IWILL IBOX-718A

Expandable Industrial AI Computer • 3 PCIe Slots • Full-length GPU
Intel® Core™ 12th–14th Gen • Q670 • DC 12V / 500 W

The IWILL IBOX-718A is a rugged expandable industrial computer built for machine vision, AI inference and demanding automation. It takes Intel® Core™ 12th–14th Gen desktop processors on the Q670 platform and offers three PCIe slots — including a full x16 slot for full-length graphics or AI accelerator cards up to 312 mm. Rich industrial I/O, quad 4K display, four Intel LAN ports with vPro and a 500 W DC input in an aluminium-alloy and stainless-steel chassis.



Key features

- 1× PCIe x16 + 2× PCIe x8 (x4) — full-length GPU up to 312 mm
- Intel® Core™ 12th–14th Gen (LGA1700), Q670 chipset
- 2× DDR5 SO-DIMM, up to 64 GB
- 4× M.2 + 1× Mini-PCIe; 4G / 5G with Nano-SIM
- 4× GbE LAN (Intel® vPro® / AMT), 8× USB 3.1
- 6× COM (4× RS485, 2× RS232), isolated GPIO
- 2× HDMI + 2× DP, quad independent 4K displays

SYSTEM	
Model	IBOX-718A — titanium grey (custom colours available)
Chassis	High-quality aluminium alloy with stainless-steel structure
Processor	Configurable Intel® Core™ 12th / 13th / 14th Gen desktop (Alder Lake-S / Raptor Lake-S), LGA1700 socket
Chipset	Intel® Q670 (W680 optional)
Memory	2× DDR5 SO-DIMM, 4800 / 5600 MHz, up to 64 GB
Graphics	Integrated Intel® UHD Graphics 730 / 770; supports full-length discrete GPU / AI accelerator cards
Storage	2× M.2 2280 M-key (1× PCIe 4.0 x4 / SATA, 1× PCIe 4.0 x4 NVMe) + 2× 2.5" SATA bays
Operating system	Windows 10 / 11, Linux
Management	Power-on after power restore, scheduled power-on, Wake-on-LAN, PXE, watchdog (0–255)

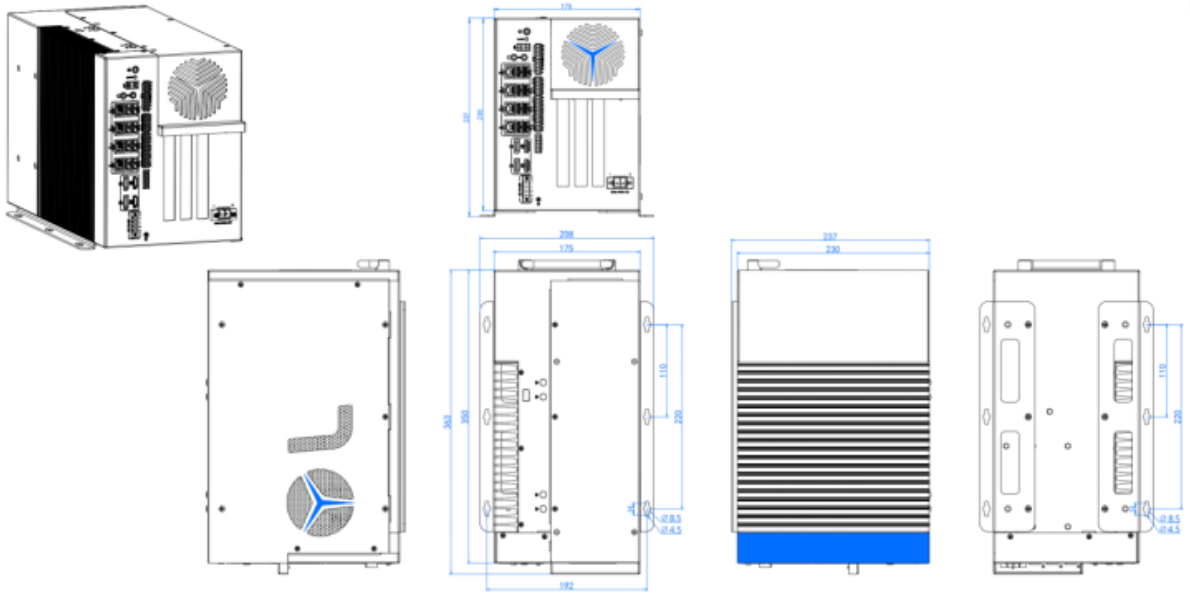
DISPLAY & NETWORK	
Display outputs	2× HDMI + 2× DisplayPort — up to 4 independent UHD displays (sync / async)
Network	4× Gigabit LAN: 3× Intel® i210-AT + 1× Intel® i219-LM (vPro® / AMT)

