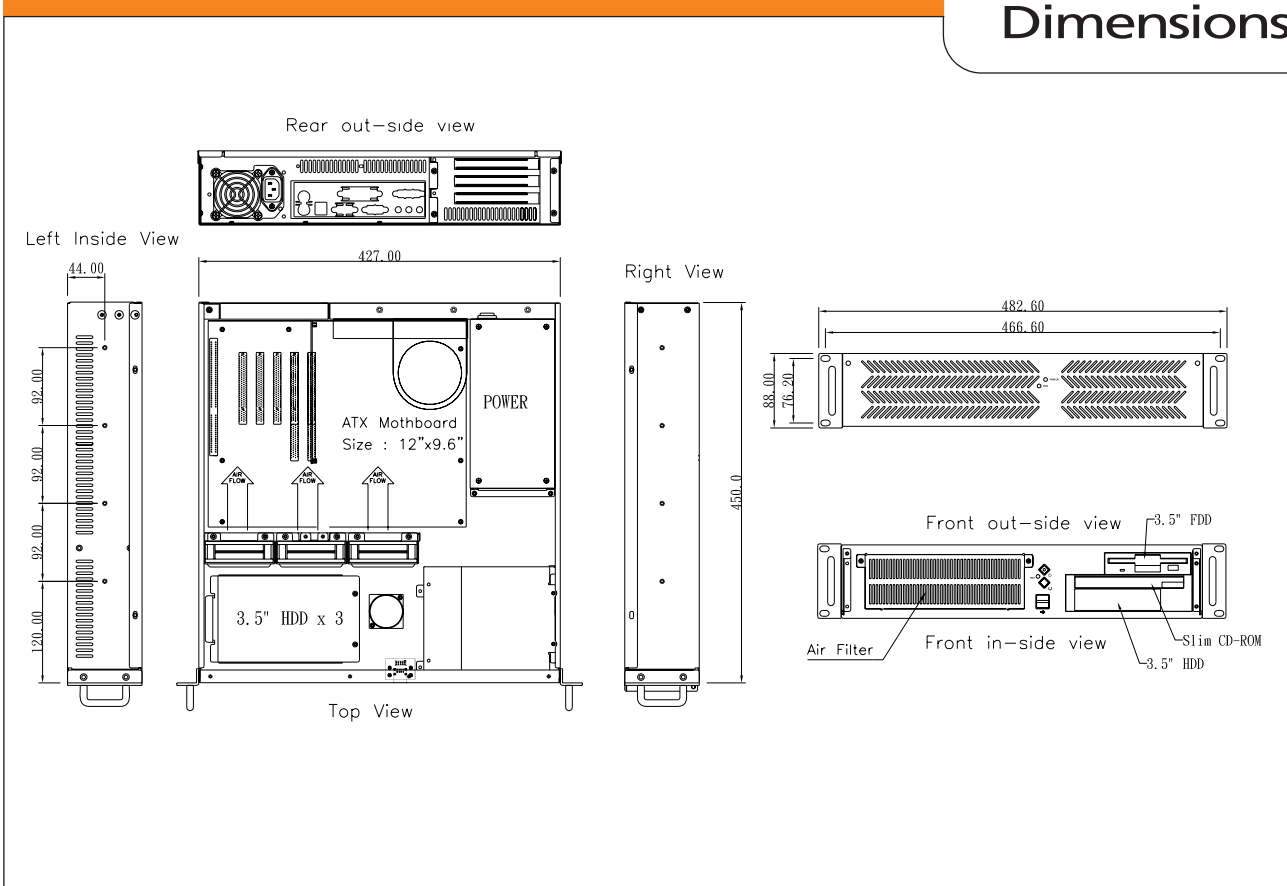# Impact-R 2019

Features

The **Impact-R 2019** is powered by an industrial motherboard featuring the Intel Q35 + ICH9-DO chipset. Featuring a Intel Core 2 Processor, this system provides both PCI and PCI Express expansion and includes onboard RAID.
The Impact-R series utilises industrial components which provide revision control together with a 5-year product life.
Our systems are assembled and tested within a lean manufacturing environment controlled under our ISO 9001 quality system.

Systems can be tailored to meet your exact requirements.

Dimensions

Rear out-side view

Left Inside View

Right View

427.00

44.00

92.00

92.00

92.00

120.00

ATX Mothboard
Size : 12"x9.6"

