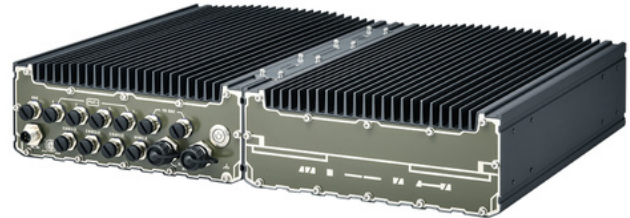


SEMIL-2000GC

Fanless and waterproof IP69K Edge AI computer with Intel® Core™ 14th/13th Gen. CPU and NVIDIA® L4 GPU

Features

- Intel® Core™ 14th/13th Generation processor
- DDR5 4800 SODIMM, up to 64GB
- NVIDIA® L4 GPU
- IP69K protection class and MIL-810H certification
- M12 X-coded connectors



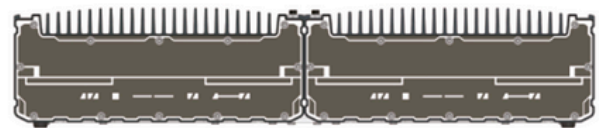
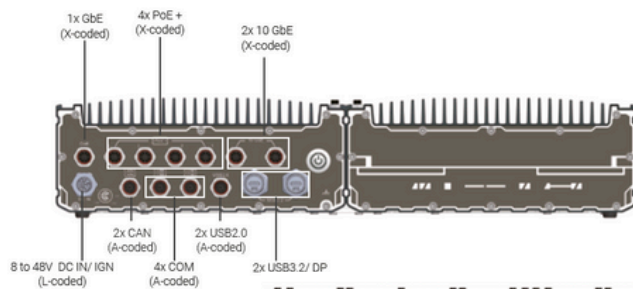
SEMIL-2000GC – Ultra-rugged IP69K dust and waterproof Edge AI computer

The SEMIL-2000GC is an extremely rugged IP69K dust and waterproof edge AI platform in a 2U 19" rack-mount form factor. With Neosys' best-in-class thermal design, the SEMIL-2000GC provides fanless maximum GPU performance at temperatures from -40°C to 70°C. The system is equipped with an NVIDIA® L4 GPU, which offers up to 2.5 times more performance than the Tesla T4. Powered by Intel's 14th/13th/12th Gen. platform, the SEMIL-2000GC benefits from Intel® 7 photolithography, which offers both power and efficient core hybrid performance. It supports up to 64 GB DDR5 memory.

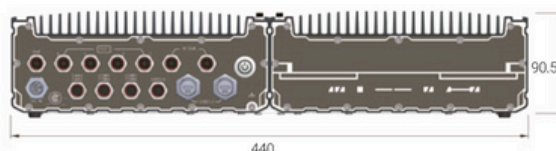
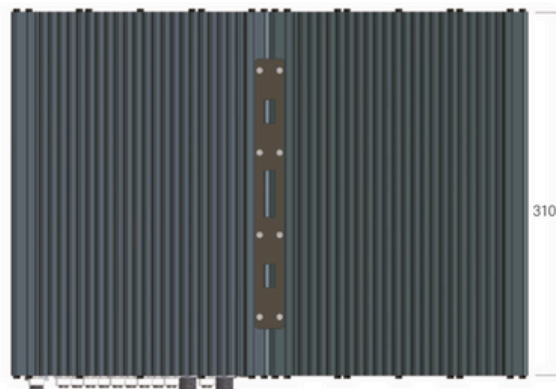
Corrosion-resistant housing for demanding environments

The SEMIL-2000GC has a corrosion-resistant housing made of stainless steel and aluminum that resists moisture and salinity. By using M12 connectors, it offers extremely robust connections in shock and vibration environments. This includes two CAN bus 2.0 with SocketCAN driver, two USB 3.2, seven Ethernet ports (including two 10GbE) and four 802.3at PoE+ ports, each delivering 25.5W of power to connected compatible devices. Internally, the SEMIL-2000GC offers an M.2 M-Key socket to support NVMe SSDs and Mini PCIe sockets to expand functionality. In addition, it has two 2.5" SATA SSD/HDD accommodations, an 8-48V wide range DC input with ignition control and meets MIL-STD-810H standards.

Appearance



Dimension (in mm)

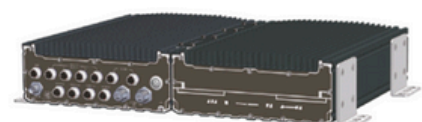


Mounting Configuration

SEMIL 19" rackmount



SEMIL wall mount



SEMIL-2000GC




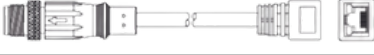

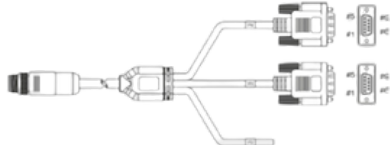
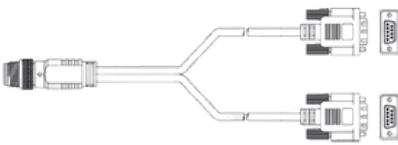

Fanless and waterproof IP69K Edge AI computer with Intel® Core™ 14th/13th Gen. CPU and NVIDIA® L4 GPU

