

SEMIL-2000

Waterproof IP69K computer with 14th / 13th generation Intel® Core™ processor, as well as 2x M12 10GbE and 4x M12 PoE+ ports

Features

- Intel® Core™ 14th/13th Generation processor
- DDR5 4800 SODIMM, up to 64GB
- 2x 10GbE, 1x GbE and 4x 2.5GbE PoE+
- IP69K protection class and MIL-810H certification
- M12 X-coded connectors



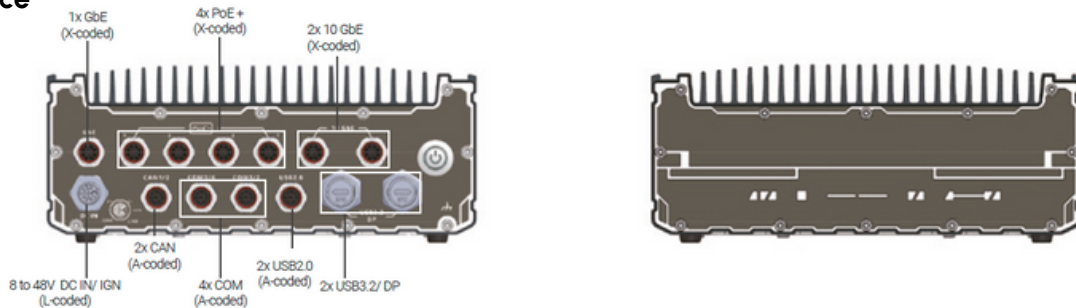
SEMIL-2000– Rugged and versatile embedded PC for extreme conditions

The SEMIL-2000 is an extremely robust embedded platform with IP69K dust and water protection in a 2U 19" / 2 rack-mount form factor. With Neosys' best-in-class thermal design, the SEMIL-2000 ensures fanless operation at temperatures from -40°C to 70°C. The system features two 5Gbps Type-C ports with alternative DisplayPort signal outputs.

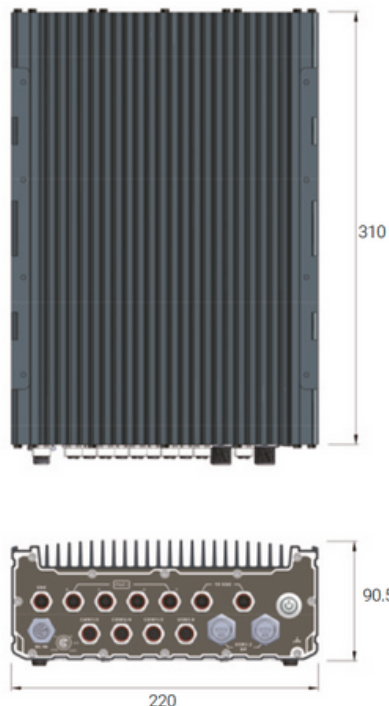
Powerful Intel® processors in a corrosion-resistant housing

Powered by Intel's 14th/13th/12th Gen platform, the SEMIL-2000 takes advantage of Intel® 7 photolithography. The latest Core™ desktop processors offer a hybrid configuration of performance and efficiency cores and support up to 64GB DDR5 memory. The housing of the SEMIL-2000 is made of corrosion-resistant stainless steel and aluminum to withstand moisture and salinity. The use of M12 connectors ensures extremely robust connections in shock and vibration environments.

Appearance



Dimension (in mm)



SEMIL-2000






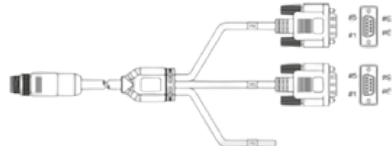
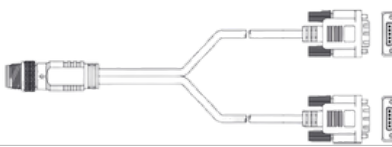

Waterproof IP69K computer with 14th / 13th generation Intel® Core™ processor, as well as 2x M12 10GbE and 4x M12 PoE+ ports

Product: SEMIL-2000	
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)
RAM	Up to 64 GB DDR5 4800 SDRAM (two SODIMM slots)
AMT	Supports Intel vPro / AMT I6.0
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	2200 (W) x 310 (D) x 90.5 (H) mm
Weight	6 kg
Mounting	Rackmount (optional) and wall mounting (standard)
IP Protection	IP69K
Certifications	EN 50121 (EN 50155 EMC), CE/FCC Class A, according to EN 55032 & EN 55024

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Ordering Information	SEMIL-2000GC
MODEL NO.	
SEMIL-2007	19"/2 rack mount IP69K waterproof computer 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
JPlate-SL	Joint plate for dual SEMIL assembly (for SEMIL-2000)
Rmkit-SL	Rack mount for single SEMIL (for SEMIL-2000)
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-2000	
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