POWER

AIR FLOW   AIR FLOW   AIR FLOW

3.5" HDD x 3

Top View

482.60
466.60

88.00
76.20

450.0

Front out-side view   3.5" FDD

Air Filter   Front in-side view   Slim CD-ROM

3.5" HDD

Impact-R 2019

Specifications

Hardware specification	CPU: Intel Core 2 Quad Q9400 LGA775, 2.66GHz, 1333MHz, 6MB cache Chipset: Intel Q35 + ICH9-DO Main memory: 1GB DDR2 dual channel Upgradeable to: 8GB (may be limited by O/S) Video: Built-in Intel Q35 GMCH 3100 integrated graphic engine LAN: 2 ports support 10/100/1000 Mbps, with Realtek RTL8111B and Intel 82566DM Audio: HD Codec audio as Mic-in/ Line-out/ Speaker- out with Realtek ALC888 SATA: 6 x SATA-300 Onboard RAID: ICH9-DO supports RAID 0/1/10/5 function Watchdog Timer: 255 levels, 0~255 sec. Resolution: Analog display : VGA up to 2048 x 1536 @ 75 Hz with 32-bit color
BIOS	Phoenix Award BIOS
Storage	250GB SATA Hard Drive DVDRW (standard height) Total drive capacity: 1 x 5.25" external, 1 x 3.5" external, 3 x 3.5" internal or 1 x Slim 5.25" external, 1 x 3.5" external, 4 x 3.5" internal We can provide storage and backup solutions for any application
System expansion	2 x PCI 32 Bit PCI slots (1 x 250mm, 1 x 180mm length) 1 x PCI Express x16 graphics slot (180mm length, suitable for single slot width cards
System architecture	Industrial ATX form factor motherboard
Supported OS (Operating System)	Windows XP, Windows Vista, Windows 7 and Linux. If your desired operating system is not listed or you wish to check support for a specific version of Linux, please contact us.
Internal interfaces	3 x Connectors for 6 additional external USB 2.0/1.1 ports 3 x Connectors for external COM ports (3 x RS232) 1 x Digital I/O connector 6 x Serial ATA connectors 1 x Floppy connector 1 x 24-pin ATX power connector 1 x 4-pin 12V power connector 1 x DVI Chrontel CH7307 DVI transmitter 1 x Front panel connector 3 x 4-wire fan connectors 2 x IEEE 1394a
LEDs and switches	Power (PC ON) LED Hard disk access LED Front: ATX system control switch, system reset
External interfaces	1 x Mini-DIN-6 PS/2 mouse port 1 x Mini-DIN-6 PS/2 keyboard port 1 x DB-9 serial port (RS232 / 422 / 485 jumper selectable) 1 x DB-15 VGA port 2 x RJ45 LAN ports 6 x USB 2.0/1.1 ports (4 x rear, 2 x front) 1 x Mic-in, Line-out 1 x Parallel port (ECP/EPP/SPP)
Mechanical	Design: EIA RS-310C 19" Rackmount Standard Construction: Heavy duty cold rolled electroplated steel Colour: Black (custom colours available for large orders) Dimensions: 483 (W) x 88 (H) x 450 (D) mm (19.0" x 3.5" x 17.7") Packaging size: 615 (W) x 224 (H) x 600(D) mm (24.2" x 8.8" x 23.6") Total drive capacity: 1 x Slim 5.25" external, 1 x 3.5" external, 4 x 3.5" internal or 1 x 5.25" external, 1 x 3.5" external, 3 x 3.5" internal Cooling : 3 x 80mm ball bearing fans (42.5 CFM each) Air filter: removable (washable) Gross weight: approximately 17kg
Environmental operational	Acoustic noise: Approximately 48dBA sound pressure at 23°C (typical) Temperature: 0 to 45°C (tested for extended operation up to 50°C) Humidity: 5 to 90% at 25°C non-condensing
Environmental storage	Temperature: -20 to 65°C Humidity: 5 to 90% at 25°C non-condensing

Electromagnetic compatibility (EMC)	EN55022 Class A EN55024 Industrial severity (where applicable) Electrostatic discharge immunity test (EN61000-4-2) ±4kV Contact, applied to enclosure port ±8kV Air, applied to enclosure port ±4kV Indirect, applied to coupling plane Radiated, radio-frequency, electromagnetic field immunity test (EN61000-4-3) 80-1000MHz, 10 V/m (RMS, no modulation) 80% Modulation with 1kHz Sine wav Electrical fast transient/burst immunity test (EN61000-4-4) Power port ac, inc. protective earth Severity ±2kV Surge Immunity test (EN61000-4-5) Power port ac Severity ±2kV applied line to line Severity ±2kV applied line to earth Immunity to conducted disturbances induced by radio frequency fields (EN61000-4-6) Power port ac, inc. protective earth via CDN M3 0.15-80MHz, 10 V/m (no modulation) 80% Modulation with 1kHz Sine wave, applied via CDN type M3 Voltage dips, short interrupts and voltages variations immunity tests (EN61000-4-11) Power port ac >95% Reduction, 0.5 Periods >30% Reduction, 25 Periods >95% Reduction, 250 Periods Voltage dips, short interrupts and voltages variations immunity tests (EN61000-6-2) Power port ac >30% Reduction, 0.5 Periods >60% Reduction, 25 Periods >100% Reduction, 250 Periods Limits for harmonic current measurement (EN 61000-3-2), Product Class D Limitation of voltage changes, voltage fluctuations and flicker (EN 61000-3-3) Amplicon own a fully equipped EMC facility and can provide many additional tests to meet your requirements.
Safety	Safety of information technology equipment (EN 60950) CE Marked
Electrical Ratings	Voltage: 90 ~ 264 VAC full range Frequency: 47 ~ 63Hz Input current: 8.0 / 4.0A for 115 / 230 VAC Inrush current: 80A max PSU maximum secondary loading: 400W (150W typical)* Active PFC EMI noise filter Over power/voltage/current protection Short circuit protection *Higher rated power supplies are available and we recommend that you discuss your power requirements before placing your order
Reliability	System MTBF typically: >20,000 hrs @ 30°C (we can provide information for specific configurations) Four hour burn-in diagnostic run on every system

10-12-09