

# Impact-R 203M



## Features

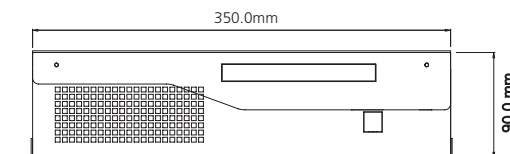
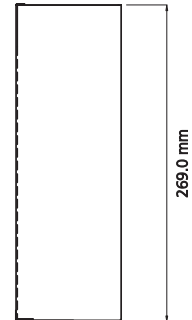
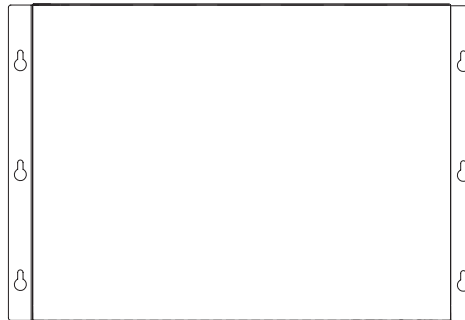
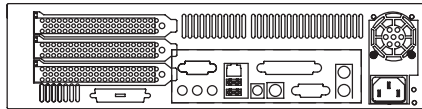
The **Impact-R 203M** is powered by an industrial Mini-ITX motherboard featuring the Intel 945GM / ICH7M chipset. Powered by an Intel Core Duo Mobile processor with support for up to Intel Core 2 Duo Mobile processors, this future proof model provides excellent performance in a compact expandable form factor industrial case.

The Impact-R series utilise industrial components, which provide revision control together with a 5-year product life. Our production processes are controlled under ISO 9001:2000 and every system undergoes a full diagnostic burn-in prior to shipment.

These systems are suited to data logging, mobile communications, digital signage, networking and embedded applications.

Systems can be tailored to meet your exact requirements. Each system comes with a 3 year warranty.