Product: SEMIL-2000GC	
SYSTEM	
CPU	Supports Intel® Core™ CPU of the 13th Generation (LGA1700 socket, 65W/ 35W TDP) – Intel® Core™ i9-13900E/ i9-13900TE – Intel® Core™ i7-13700E/ i7-13700TE – Intel® Core™ i5-13500E/ i5-13400E/i5-13500TE – Intel® Core™ i3-13100E/ i3-13100TE Supports Intel® Core™ CPU of the 12th Generation (LGA1700 socket, 65W/ 35W TDP) – Intel® Core™ i9-12900E/ i9-12900TE – Intel® Core™ i7-12700E/ i7-12700TE – Intel® Core™ i5-12500E/ i5-12500TE – Intel® Core™ i3-12100E/ i3-12100TE – Intel® Pentium® G7400E/ G7400TE – Intel® Celeron® G6900E/ G6900TE
Chipset	Intel® Q670E platform controller hub
Graphics	Integrated Intel® UHD Graphics 770 (32EU)
GPU Accelerator	NVIDIA® L4 GPU
RAM	Up to 64 GB DDR5 4800 SDRAM (two SODIMM slots)
AMT	Supports Intel vPro / AMT 16.0
TPM	Supports dTPM 2.0
Storage	2x internal SATA connector for 2.5" HDD/ SSD installation, supports RAID 0/ 1 1x M.2 2280 M key NVMe socket (PCIe Gen4x4) for NVMe SSD
Expansion	3x full-size mini PCI Express socket with SIM slot 1x M.2 2242/3052 B key socket with dual SIM slot for M.2 5G/ 4G module 1x M.2 2230 E key socket for Wi-Fi
INTERFACE	
Ethernet	2x 10GbE Ethernet from X550-AT2 (with WoL) (M12 X-coded) 4x 2.5GbE Ethernet from Intel I226-IT (PoE+) (M12 X-coded) 1x GbE Ethernet from Intel I219-LM (with WoL) (M12 X-coded) 4x IEEE 802.3at PoE+ PSE with 100 W total power budget
USB	2x Type-C USB 3.2 Gen1x1 (5Gbps) ports (shared DisplayPort) 2x USB 2.0 ports (M12 A-coded)
COM	2x isolated 3-wire RS-232 connections (COM1/ COM2) 1x isolated 3-wire RS232 (COM3) 1x RS-422/485 connection (COM4)
CANBus	2x isolated CAN 2.0 connection, supports SocketCAN under Linux
Video	2x Type-C USB port with DP output (shared USB 3.2 Gen1x1)
ENVIRONMENTAL	
Cooling	Fanless
Power Supply	8V to 48V DC input, with reverse polarity protection (M12 L-coded) Built-in ignition current control (IGN/ GND signal via M12 L-coded plug)
Operating Temperature	With 35W CPU: -40°C ~ 70°C With CPU operation ≥ 65W CPU: -40°C ~ 70°C (configured as 35W TDP mode) -40°C ~ 60°C (configured as 65W TDP mode)
Storage Temperature	-40° ~ 85°C
Vibration / Shock Resistance	Vibration: MIL-STD-810H, 514.8C-IV, Category 4 Shock: MIL-STD-810H, 516.8 Procedure I
Humidity	10 ~ 90% , non-condensing
Dimensions	440 (W) x 310 (D) x 90.5 (H) mm (without rack mount)
Weight	12 kg
Mounting	Rackmount (standard) and wall mounting (standard)
IP Protection	IP69K
Certifications	EN 50121 (EN 50155 EMC), CE/FCC Class A, according to EN 55032 & EN 55024

SEMIL-2000GC

Fanless and waterproof IP69K Edge AI computer with Intel® Core™ 14th/13th Gen. CPU and NVIDIA® L4 GPU

Ordering Information	SEMIL-2000GC
MODEL NO.	
SEMIL-2047GC	19" rack mount IP69K waterproof computer including NVIDIA® L4, supporting Intel® 14th/ 13th/ 12th-Gen Core™ processor with 2x M12 10GbE and 4x M12 PoE+ ports
OPTIONAL ACCESSORIES	
PA-280W-CW6P-2P	280W AC-DC power adapter 24V 11.67A, 85~264VAC, -30~+70°C w/ Wafer FML6P to 2P End Terminal cable for AWP/SEMIL
PA-600W-C4PY-4P	600W AC-DC power adapter 24V 25A, 85~264VAC, -20~+70°C, w/ 4PY Terminal to 4P End Terminal cable for AWP/SEMIL
M12 CABLE KIT	
Cblkit-M12-SEMIL2000	7x Cbl-M12X8M-RJ45-500CM 2x Cbl-M12A8M-2DB9M_OW2-180CM1 (COM 1/2 & CAN 1/2) 1x Cbl-M12L5F-CordEnd5-180CM 1x Cbl-M12A8M-2U2TA-180CM1 1x Cbl-M12A8M-2DB9M-180CM (COM3/4)

Cable Kit Guide	SEMIL-2000GC	
TYPE	MODEL NAME	DESCRIPTION
	Cbl-TpCPlug-DPM-1M	TypeC Male Plug to DP Male Cable, Length : 1M
	Cbl-TpCPlug-U3TA-50CM	TypeC Male Plug to USB3.0 Type-A FML, Length: 50CM
	Cbl-TpCPlug-UTpCF-50CM	TypeC Male Plug to USB Type-C FML Cable, Length : 50CM
	Cbl-M12X8M-RJ45-500CM	M12(8-pole-X-coded) to RJ45, CAT6, Length : 500CM
	Cbl-M12A8M-2U2TA-180CM1	M12 (8-pole-A-coded) to 2xUSB 2.0 type A (female), Length: 180CM
	Cbl-M12A8M-2DB9M_OW2-180CM1	M12 A-Code Male 8P to x2 DB9 Male+2P, Length: 180CM
	Cbl-M12A8M-2DB9M-180CM	M12 (8-pole-A-coded male) to 2x DB9 male, Length: 180CM
	Cbl-M12L5F-CordEnd5-180CM	M12 L-Code 5P(FML) to Cord End Terminal 5P, Length: 1.8M