I/O & EXPANSION	
I/O ports	8× USB 3.1, 4× GbE LAN, 6× COM (COM1–4 RS485, COM5–6 RS232), 2× HDMI, 2× DP, 4-in / 4-out optically isolated GPIO, 4-pin remote power switch, CLRTC button, mic / speaker, 6-pin Phoenix terminal (customisable), power button
PCIe slots	1× PCIe x16 (x16 signal) + 2× PCIe x8 (x4 signal); max card size 312 × 21 × 112 mm (L × W × H)
M.2 / Mini-PCIe	1× M.2 3052/3042 B-key (4G / 5G) + Nano-SIM; 1× M.2 2230 E-key (Wi-Fi / BT); 1× Mini-PCIe (PCIe + USB)
Optional	8× GPIO, 3× USB 2.0 — not on standard build

POWER & ENVIRONMENT	
Power input	DC 12V, 2-pin 7.62 mm Phoenix connector, 500 W max (powers mainboard and GPU)
Operating temp.	0°C to +50°C (commercial HDD) | –20°C to +60°C (industrial SSD)
Humidity	5%–95%, non-condensing
Certifications	CE, CCC, FCC Class A, RoHS

MECHANICAL	
Dimensions	175 × 363 × 230 mm (excl. wall-mount brackets)
Weight	9.36 kg (including graphics card and power supply)
Applications	Machine vision and AI inference, industrial automation, healthcare, logistics and transportation, warehousing

DIMENSIONS



Mechanical drawing (mm)

ORDERING INFORMATION

Configuration	Processor options	Build
IBOX-718A-i3	Intel® Core™ i3-12300T / 13100T / 14100T	Standard ports, 3× expansion slots
IBOX-718A-i5	Intel® Core™ i5-12500T / 13500T / 14500T	Standard ports, 3× expansion slots
IBOX-718A-i7	Intel® Core™ i7-12700T / 13700T / 14700T	Standard ports, 3× expansion slots

PACKING LIST

In the box	Qty	Specification
Power adapter	1	2-pin, 500 W (12V / 41.7 A)
PCIe power cable	1	8-pin to 8-pin, male-to-female
PSU bracket	1	Pair
Power cord	1	CN / US / UK / EU
Wall-mount brackets	2	Standard

RECOMMENDED GRAPHICS / AI ACCELERATOR CARDS

GPU	Memory	Bandwidth	AI compute (Tensor)	TDP
RTX 3050	GDDR6 8 GB	224 GB/s	104 TOPS	130 W
RTX 3060	GDDR6 8 / 12 GB	240 / 360 GB/s	128 TOPS	170 W
RTX 4060	GDDR6 8 GB	272 GB/s	272 TOPS	115 W
RTX 4070	GDDR6X 12 GB	504 GB/s	466 TOPS	200 W
RTX 5050	GDDR6 8 GB	320 GB/s	421 TOPS	130 W
RTX 5060	GDDR7 8 GB	448 GB/s	614 TOPS	145 W
RTX 5070	GDDR7 12 GB	672 GB/s	819 TOPS	200 W

Recommended NVIDIA® GeForce® RTX cards for this chassis; maximum card size 312 × 21 × 112 mm. Card supplied on request.

Configurable platform — processor, memory, storage, expansion and wireless confirmed per order. Specifications subject to change without notice. © IWILL.