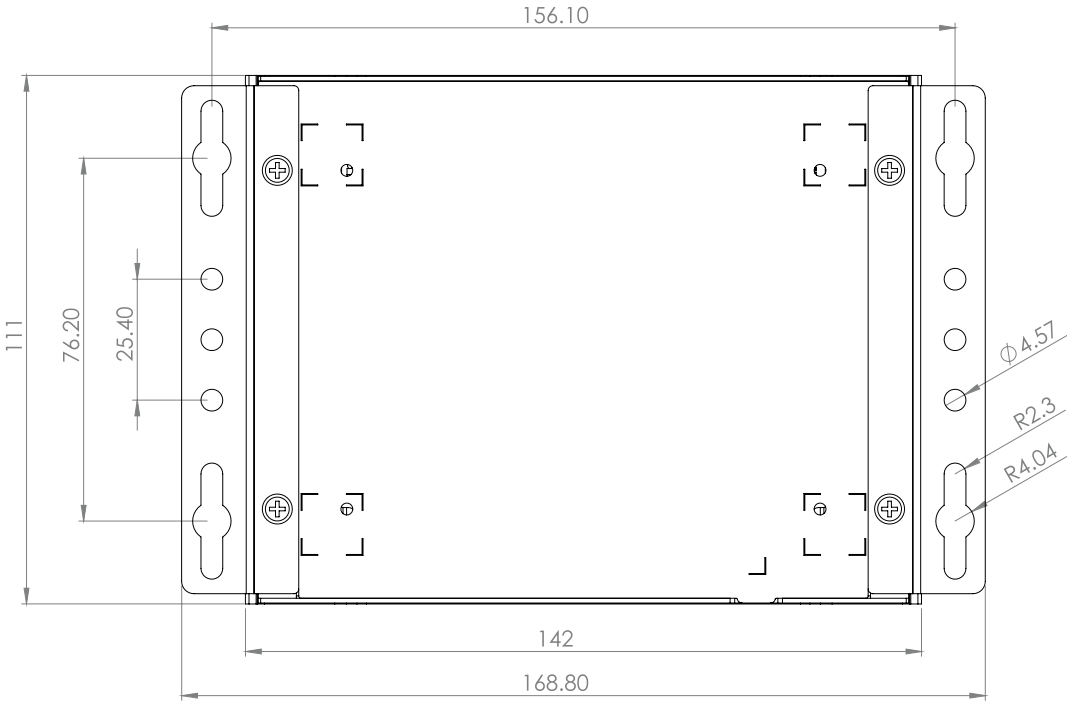
All measurements in mm



FRONT



SIDE

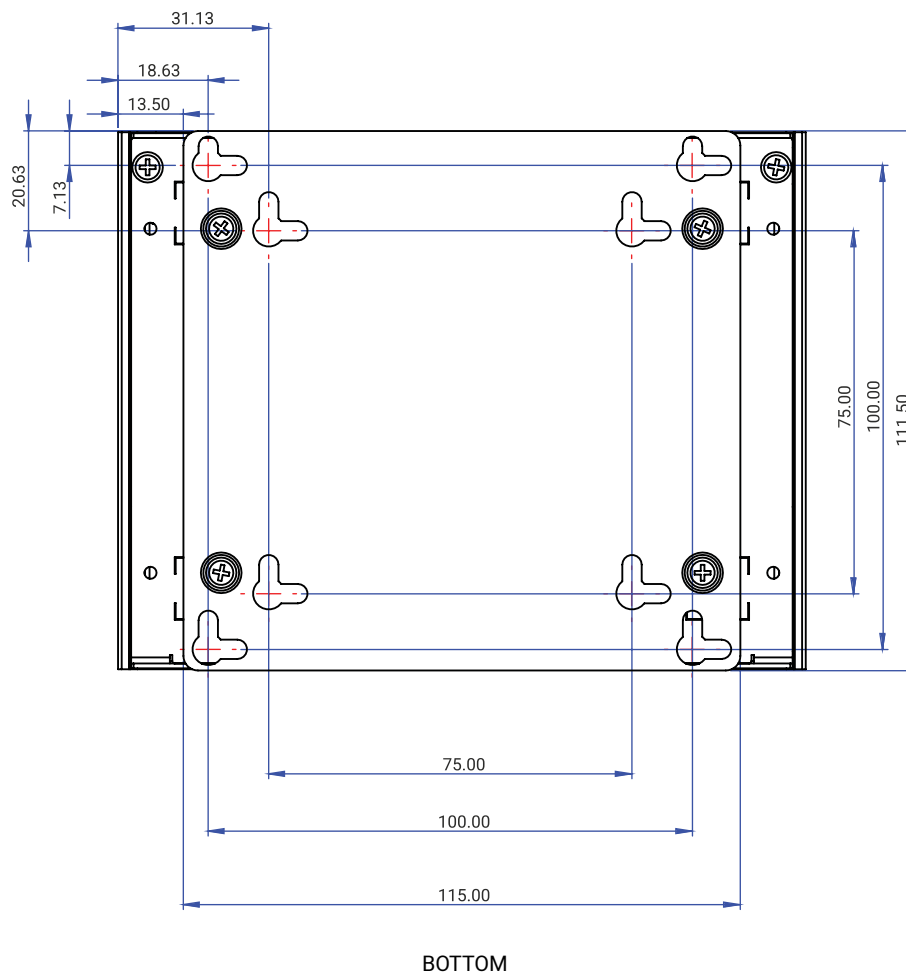
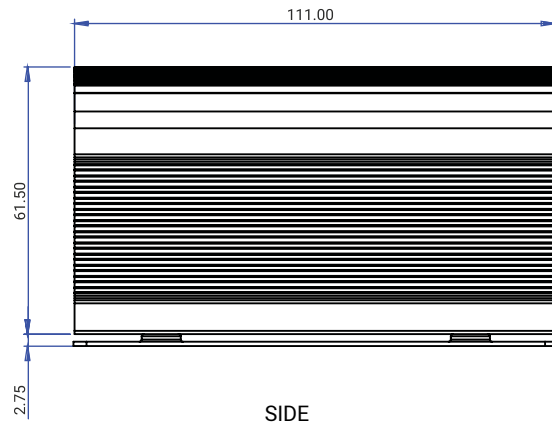


