ONLOGIC

Karbon 700-SE

High-Performance Rugged Computing, Evolved

Karbon 700 brings power, reliability, and connectivity to the edge.

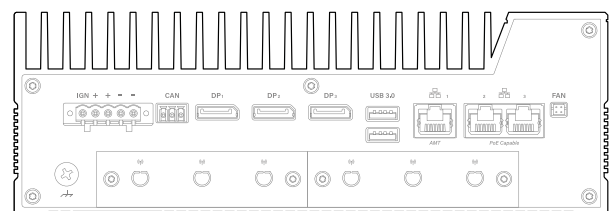onlogic.com/k700-se

Built To Do More

Karbon 700 reaches a new peak of rugged computing with powerful 8-core i7 or Xeon processing.

Designed For The Edge

Deployment is easy with Karbon 700, with deeply customizable DIO, integrated CAN bus, automotive power and flexible I/O configurations via ModBay™ expansion.

Engineered To Last

Rugged fanless design, wide operating temperature range, and leading shock and vibration resistance give Karbon 700 the durability for the toughest computing environments.

82 mm

240 mm

IGN CAN DP₁ DP₂ DP₃ USB 3.0 FAN
AMT PoE Capable

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System

Processor	Support for Intel 8th & 9th Gen Processors Xeon E-2124G, E-2176G, E-2226GE, E-2278GE, E-2278GEL Core i7-8700, i7-8700T, i7-9700E, i7-9700TE Core i5-8500, i5-8500T, i5-9500E, i5-9500TE Core i3-8100, i3-8100T, i3-9100E, i3-9100TE Pentium 5400, 5400T Celeron 4900, 4900T
Processor Speed	1.8 ~ 3.7 GHz
Processor Cores	2 ~ 8
Chipset	Intel C246
Integrated Graphics	Intel UHD Graphics 610/630
Memory	2 DDR4 SO-DIMM slots 4 ~ 64 GB (ECC or non-ECC)

Rear I/O

Ethernet	1 GbE LAN with Intel I219-LM controller 2 GbE LAN with Intel I210-AT controllers (PoE optional)
USB	2 USB 3.1 Gen 1
Video	3 DisplayPort
Power	5-Pin Terminal Block Power Input (9 ~ 48 V) Intelligent Ignition Sensing
Other	3-pin CAN bus 2 ModBay (4 LAN, 4 PoE, etc.) External Fan Connection

Front I/O

USB	4 USB 3.1 Gen 1
Serial	2 RS-232/422/485 COM
Other	8-bit Isolated Digital I/O (4-in, 4-out) 2-pin Remote Power Switch 2 2.5" Hot-Swap Drives (optional) Audio jack (Line-In; Mic-In) External Mini-SIM slot Power button

Expansion & Features

Expansion & Storage	1 M.2 2280 M-key (PCIe x4, SATA) 1 M.2 2230/60/80 M-key (PCIe x2) 1 M.2 2230 E-key 2 mPCIe (1 shared with mSATA) 2 SATA III 2.5" SSD/HDD (Optional Hot-swap)
Onboard Connectors	2 ModBay for I/O Expansion
Features	Onboard TPM 2.0

Mechanical

Dimensions (WxHxD)	240 x 82 x 242 mm (9.45 x 3.23 x 9.53 in)
Mounting Options	Wall-mount Wall-mount with Vibration Isolation

Environmental & Regulatory

Operating Temperature	-40°C ~ 70°C with 35W TDP Processor -40°C ~ 50°C with 65W TDP Processor -40°C ~ 40°C with 80W TDP Processor
Storage Temperature	-40°C ~ 85°C
Shock	Tested according to IEC 60068-2-27 and MIL-STD-810G
Vibration	Tested according to IEC 60068-2-64 and MIL-STD-810G
Certifications	FCC 47 CFR Part 15 Low-Voltage (2014/35/EU) Electromagnetic Compatibility (2014/30/EU) Radio Equipment (2014/53/EU) - Only applicable for configurations with wireless transmitters EN 55032 EN 55035 RoHS 3 (2015/863/EU) WEEE Directive (2012/19/EU) Power Immunity According to E-Mark 7637-2 & 16750-2 EN 50121 Additional Safety and EMC certifications pending. Some certifi- cations configuration dependent.

Karbon 700-SE Dimensional Drawings

High-Performance Rugged Computing, Evolved

All measurements in mm

82mm

242mm

240mm

240 mm

225.40 mm

MOUNTING
6X M4X0.7
10mm MAX

242 mm

180 mm

100 mm