

RCS-9220A/ 9220AH

Quad Core Intel® Core™ i7/ i5/ i3 (Skylake-S) Fanless Robust Computing System with Intel® Q170 Chipset, 2 GigE LAN, 2 PCIe x8, 7 USB 3.0, 4 COM, 3 SIM, 32 Isolated DIO, -25°C to 75°C Extended Temperature



Features

- LGA 1151 Socket supports Quad Core Intel® Core™ i7/ i5/ i3 Processor (Skylake-S)
- Onboard DVI-I, DVI-D and DisplayPort display interface, up to 3 independent HD displays
- Fanless, -25°C to 75°C Operating Temperature
- 6V to 36V DC Power Input with 80V Surge Protection
- 2 Independent GigE LAN, iAMT 11.0 supported
- 2 PCIe x8 Expansion Slot
- Front-access : 2 SIM Socket, 6 USB 3.0, 4 COM
- 3 SIM Card Socket for 3G/ 4G/ LTE/ WiFi/ GPRS/ UMTS
- 7 USB 3.0, 3 Mini PCIe, 1 mSATA, 1 CFast Socket
- 32 Isolated DIO, Remote Power Switch
- Configurable Ignition Power Control



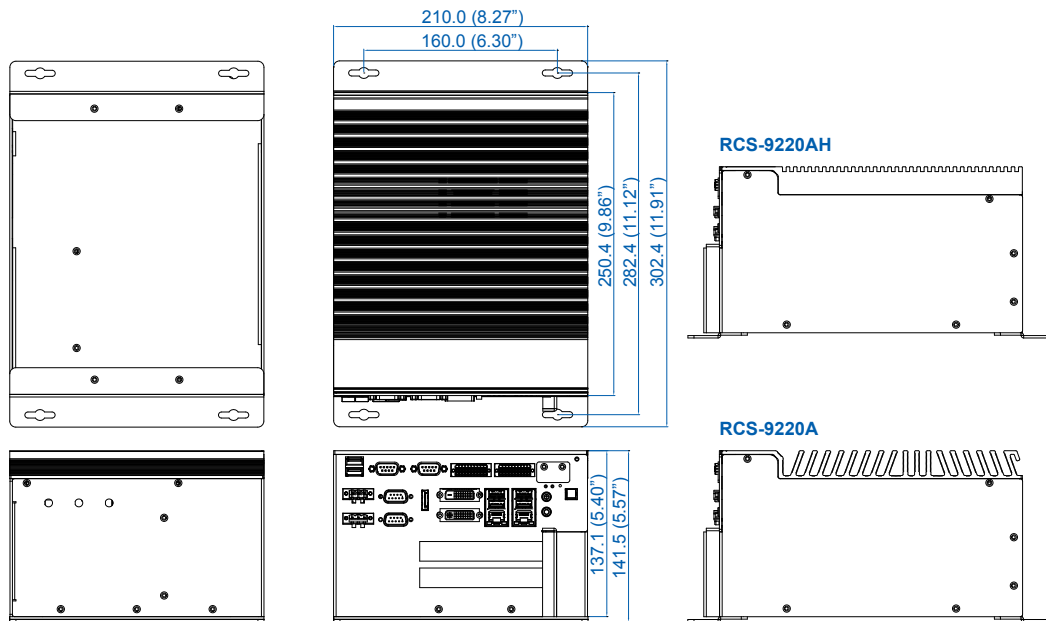
Specifications

| System | |
|---------------------------|--|
| Processor | Intel® Core™ i7-6700/ i7-6700TE/ i5-6500/ i5-6500TE/ i3-6100/ i3-6100TE Processor (Skylake-S) |
| Chipset | Intel® Q170 |
| BIOS | AMI |
| SIO | IT8786E |
| Memory | 2 DDR4 2133 MHz SO-DIMM, up to 32GB |
| I/O Interface | |
| Serial | 4 COM RS-232/ 422/ 485 |
| USB | <ul style="list-style-type: none"> ▪ 7 USB 3.0 (6 External, 1 Internal) ▪ 2 USB 2.0 (Internal) |
| Isolated DIO | 32 Isolated DIO : 16 DI, 16 DO |
| LED | Power, HDD, Wireless |
| SIM Card | 3 SIM Card Socket (2 External, 1 Internal) |
| Expansion | |
| Mini PCIe | 3 Mini PCIe Socket : <ul style="list-style-type: none"> ▪ 2 Full-size for PCIe/ USB/ External SIM Card ▪ 1 Full-size for PCIe/ USB/ Internal SIM Card/ mSATA |
| PCIe | 2 PCIe x8 Slot |
| Graphics | |
| Graphics Processor | Intel® HD Graphics 530 |
| Interface | <ul style="list-style-type: none"> ▪ DVI-I : Up to 1920 x 1200 @ 60Hz ▪ DVI-D : Up to 1920 x 1200 @ 60Hz ▪ DisplayPort : Up to 4096 x 2304 @ 60Hz |
| Storage | |
| SATA | 4 SATA III (6Gbps) |
| mSATA | 1 SATA III (Mini PCIe Type, 6Gbps) |
| Storage Device | <ul style="list-style-type: none"> ▪ 1 CFast Socket (Internal) ▪ 2 2.5" SSD/ HDD Bracket (Internal) |
| Audio | |
| Audio Codec | Realtek ALC892, 5.1 Channel HD Audio |
| Audio Interface | 1 Mic-in, 1 Line-out |
| Ethernet | |
| LAN 1 | Intel® I219LM GigE LAN supports iAMT 11.0 |
| LAN 2 | Intel® I210 GigE LAN |

