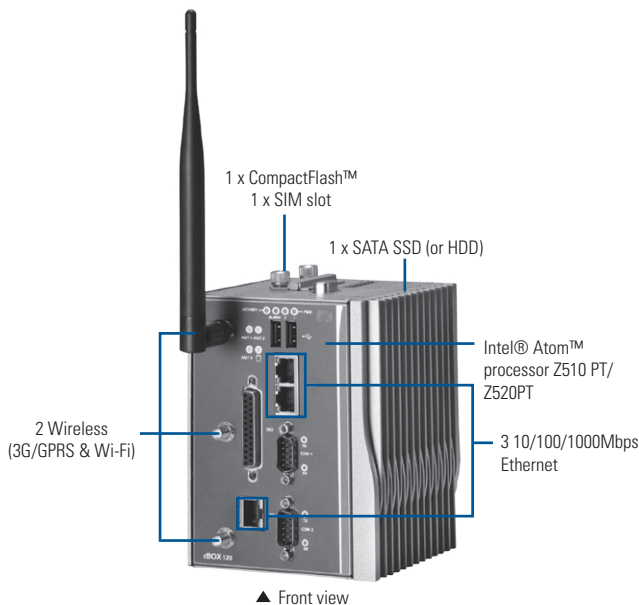
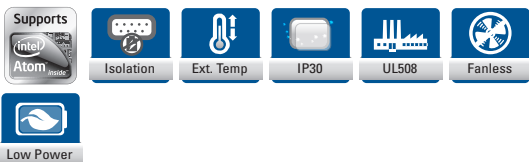


rBOX120-2COM

Robust Din-rail Fanless Embedded System with Intel® Atom™ Processor Z510PT/ Z520PT up to 1.33 GHz, Intel® US15WPT, 2 Isolated COM, SATA SSD, LANs and RTC



▲ Front view



Introduction

The rBOX120-2COM din-rail fanless embedded field controller supports extra low power Intel® Atom™ processors Z510PT and Z520PT with extended temperature range of -40°C to 70°C for use in extreme operating environments.

To prevent ESD and over-voltage, this super compact-size rBOX120-2COM is equipped with 2 isolated RS-232/422/485, 3 isolated 10/100/1000Mbps Ethernet for offering magnetic isolation protection. Two power paths input minimize the risk of data loss in the event of a single power failure. In addition, the RTC battery (battery onboard & gold-capacity onboard) reduces maintenance efforts and is ideally suited to vibration environment. Powered by IP30 housing, wide operating temperature range and Safety/EMI/EMS compliance, the rBOX120-2COM is ideal for intelligent computing and communication solutions in critical environments such as power utility, transportation and more.

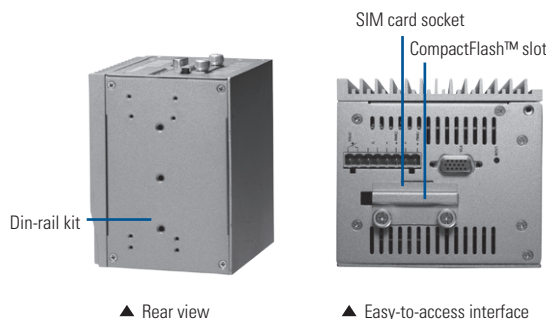
The ready-to-run rBOX120-2COM equipped with AXView remote monitoring software is a total solution for power plant automation, facility monitoring systems, intelligent transportation systems, and more.

Specifications

| | | |
|-------------------|--|--|
| Standard Color | Sliver-Black | |
| Construction | Extruded aluminum and heavy-duty steel, IP30 | |
| CPU | Intel® Atom™ processor Z510PT 1.1 GHz or Z520PT 1.33 GHz | |
| System Memory | 1 x 200-pin DDR2 SO-DIMM max. up to 2 GB | |
| System I/O Outlet | Serial Port | 2 x Isolated RS-232/422/485 (COM 1~2) Interface select by software or BIOS Supports Auto Flow Control in RS-485 mode ESD protection 15 KV Magnetic isolation protection 2KV COM 1 & COM 2 speed up to 115.2kbps |

Features

- Fanless and cableless design
- Intel® Atom™ processor Z510PT 1.1 GHz or Z520PT 1.33 GHz
- Wide temperature operation of -40°C ~ +70°C
- 2 isolated COM ports
- 3 isolated 10/100/1000Mbps Ethernet ports
- 1 isolated DIO (8-In/ 8-Out)
- 2 watchdog timer
- RTC Battery function
- LED indicators
- 2 wireless (3G/GPRS & Wi-Fi)
- SNMP V1/V2c
- Supports 1 x 2.5" SATA SSD (or HDD)
- Supports 1 CompactFlash™, 1 SD card (optional)
- 2 power paths with terminal block and 12-48VDC
- Supports AXView remote monitoring software package



