

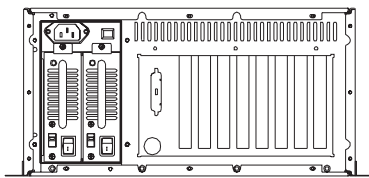
# Ventrix 540/541 PICMG 1.3



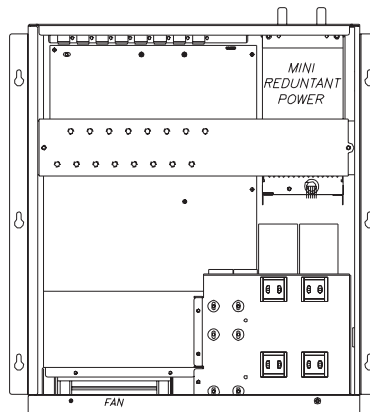
## Features

- Intel i5/i7 Processor with Hyper-threading and TurboBoost
- Supports Intel AMT 7.0, RAID 0,1,5,10, TPM
- 3 year warranty, first year onsite (UK ONLY)
- Constructed from roadmapped industrial components
- Designed for mission critical 24/7 applications
- Assembled and tested within a lean manufacturing environment under ISO 9001

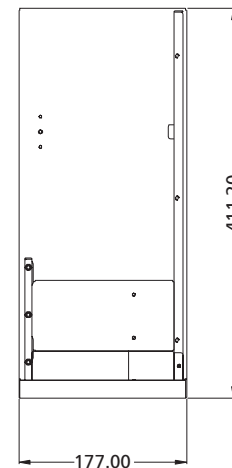
## Dimensions



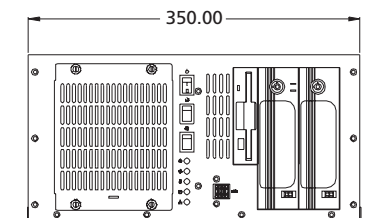
Rear View



Top View



Side View



Front View

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# Ventrix 540/541 PICMG 1.3

## Specifications

The information is believed to be accurate. However Amplicon Liveline Limited accepts no responsibility for any problems caused by errors and omissions. Specifications are subject to change without notice.