BOTTOM

# ML100G-53 Dimensional Drawings

VESA Mounting

All measurements in mm



# ML100G-41

## Industrial Fanless AMD Ryzen 4000 Compact Computer

The ML100G-41 fanless AMD Ryzen compact computer offers quad-display support, AMD Radeon™ graphics and the protection of OnLogic Hardshell™ Technology.



### The Versatility Of The Ryzen 4000 Series

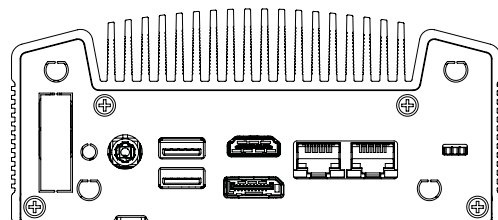
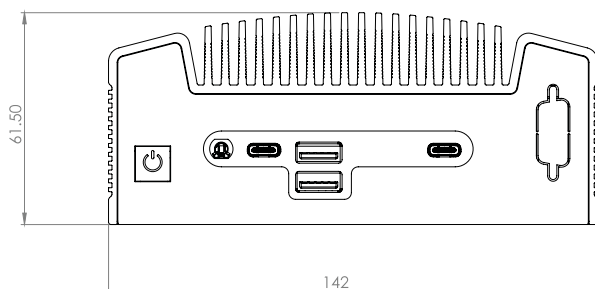
The ML100G-41 is powered by the AMD Ryzen 4000 series, with impressive performance for both graphics intensive applications and multitasking workloads. Choose from the AMD Ryzen 3 4300U (Quad-Core) or Ryzen 7 4800U (Octa-Core) processors with onboard AMD Radeon™ graphics and up to 32GB of dual channel DDR4 memory.

### Put AMD Power Wherever You Need It

Our Hardshell™ Fanless Technology is optimized for reliable passive cooling and protects the system from dust, debris, chemical and moisture ingress. Power input of 12 to 19 VDC, a wide operating temperature range, and a variety of installation options, mean you can install the ML100G-41 wherever you need it.

### Quad-Display Capable

The ML100G-41 offers versatile connectivity and impressive networking capabilities to power your project. 2 x USB 3.2 Gen 2 (Type-A), 2 x USB 3.2 Gen 2 (Type-C), 2 x USB 2.0, HDMI and DisplayPort support up to 4 simultaneous 4k displays. One Gigabit LAN port and one 2.5 Gigabit LAN port provide blazing fast data transfer to your network or the cloud, and onboard COM lets you connect to your legacy equipment or sensors.





System	
Processor	AMD Ryzen 3 4300U AMD Ryzen 7 4800U
Processor Speed	2.7GHz/1.8 GHz
Processor Socket	Onboard (BGA)
Processor Generation	Renoir
Processor Cores	4 8
Graphics/GPU	AMD Radeon Graphics
Memory Type	DDR4 SO-DIMM (non-ECC)
Memory Capacity	32 GB
Memory Speed	3200 MHz
Memory Slot Count	1
Number of Displays Supported	4

Rear I/O	
USB	2 x USB 2.0 Gen2 (Type A)
Video	1 HDMI Port 1 DisplayPort
Other	1x GbE Port 2x 2.5x GbE Port

Front I/O	
USB	2 x USB 3.2 Gen2 (Type A) 2 x USB 3.2 Gen2 (Type C) (Supports DP1.2a display output)
Audio	1 (headphone & microphone jack)
Other	1 Optional COM port
Port Punchouts	4 Antenna holes

Expansion & Features	
Expansion Options	1x M.2 E Key 2230 slot
Storage Options	1 M.2 2280 PCIe Gen 4.0 x4/SATA
LAN Controller	Realtek RTL8111GN 10/100/1000 Realtek RTL8125BG with 10/100/1000/2500 Mbps
Input Voltage	12 VDC
Power Input	DC jack

