



Fanless, Ruggedized DC Computer for Marine Use

MPC-FR Series

The MPC-FR Series is a high performance marinated computer designed for shipboard use in all sea states. The MPC-FR Series uses genuine 4th Generation Intel Core i3® or i5® or i7® mobile CPUs. It is specially built for fanless operation, low power/heat and low maintenance. Designed for high shock and vibration and wide variations in operating temperature, the non-ventilated enclosure eliminates dirt and salt air drawn in by fan-cooled units. The MPC-FR Series is designed to be bolted down where ever it is convenient for operation in a vessel. The MPC-FR Series is user friendly, running Microsoft Windows7® Pro operating system. It offers standard I/O including 1-RS-232, 1-RS-232/422/485 serial COM ports, 2-USB 2.0 and 4-USB 3.0 ports, dual RJ-45 fast ethernet and HDMI and DVI-I monitor outputs. The MPC-FR Series is designed to be powered directly from any 9-30 VDC source. The MPC-FR Series has an all aluminum enclosure and is rated to operate from -20° to +60°C (-4° to 140°F). The MPC-FR Series is extremely compact, taking only 9.8"W x 8.65"D x 2.36"H. Connections are made to the computer via standard computer connectors for interoperability and convenience. Available options include solid state HD, internal mini-PCIe, 802.11b/g Wi-Fi and external AC power adapter.



Front



Rear

Standard Features

- Intel i7 2.4 GHz or i5 1.8 GHz or i3 2.6 GHz Processor
- 320 GB SATA 2.5" HDD, Upgradable to 500 GB or 1TB, or
- 32GB SSD or 64, 128, 250 or 500 GB Solid State Drive.
- 2 GB DDR3 1066MHz. RAM Memory, upgradable to 8 GB.
- Intel® QM87 Express Video Chipset.
- Dual 10/100/1000 Ethernet.
- 1 - RS232 Serial Port, 1 - RS-232/422/485 Serial Port.
- 2 - USB 2.0 Ports, 4 - USB 3.0 Ports.
- Windows7® Pro Operating System (64-bit).
- Deck/bulkhead mounting rails.
- Fanless Non-Corrosive Aluminum Sealed Case.
- Internal Mini-card Option Slot, Wireless 802.11 b/g.
- 12-19 VDC Power Input.
- Super-compact 9.8" x 8.65" x 2.36", 7.7 lb.



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Specifications

■ CPU	Intel Core i7-4700EQ® 2.4 GHz. Quad core, i5-4422E 1.8 GHz. DualCore, or i3-4110E 2.6GHz. DualCore			
■ Operating System	Windows7® Pro 64-bit, Windows8® Pro 64-bit, Linux			
■ Hard Drive	320 GB 2.5" Industrial Grade SATA, Optional 500 GB or 1TB, Optional 64, 128, 160, 240 or 500 GB Solid State			
■ Memory	2 GB DDR3L 1333/1600MHz., Upgradable to 4 or 8 GB			
■ Video Chipset	Intel® QM87 Express Chipset			
■ Expansion	1 - Mini-card Slot (Internal)			
■ I/O Ports	2 - USB 2.0, 4 - USB 3.0, 1 - RS-232, 1 - RS-232/422/485			
■ Monitor Support	1 - DVI-I (Analog VGA with optional adapter), 1 - HDMI (Second DVI-D with optional adapter)			
■ Networking	2 - RJ-45 10/100/1000 Base T Ethernet			
■ Mounting	Slotted mounting brackets			
■ Weight	3.5 kg / 7.7 lbs.			
■ Power	85 Watts Nominal			
■ Environmental	Operating	Non-Operating		
	Temperature (Air Ambient)	-20°C to 60°C (-4°F to 140°F)	-20°C to 75°C (-4°F to 167°F)	
	Relative Humidity	5% to 90% (@40°C) non-condensing		
	Shock	50G (IEC60068-2-27, half-syne 11msec.)		
	Vibration	5Grms (IEC60068-2-64, Random, 10~500Hz, 1hr/axis)		
■ Electrical	Input	12-19 VDC Internal	120/240 VAC (External Adapter)	
	Frequency	DC Input	45 – 75 Hz	
■ Standards	CE, FCC Class A Part 15			
■ Options	External AC Adapter			
	Wireless IEEE 802.11 b/g			
	Internal Mini-PCIe Card (Consult Factory)			
■ Ordering Information	MPC-FR4724	Corei7 Quad Core 2.4 GHz.		
	MPC-FR4518	Corei5 DualCore 1.8 GHz.		
	MPC-FR4326	Corei3 DualCore 2.6 GHz.		
	Options	-4	Increase RAM to 4GB	
		-8	Increase RAM to 8GB	
		-WF	Add Wifi Card with Antenna	
		-500HD	Increase HD to 500GB	
		-1TB	Increase HD to 1 TB	
		-64SD	Substitute 64GB SSD for HD	
		-128SD	Substitute 128GB SSD for HD	
	-250SD	Substitute 250GB SSD for HD		
	-500SD	Substitute 500GB SSD for HD		