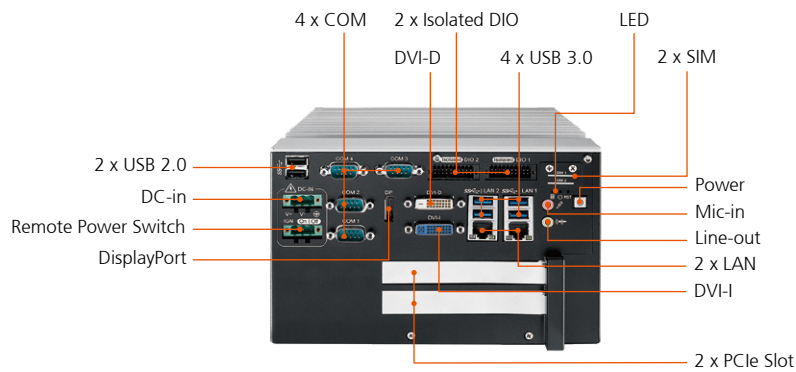
| Power | |
|-------------------------------|---|
| Power Input | 6V to 36V, DC-in |
| Power Interface | 3-pin Terminal Block : V+, V-, Frame Ground |
| Ignition Control | 16 Mode (Internal) |
| Remote Switch | 3-pin Terminal Block : On, Off, IGN |
| Surge Protection | Up to 80V/1ms Transient Power |
| Others | |
| TPM | Optional Infineon SLB9665 supports TPM 2.0, LPC Interface |
| Watchdog Timer | Reset : 1 to 255 sec./min. per step |
| Smart Management | Wake on LAN, PXE supported |
| HW Monitor | Monitoring temperature, voltages. Auto throttling control when CPU overheats. |
| Software Support | |
| OS | Windows 10, Windows 8.1, Windows 7, Linux |
| Mechanical | |
| Dimensions (W x L x H) | 137mm x 250mm x 210mm (5.40" x 9.86" x 8.27") |
| Weight | RCS-9220A : 3.1 kg (6.8 lb) RCS-9220AH : 4.3 kg (9.5 lb) |
| Mounting | Wallmount by mounting bracket |
| Environment | |
| Operating Temperature | RCS-9220A with 35W TDP CPU (i7-6700TE, i5-6500TE, i3-6100TE) : -25°C to 75°C (-13°F to 167°F) RCS-9220AH with 65W TDP CPU (i7-6700, i5-6500, i3-6100) : -25°C to 55°C (-13°F to 131°F) |
| Storage Temperature | -40°C to 85°C (-40°F to 185°F) |
| Humidity | 5% to 95% Humidity, non-condensing |
| Relative Humidity | 95% @ 70°C |
| Shock | <ul style="list-style-type: none"> ▪ IEC 60068-2-27 ▪ SSD : 50G @ wallmount, Half-sine, 11ms |
| Vibration | <ul style="list-style-type: none"> ▪ IEC 60068-2-64 ▪ SSD : 5Grms, 5Hz to 500Hz, 3 Axis |
| Certification | CE, FCC, EN50155, EN50121-3-2 |

Dimensions

Unit : mm/ inch



Front I/O



Order Information

| | |
|------------------------------------|---|
| RCS-9220A | RCS-9000, 2 GigE LAN, 2 PCIe x8, 7 USB 3.0, 4 COM, 3 SIM, Isolated DIO |
| RCS-9220AH | RCS-9000 w/ 65W CPU, 2 GigE LAN, 2 PCIe x8, 7 USB 3.0, 4 COM, 3 SIM, Isolated DIO |
| i7-6700 | 6th Gen Intel® Core™ i7-6700 Processor (8M Cache, up to 4.00 GHz) |
| i7-6700TE | 6th Gen Intel® Core™ i7-6700TE Processor (8M Cache, up to 3.40 GHz) |
| i5-6500 | 6th Gen Intel® Core™ i5-6500 Processor (6M Cache, up to 3.60 GHz) |
| i5-6500TE | 6th Gen Intel® Core™ i5-6500TE Processor (6M Cache, up to 3.30 GHz) |
| i3-6100 | 6th Gen Intel® Core™ i3-6100 Processor (3M Cache, 3.70 GHz) |
| i3-6100TE | 6th Gen Intel® Core™ i3-6100TE Processor (4M Cache, 2.70 GHz) |
| DDR4 16G | Certified DDR4 16GB 2133MHz RAM |
| DDR4 8G | Certified DDR4 8GB 2133MHz RAM |
| DDR4 4G | Certified DDR4 4GB 2133MHz RAM |
| PWA-280W-WT | 280W, 24V, 85V AC to 264V AC Power Adapter with 3-pin Terminal Block, Wide Temperature -30°C to +70°C |
| PWA-160W-WT | 160W, 24V, 85V AC to 264V AC Power Adapter with 3-pin Terminal Block, Wide Temperature -30°C to +70°C |
| PWA-120W | 120W, 24V, 90V AC to 264V AC Power Adapter with 3-pin Terminal Block |
| TMK2-20P-100 | Terminal Block 20-pin to Terminal Block 20-pin Cable, 100cm |
| TMK2-20P-500 | Terminal Block 20-pin to Terminal Block 20-pin Cable, 500cm |
| TMB-TMBK-20P | Terminal Board with One 20-pin Terminal Block Connector and DIN-Rail Mounting |
| 3G Module | Mini PCIe 3G/GPS Module with Antenna |
| 4G Module | Mini PCIe 4G/GPS Module with Antenna |
| WiFi & Bluetooth Module | Intel® Mini PCIe WiFi & Bluetooth Module with Antenna |