PCM4-Q170 Marine Computer

PCM4-Q170 Marine Computer for 19" rack
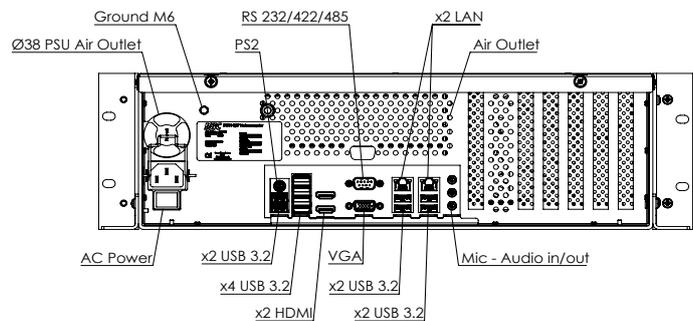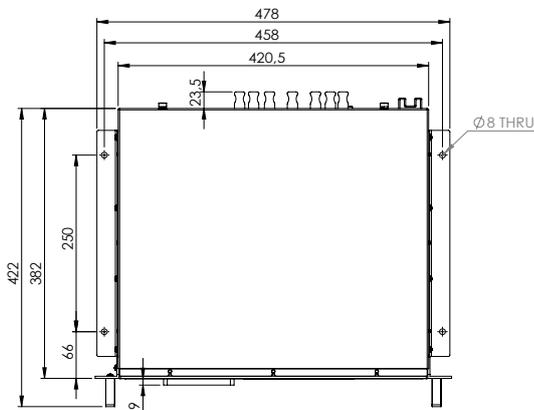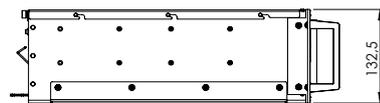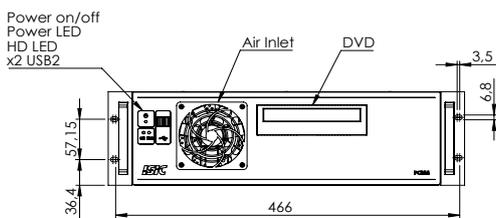
The PCM4-Q170 Marine Computer is designed for marine, naval and other demanding environments where reliable and durable hardware is required.

The PCM4-Q170 platform features high performance processors, multiple expansion possibilities via PCI slots and is 19" rack mountable.

✔ 60945 Type Approval

Mechanical outline

Motherboard

Chipset	Intel® Q170 6th/7th gen. Intel Core 64Bits
TPM	Nuvoton NPCT750AADYX TPM2.0
Watchdog timer	1-255 steps by software program
HW monitoring	Temperature, Voltage and Fan
Wake-on-LAN/PXE	Yes (WOL/PXE)
Power state	S3, S4, S5
Onboard graphics	Intel® HD Graphics 630 (i3 and i5, i7)
Graphics supports	DirectX 12, Open GL 4.5 , Open CL 2.0

CPU options

Core i3-7100	3.9 GHz 2 cores, 4 threads, CPU Mark 4,335
Core i5-7500	3.4/3.8 GHz 4 cores, 4 threads, CPU Mark 6,078
Core i7-7700	3.6/4.2 GHz 4 cores, 8 threads, CPU Mark 8.631

Memory and storage

Memory	Up to 64 GB DDR4 RAM, DIMM
Storage	128 GB up to state of art 2.5" SSD, SATAIII

Power supply/power consumption

AC Power	100-240 VAC 50/60Hz (Nominel Marine)
DC Power	24 VDC (Nominel Marine) optional
Power	<300W (VA)

OS options

Windows 10	Windows 10 IoT 64-bit
Windows 7	Windows 7

Expansion slots

PCI	3 x PCI
PCIe x4	2 x PCI express x4
PCIe x16	1 x PCI express x16

Input/output

HDMI output	2 x HDMI up to 4960x2160 @ 24 Hz
VGA output	1 x 15p D-sub up to 1920x1200 @ 60 Hz
Serial Port	1 x 9p D-sub female RS232/422/485
Ethernet AMT	1 x Gbit LAN, Intel PHY I219LM iATM 11.0
Ethernet	1 x Gbit LAN, Intel I211AT
USB rear	10 x USB 3.2 on rear
USB front	2 x USB 2.0 on front of unit
PS/2	1 x PS/2 combo connector
Audio Line-out	1 x 3.5 mm Jack
Audio Mic-in	1 x 3.5 mm Jack
Audio line-in	1 x 3.5 mm Jack

Physical dimensions

Dimensions	420 (W) x 132 (3U) (H) x 382 (D) mm
Dimensions in box	580 (W) x 290 (H) x 550 (D) mm
Weight	11 kg; 15 kg in box

Environmental

Operating temp.	- 15 to 55° C
Storage temp.	- 25 to 70° C
Humidity	8 to 95% RH
Compass SD	105 cm (stand.) 65 cm (steer.)

Options & accessories

Serial ports	Via expansion slots - please inquire
Ethernet	Via expansion slots - please inquire
Parallel port	Via expansion slots - please inquire
Other ports	Via expansion slots - please inquire
Mounting bracket	Table mount bracket (03805 003)
Rack mount ears	19" rack mounting incl. handles (03593-001)

Approvals & Certificates

CE	EU declaration of conformity (03029-067)
UKCA	UK declaration of conformity (03029-099)
Marine	IEC 60945 ed. 4 & IACS E10 rev. 8
Certificate	DNV Mutual Recognition, DNV

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