



Ruggedized, Qualified High Performance Computer for Marine Use

MPC-CQ

The MPC-CQ is a high performance marinated computer designed for ship-board use for all general computing needs. The high performance Intel Core i7® CPU provides fast operation, low power/heat and low maintenance. The MPC-CQ is designed and built for high shock and vibration and wide variations in operating temperature in ocean-air environments. Specifically, the MPC-CQ is designed and built to meet or exceed basic MI-STD-810G environmental tests as well as IEC60945. The MPC-CQ is designed to be bolted down where ever it is convenient for operation in a vessel. The MPC-CQ is user friendly, running Microsoft Windows10® IoT Enterprise (MS Server or Linux optional). It offers standard I/O including 6-USB ports, dual Serial COMs, audio, dual 10/100/1000 RJ-45 fast ethernet and HDMI/DVI monitor support in addition to conventional VGA, plus offers expansion via 4 - PCIe slots. The MPC-CQ is designed to be powered directly from a 24 VDC or 115/230 VAC source. The MPC-CQ has a compact, all-aluminum chassis providing light weight and maximum corrosion resistance. Connections are made to the computer via standard computer connectors for interoperability and convenience. Available options include upgradable SSD and second SSD up to 1TB, 4GB RAM expandable to 32 GB RAM, and expansion cards.



Standard Features

- Intel® Core i7 Quad Core 3.6GHz, 4.2GHz Turbo-boost.
- 275GB 2.5" SATA Solid State Drive, Upgradable to 1TB.
- Optional Secondary SSD Drive, up to 1TB.
- 4GB DDR4 2133 RAM Memory Upgradable to 32 GB.
- Intel H110 Chipset with Advanced HD 630 Graphics.
- 10/100/1000 Ethernet, 2 - USB2.0, 4 - USB3.0 Ports.
- Conformally Coated Electronics, Internal Shock Prep.
- 1 - RS-232, 1 - RS-232/422/485 Serial COMs.
- VGA and DVI-I WUXGA Outputs, HDMI Out up to 4K UHD.
- Windows10 IoT Enterprise Operating System (64-bit).
- HD Audio Codec, Line In, MIC In, 7:1 Audio Out.
- Ruggedized Aluminum Case with bolt-down rails.
- 4 - PCIe Option Slots.
- 24 VDC or 115/230 VAC Power Supply, 450 watts.

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Specifications

■	CPU	Intel Core i7-7700 3.6 GHz, 8 MB Cache, DQuad Core, Up to 4.2 GHz with Turbo Boost	
■	Operating System	Windows10® IoT Enterprise Edition (64 bit), MS Server or Linux Optional	
■	Main Drive	275GB 2.5" Industrial Grade SATA SSD, Expandable up to 1 TB, 2nd Drive Optional	
■	Memory	4 GB DDR4 2133MHz., Upgradable to 32GB (4 Slots)	
■	Video Chipset	Intel H110 Advanced Chipset, HD630 Graphics	
■	Expansion	4 - PCIe Option Slots	
■	I/O Ports	1 RS-232, 1 - RS-232/422/485 COM ports, 2 - USB 2.0, 4 - USB 3.0 for External Peripherals	
■	Audio	HD Audio Codec, MIC, Line In, 7:1 Audio Out	
■	Monitor Support (max.)	VGA (1920x1200), DVI-D (1920x1200), HDMI (3840x2160)	
■	Networking	Dual RJ-45 10/100/1000 Base T Fast Ethernet	
■	Chassis	All Aluminum Compact Tower Case, Mounting Rails Included for Surface Mount	
■	Weight (Approx.)	8.1 kg / 17.8 lbs.	
■	Dimensions	12.8" x 18.39 x 6.69" (325mm. x 467mm. x 170mm)	
■	Power	450 Watts Nominal	
■	Environmental	Operating	Non-Operating
	Temperature (Air Ambient)	-10°C to 60°C (14°F to 140°F)	-20°C to 85°C (-4°F to 185°F)
	Relative Humidity	5% to 95% (@40°C) non-condensing	
■	Electrical		
	Input	24 VDC Internal	120/240 VAC Internal
	Frequency	DC Input	45 – 75 Hz
■	Standards	CE, FCC Class A Part 15, RoHS, MIL-STD-810G, IEC 60945 (Other standards and tests may be available, Consult Factory)	