Mechanical	
Dimensions (WxHxD)	142 x 62 x 1011 mm 5.6" x 2.4" x 4.4"
Mounting Options	DIN-mount VESA-mount Wall-mount
Case Type	Compact Fanless
Case Material	Aluminum Extrusion Steel

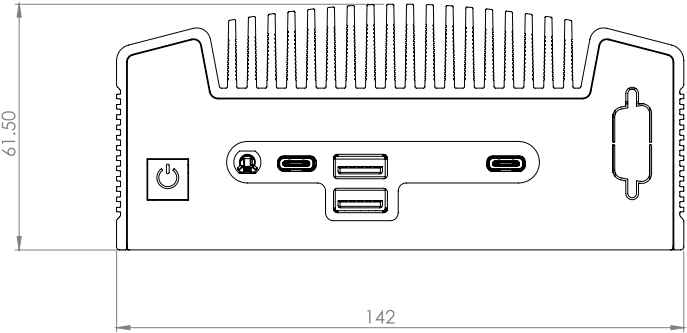
Environmental & Regulatory	
Operating Temperature	0 - 50°C
Certifications	FCC 47 CFR Part 15 CE WEEE Directive (2002/96/EC) ErP Directive (2009/125/EC) RoHS 2 (2011/65/EU) REACH EN 55024 EN 55032 EN 55035 EN 62368-1

Other	
Warranty	2 Year Limited Warranty on parts and services
Notes	Please note, this product does not support audio over HDMI. For audio, please use the DisplayPort outputs or front 3.5 mm audio jack

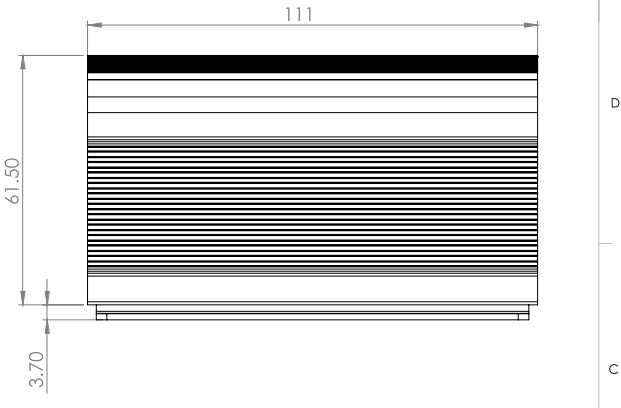
# ML100G-41 Dimensional Drawings

DIN and Wall Mounting

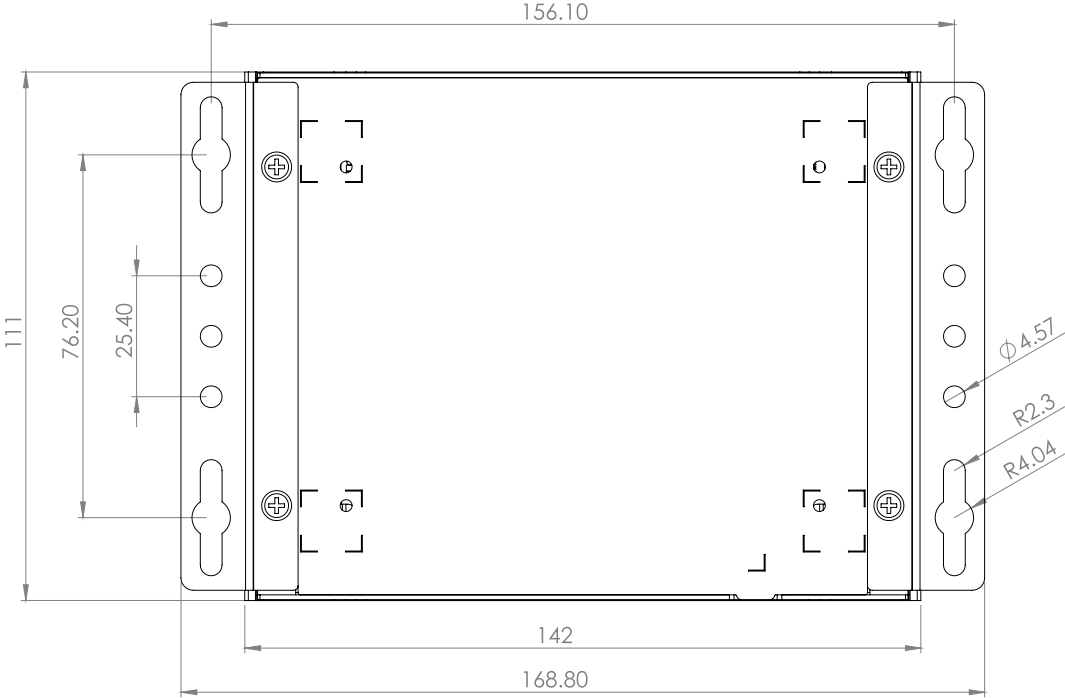
All measurements in mm



FRONT



SIDE



BOTTOM



# ML100G-41 Dimensional Drawings

VESA Mounting

All measurements in mm