|                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hardware specification          | Processors incorporated into each model:<br>Ventrix 540-E1.6 – Intel Core i5-2400 3.1 GHz, 6M Cache<br>Ventrix 541-E1.6 – Intel Core i7-2600 3.4 GHz, 8M Cache<br><br>Chipset: Intel® Q67 Express Chipset<br>Main memory: 2GB DDR3 1066/1333MHz dual channel (max 16GB*)<br>Video: Integrated Intel® HD Graphics<br>Display Resolution: Resolutions up to 2048 x 1536 @ 75 Hz<br>LAN: 2 ports at 10/100/1000Mbps, support for WoL, PXE Boot ROM, AMT 7.0 with Intel® 82579LM, 2 <sup>nd</sup> port Intel® 82574L<br>Watchdog Timer: 1-255 sec or 1-255 min<br>TPM: Infineon SLB 9635 TT 1.2<br><br>*Usable memory capacity may be limited by the operating system | Environmental operational           | Acoustic noise: 50dBA sound pressure at 22°C (typical)<br>Temperature: 5 to 45°C (tested for extended operation up to 50°C)<br>Humidity: 5 to 90% at 25°C non-condensing<br>Please contact us to discuss extended or harsher environmental specifications                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| BIOS                            | BIOS AMBIOS 64Mb SPI BIOS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Environmental storage               | Temperature: -20 to 65°C<br>Humidity: 5 to 90% at 25°C non-condensing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Storage                         | 250GB HDD 7200rpm<br>DVDRW<br>Total drive capacity: 2 x 5.25", 1 x 3.5" HDD, 1 x 3.5" FDD / HDD<br>We can provide storage and backup solutions for any application                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Electromagnetic compatibility (EMC) | EN55022 Class A<br>EN55024 Industrial severity (where applicable)<br><br>Electrostatic discharge immunity test (EN61000-4-2)<br>±4kV Contact, applied to enclosure port<br>±8kV Air, applied to enclosure port<br>±4kV Indirect, applied to coupling plane<br><br>Radiated, radio-frequency, electromagnetic field immunity test (EN61000-4-3)<br>80-1000MHz, 10 V/m (RMS, no modulation) 80% Modulation with 1kHz Sine wave<br><br>Electrical fast transient/burst immunity test (EN61000-4-4)<br>Power port AC, inc. protective earth<br>Severity ±2kV<br><br>Surge Immunity test (EN61000-4-5)<br>Power port AC<br>Severity ±2kV applied line to line<br>Severity ±2kV applied line to earth<br><br>Immunity to conducted disturbances induced by radio frequency fields (EN61000-4-6)<br>Power port AC, inc. protective earth via CDN M3<br>0.15-80MHz, 10 V/m (no modulation) 80% Modulation with 1kHz Sine wave, applied via CDN type M3<br><br>Voltage dips, short interrupts and voltages variations immunity tests (EN61000-4-11)<br>Power port AC<br>>95% Reduction, 0.5 Periods<br>>30% Reduction, 25 Periods<br>>95% Reduction, 250 Periods<br><br>Voltage dips, short interrupts and voltages variations immunity tests (EN61000-6-2)<br>Power port AC<br>>30% Reduction, 0.5 Periods<br>>60% Reduction, 25 Periods<br>>100% Reduction, 250 Periods<br><br>Limits for harmonic current measurement (EN 61000-3-2), Product Class D<br><br>Limitation of voltage changes, voltage fluctuations and flicker (EN 61000-3-3)<br><br>Amplicon own a fully equipped EMC facility and can provide many additional tests to meet your requirements. |
| System expansion                | 5 PCI (1 x full length, 4 x 180mm)<br>1 x PCIe X16 (Graphics only available on the 530 model only)<br>Additional slots can be made available by reducing I/O ports such as serial, parallel and USB.                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Safety                              | Safety of information technology equipment (EN 60950)<br>CE Marked                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| System architecture             | Full-sized SBC with PCI / PCIe golden finger<br>PICMG 1.3 Compliant<br>PCI V2.2 Compliant                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Electrical ratings                  | Voltage: 90 – 264 VAC full range<br>Frequency: 47–63Hz<br>Input current: 8.0 / 4.0A for 115 / 230 VAC<br>Inrush current: 65A / 125A max<br>Typical operational current: : 0.5 –1A (base system)<br>PSU maximum secondary loading: 460W<br>Typical Power 150W (unexpanded)<br>Active PFC<br>EMI noise filter<br>Over power / voltage / current protection<br>Short circuit protection<br><br>Higher rated and DC power supplies options are available.<br>We recommend that you discuss your power requirements before placing your order                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Supported OS (Operating System) | Windows XP FeS, Windows 7 32/64 Bit, Windows Server 2008, and Linux<br>If your desired operating system is not listed, or you wish to check support for a specific version of Linux, please contact us.                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Reliability                         | System MTBF: >25,000 hrs (we can provide information for specific configurations)<br><br>Four hour burn-in diagnostic run on every system                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Internal interfaces             | Serial ATA: 2x SATA 6 Gb/s ports, 4x SATA 3 Gb/s ports, supports RAID 0/1/5/10<br>USB: 8 x USB 2.0 ports<br>KB/MS 1x internal pin header for PS/2 keyboard/mouse*<br>Serial Ports: 5x RS-232, 1x RS-232/422/485*<br><br>*Available via rear breakout                                                                                                                                                                                                                                                                                                                                                                                                              |                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| LEDs and switches               | Power (PC ON) LED<br>Hard disk access LED x 2<br>Environmental temperature warning LED<br>System fan monitor LED x 2<br>Environmental monitoring buzzer reset<br>Front: ATX system control switch, system reset                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| External interfaces             | Front<br>USB: 2 ports<br>Front keyboard: Mini-DIN for (keyboard only)<br>Rear<br>USB: 2 x USB 3.0 ports on faceplate<br>Serial: COM 1–6 available via brackets* (9 pin D-Type)<br>VGA: DB-15 connector x 1<br>LAN: RJ45 Ethernet x 2<br><br>*Please discuss your port configuration requirements                                                                                                                                                                                                                                                                                                                                                                  |                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Mechanical                      | Design: Desktop or wall mount<br>Construction: Heavy duty cold rolled electroplated steel<br>Colour: Black (custom colours available for large orders)<br>Dimensions: 350(W) x 177(H) x 411(D) mm (13.8" x 7.0" x 16.2")<br>Packaging size: 490(W) x 324(H) x 558(D) mm (19.3" x 12.8" x 22.0")<br>Total drive capacity: 2 x 5.25", 1 x 3.5" HDD, 1 x 3.5" floppy disk drive<br>Cooling: 1 x 120mm fan, 90 CFM<br>Air filter: Removable (washable)<br>Gross weight: Approximately 17kg                                                                                                                                                                            |                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

| Model            | PCIe slots | PCI slots | Processor                  |
|------------------|------------|-----------|----------------------------|
| Ventrix 540-E1.6 | 1          | 4         | Intel Core i5 2400, 3.1GHz |
| Ventrix 541-E1.6 | 0          | 4         | Intel Core i5 2600, 3.4GHz |
|                  |            |           |                            |

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