

# PCM4-Q87 Marine Computer

## PCM4-Q87 Marine Computer for 19" rack



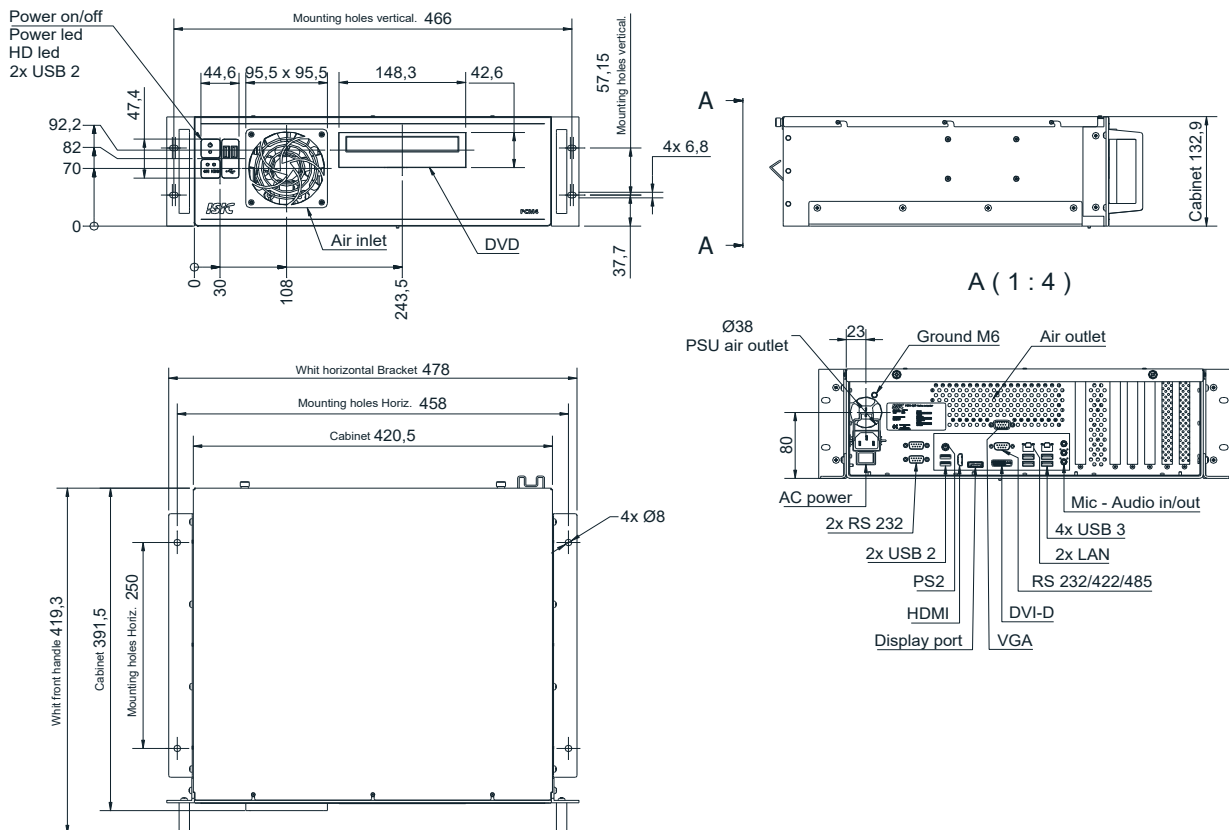
The **PCM4-Q87** Marine Computer is designed for marine, naval and other demanding environments where reliable and durable hardware is required.

The PCM4-Q87 platform has a long track record in the market and features high performance processors, multiple expansion possibilities via PC slots and is 19" rack mountable.

✓ 60945 Type Approval

## Mechanical outline

### PCM4-Q87



# PCM4-Q87 Marine Computer

## Motherboard

Chipset	Intel® Q87 Express Chipset 64Bits
TPM	Header for add on TPM module
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, ref. to CPU
Graphics supports	DirectX 11.2, Open GL 4.3 , Open CL 2.0

## CPU Options

Pentium G3420	3.2 GHz 2 cores, CPUMark 1,998
Core i3-4360	3.7 GHz 2 cores, 4 threads, CPUMark 3,657
Core i5-4590S	3.0 GHz 4 cores, 4 threads, CPUMark 5,078
Core i7-4790S	3.2 GHz 4 cores, 8 threads, CPUMark 6,935

## Memory and Storage

Memory	Up to 32 GB DDR3 RAM, SODIMM
Storage	Up to 1.9 TB SSD, SATAIII

## Power supply/power consumption

AC Power	90 - 264 VAC 50-60Hz (standard)
DC Power	18 - 36 VDC (optional)
Consumption	35 to 130 W Typ. 300 W Max.

## OS options

Windows 7	Windows 7
Windows 8	Windows 8
Windows 10	Windows 10 IoT
Linux	Ubuntu

## Expansion slots

PCI	3 x PCI
PCIe x1	1 x PCI express x1
PCIe x4	1 x PCI express x4
PCIe x16	1 x PCI express x16

## Input/output

HDMI output	1 x HDMI up to 4960x2160 @ 24 Hz
DisplayPort output	1 x DP female up to 2560x1440 @ 60 Hz
DVI-D output	1 x DVI-D female up to 1920x1200 @ 60 Hz
Serial Port	1 x 9p D-sub female RS232/422/485
Ethernet AMT	1 x Gbit LAN, Intel PHY I217LM ATM 9.0
Ethernet	1 x Gbit LAN, Intel I210AT
USB rear	4 x USB 3.0 & 2 x USB 2.0 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 380 (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% relative humidity
Compass SD	105 cm (stand.) 65 cm (steer.)

## Options & accessories

VGA output	Routed out from internal header
TPM	Add on TPM module available
Serial ports	Via expansion slots - please enquire
Ethernet	Via expansion slots - please enquire
Parallel port	Via expansion slots - please enquire
Other ports	Via expansion slots - please enquire
Mounting bracket	Bracket mounting (03805-003)
Rack mount ears	19" rack mounting incl. handles (03593-001)

## Approvals & Certificates

CE	EN 61000-6-2 & EN 61000-6-4
Marine	IEC 60945 ed. 4 & IACS E10 rev. 8
Certificate	DNV Mutual Recognition