## Dimensions



350.0mm

90.0 mm

269.0 mm

# Impact-R 203M

## 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	<p>CPU: Intel Core Duo Mobile Processor 2.0GHz 667MHz FSB 2MB cache *</p> <p>Chipset: Intel 945GM / ICH7M</p> <p>Main memory: 1GB DDR2 SODIMM</p> <p>Upgradeable to: 4GB</p> <p>Video: Built-in Intel Graphics Media Accelerator</p> <p>Analogue display up to 1600 x 1200</p> <p>LAN: 2 x Marvell 88E8053 PCI Express Gigabyte Controllers</p> <p>Audio: Realtek ALC655</p> <p>SATA: 2 x interfaces (SATA 1.0 specification)</p> <p>SATA speed up to 1.5Gb/s</p> <p>PCI IDE Interface: Supports 2 x Ultra ATA 33 / 66 / 100 devices</p> <p>USB: 6 x Ports 2.0 / 1.1 (2 x front, 4 x rear)</p> <p>Serial Ports: 3 x Serial Ports</p> <p>*Supports up to Intel Core 2 Duo Mobile Processor 2.16GHz CPU</p>	Electromagnetic compatibility (EMC)	<p>EN55022 Class A</p> <p>EN55024 Industrial severity (where applicable)</p> <p>Electrostatic discharge immunity test (EN61000-4-2)</p> <p>±4kV Contact, applied to enclosure port</p> <p>±8kV Air, applied to enclosure port</p> <p>±4kV Indirect, applied to coupling plane</p> <p>Radiated, radio-frequency, electromagnetic field immunity test (EN61000-4-3)</p> <p>80-1000MHz, 10 V/m (RMS, no modulation)</p> <p>80% Modulation with 1kHz Sine wav</p> <p>Electrical fast transient/burst immunity test (EN61000-4-4)</p> <p>Power port ac, inc. protective earth</p> <p>Severity ±2kV</p>
BIOS	<p>Award BIOS</p> <p>4Mbit flash memory</p>		<p>Surge Immunity test (EN61000-4-5)</p> <p>Power port ac</p> <p>Severity ±2kV applied line to line</p> <p>Severity ±2kV applied line to earth</p>
Storage	<p>80GB Western Digital Scorpio 2.5" drive</p> <p>Slim DVDRW</p> <p>Total drive capacity: 1 x Slim 5.25" external, 1 x 2.5" internal</p> <p>CompactFlash socket available</p> <p>We can provide storage and backup solutions for any application</p>		<p>Immunity to conducted disturbances induced by radio frequency fields (EN61000-4-6)</p> <p>Power port ac, inc. protective earth via CDN M3</p> <p>0.15-80MHz, 10 V/m (no modulation) 80% Modulation with 1kHz Sine wave, applied via CDN type M3</p>
System expansion	<p>3 x 5V PCI 32 Bit slot (max 200mm length)</p> <p>High bandwidth cards should be tested to guarantee compatibility. Please contact sales for further information.</p>		<p>Voltage dips, short interrupts and voltages variations immunity tests (EN61000-4-11) Power port ac</p> <p>&gt;95% Reduction, 0.5 Periods</p> <p>&gt;30% Reduction, 25 Periods</p> <p>&gt;95% Reduction, 250 Periods</p>
System architecture	<p>Industrial Mini-ITX form factor motherboard</p>		<p>Limits for harmonic current measurement (EN 61000-3-2), Product Class A</p> <p>Limitation of voltage changes, voltage fluctuations and flicker (EN 61000-3-3)</p>
Supported OS (Operating System)	<p>Windows XP, Windows 2000 (available via Windows XP Pro downgrade rights)</p> <p>If your desired operating system is not listed, please contact us</p>		<p>Amplicon own a fully equipped EMC facility and can provide many additional tests to meet your requirements.</p>
Internal interfaces	<p>1 x CompactFlash socket</p> <p>2 x Connectors for 4 additional external USB 2.0/1.1 ports</p> <p>1 x Connector for 1 external serial port</p> <p>1 x LCD brightness control connector</p> <p>1 x LVDS LCD panel connector</p> <p>1 x LCD/inverter power connector</p> <p>1 x LCD AUX power connector</p> <p>1 x DIO connector</p> <p>1 x Front audio connector for line-out and mic-in jacks</p> <p>1 x CD-in internal audio connector</p> <p>1 x S/PDIF-out connector</p> <p>1 x Connector for IrDA interface</p> <p>2 x Serial ATA connectors</p> <p>1 x 40-pin IDE connector</p> <p>1 x Floppy connector (FPC type)</p> <p>1 x 20-pin ATX power connector</p> <p>1 x Front panel connector</p> <p>2 x Fan connectors</p>		<p>Safety of information technology equipment (EN 60950)</p> <p>CE Marked</p>
LEDs and switches	<p>Power (PC ON) LED</p> <p>Hard disk access LED</p> <p>Front: ATX system control switch, system reset</p> <p>Rear: System ON/OFF power switch</p>		
External interfaces	<p>1 x Mini-DIN-6 PS/2 mouse port</p> <p>1 x Mini-DIN-6 PS/2 keyboard port</p> <p>3 x DB-9 serial ports</p> <p>1 x DB-15 VGA port</p> <p>2 x RJ45 LAN ports</p> <p>6 x USB 2.0/1.1 ports (2 x front, 4 x rear)</p> <p>1 x Mic-in, line-in and line-out</p>		<p>Electrical Ratings</p> <p>Voltage: 100 ~ 240 VAC full range</p> <p>Frequency: 47 ~ 63Hz</p> <p>Input current: 6.0 / 3.0A for 47Hz / 63Hz</p> <p>PSU maximum secondary loading: 300W*</p> <p>(+3.3V and +5V combined load should not exceed 110W)</p> <p>Active PFC</p> <p>Over power / voltage / current / temperature protection</p> <p>Short circuit protection</p> <p>*Higher rated power supplies are available and we recommend that you discuss your power requirements before placing your order</p>
Mechanical	<p>Design: Compact desktop / wallmount (brackets supplied)</p> <p>Construction: Heavy duty cold rolled electroplated steel</p> <p>Colour: Black / Silver (custom colours available for large orders)</p> <p>Dimensions: 350 x 90 x 269mm (13.8" x 3.5" x 11.6")</p> <p>Packaging size: 470 (W) x 390 (H) x 235 (D) mm (18.5" x 15.4" x 9.3")</p> <p>Cooling : 2 x 60mm ball bearing fan (23.5 CFM each)</p> <p>Gross weight: approximately 6kg</p>		<p>Reliability</p> <p>System MTBF: Critical components failure &gt;45,000 hrs @ 25°C</p> <p>(we can provide information for specific configurations)</p> <p>Full burn-in diagnostic run on every system</p>
Environmental operational	<p>Acoustic noise: Approximately 48dBA sound pressure at 23°C (typical)</p> <p>Temperature: 0 to 45°C (tested for extended operation up to 50°C)</p> <p>Humidity: 5 to 90% at 25°C non-condensing</p>		
Environmental storage	<p>Temperature: -20 to 65°C</p> <p>Humidity: 5 to 90% at 25°C non-condensing</p>		