



## KEY FEATURES

- 6th Gen Intel® Core™ i7/i5/i3 processors (Skylake) and H110 chipset
- Dual-channel DDR4 SO-DIMM sockets support up to 32 GB memory
- Support for 2 independent displays with 1 VGA, 1 DVI and 2 DisplayPort I/O
- 1 PCIe Gen3 x16 and 1 PCI expansion slots
- 3 Intel® GbE ports with teaming function
- SSD Support 240GB - 3.8 TB
- 2 software-programmable RS-232/422/485 + 2 RS-232 ports
- Front-accessible I/O for simplified installation and maintenance
- IACS E10, IEC-60945 maritime standard certified

## SOFTWARE SUPPORT

- Windows® 10 / 7 / Embedded Standard 7
- Linux® Ubuntu 14.04 and Fedora 20

## PHANTOM-6000M SERIES

*Value Family 6th Generation  
Intel® Core™ i7/i5/i3 Processor-Based  
Expandable Maritime 60945 certified  
Computer*

- **Phantom-6001M** (P/N:bx-10010)  
Intel® Core™ i7-6700TE fanless embedded computer
- **Phantom-6002M** (P/N:bx-10016)  
Intel® Core™ i5-6500TE fanless embedded computer
- **Phantom-6003M** (P/N:bx-10017)  
Intel® Core™ i3-6100TE fanless embedded computer

### OPTIONAL ACCESSORIES:

- **Optional Fan Module** (P/N:gh-10007)  
Fan module for Phantom-6000M series
- **Card Holder** (P/N:gh-10006)  
PCI/PCIe Card holder
- **160W AC-DC Adapter** (P/N:nt-10000)  
160W Industrial grade AC-DC adapter

# TECHNICAL SPECIFICATIONS

Model Name	Phantom-6001M	Phantom-6002M	Phantom-6003M
<b>System Core</b>			
Processor	Intel® Core™ i7-6700TE	Intel® Core™ i5-6500TE	Intel® Core™ i3-6100TE
Chipset	H110		
Video	1 VGA + 2 DisplayPort + 1 DVI-D		
Memory	4 GB DDR4 2133 MHz ( up to 32 GB)		
<b>I/O Interface</b>			
Expansion slots	1 PCIe Gen3 x16 + 1 PCI		
Ethernet	3 Intel® GbE ports 3 Intel® I211AT WOL function on each port Teaming		
Serial Ports	4 COM by DB9 connector 2 software-programmable RS-232/422/485 (COM1 & 2) [ BIOS select ] 2x RS-232 (COM3 & 4) The RS-485 support auto-flow control 2 KV surge protection on RS-422/485		
USB	6 external USB ports (4 USB 3.0 +2 USB 2.0) Each of the 6 external USB ports supports 1.6A. To ensure 40 mil/A trace design and 5V ± 5% voltage stability 1 internal USB 2.0 port		
DIO	8-CH DI and 8-CH DO		
Mini PCIe	8-CH DI and 8-CH DO 1 internal mini PCIe socket		
USIM	1 USIM socket		
Audio	1 Mic-in and 1 Line out		
<b>Power Supply</b>			
DC Input	Built-in 19-32 VDC wide-range DC input 3P pluggable connector with latch (GND, V-, V+)		
AC Input	Optional 160 W external AC-DC adapter for AC input		
<b>Storage Device</b>			
SATA SSD	SSD Support 240GB - 3.8 TB		
CompactFlash Socket	1 Type II CFast		
<b>Mechanical</b>			
Dimensions	220 (W)X 210(D) X 170(H) mm (8.67" x 8.27" x 6.69")		
Weight	4.5 kg (9.92 lbs)		
Mounting	Wall mount kit		
<b>Environmental</b>			
Operating Temperature	-15°C to 55°C, -15°C to 70°C with FAN kit		
Storage Temperature	-40°C to 85°C (-40°F to 185°F) (excl. HDD/SDD/CFast)		
Humidity	~95% @ 40°C (non-condensing)		
Vibration	Operating, 5 Grms, 5-500 Hz, 3 axes (w/ CFast or SSD) Operating, 0.5 Grms, 5-500 Hz, 3 axes (w/ HDD)		
ESD	Contact +/-4KV, Air +/-8KV		
Shock	Operating, 100 Grms, half sine 11ms duration (w/ CFast or SSD)		
EMC	CE & FCC Class A, IACS E10, IEC-60945		

\* Linux distribution by request

State: Released Revision: A Version: 4 Date: 20.06.2018