▲ Rear view

▲ Easy-to-access interface

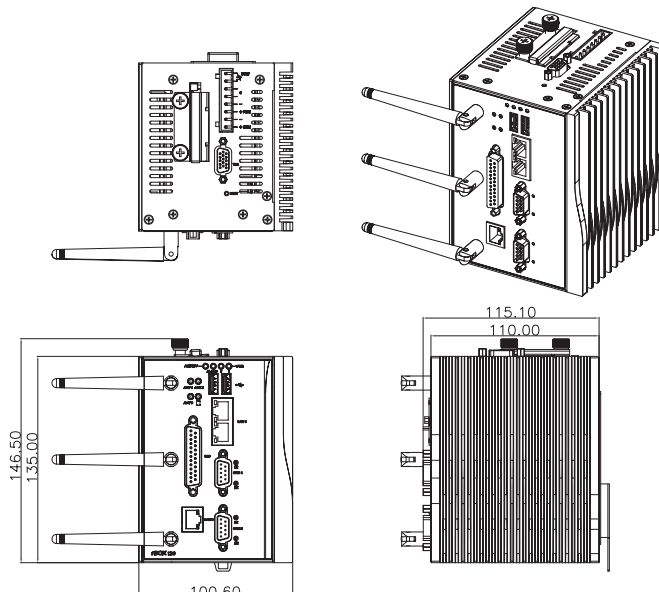
| | | |
|-------------------|------|---|
| System I/O Outlet | LAN | 3 x 10/100/1000Mbps Ethernet Magnetic isolation protection 1.5 KV |
| | USB | 2 x USB 2.0 USB power distribution control by software |
| DIO | | 1 x DIO (8-In/8-Out) |
| | DI : | Input channels : 8 source type Input voltage : 0 to 24VDC Digital input level for dry contacts : -Logic level 0 : close to GND -Logic level 1 : open |
| | DO : | Digital input levels for wet contacts : -Logic level 0 : +10V to +24V (DI to XIN_ COM-) -Logic level 1 : +3V max. |
| | | Output channels : 8 sink type Output current : Max. 200mA per channel On-state voltage : 24VDC nominal, open collector to 30V Optical isolation protection 2KV |
| RTC | | Battery onboard & Gold capacity onboard (1st backup battery when power shut-down) |
| VGA | | 1 x DB15 connector |
| Power Input | | 2 x DC power input with terminal block |
| Alarm Contact | | One relay output with current 0.5A @30VDC |
| Wireless | | 2 x Mini Card |
| | | - 3G/GPRS and Wi-Fi - Supports USB interface on 3G/GPRS and supports PCIe interface on Wi-Fi 1 x SIM socket (Easy-to-access) |

* All specifications and photos are subject to change without notice.

Specifications

| | | |
|--------------------|---|--|
| Watchdog Timer | 2 WDT WDT 1: one step is 1 sec, 255 levels WDT 2: one step is 250ms, 255 levels | |
| LEDs | System | Power, Alarm, Ready/Active, COM (TXD, RXD), wireless (3G/GPRS/Wi-Fi) |
| | Alarm | DC PWR1 or PWR2 is lost (default) User define event |
| Storage | Supports 1 x 2.5" SATA SSD or HDD Supports 1 x CompactFlash™ (Easy-to-access) Supports 1 x SD card up to 32 GB (optional) | |
| Installation | Din-rail, wall mount | |
| Power Supply | 2 power paths | |
| | Power Input Range | 12-48VDC |
| | Power Input Rating | 12-48VDC, 1.51-0.41A |
| Power Protection | DC Version: OVP (over voltage protection) UVP (under voltage protection) Reverse protection | |
| | Operating Temperature | -40°C ~ +70°C (-40°F ~ +158°F) |
| | Storage Temperature | -45°C ~ +85°C (-49°F ~ +185°F) |
| Humidity | 10% ~ 95% | |
| Weight (net/gross) | 1.5 kg (3.3 lb)/1.88 kg (1.14 lb) | |
| Dimensions | 100.6 mm (3.96") (W) x 110 mm (4.33") (D) x 135 mm (5.31") (H) | |
| EOS Support | XPE, WinCE, Linux support package, Windows® 7 Embedded | |
| ISO | Manufactured in an ISO9001 facility | |
| Safety | Heavy Industrial CE, including: EN60950-1, IEC60950-1 | |
| | Safety Compliance | UL60950-1, UL508 |
| EMI | FCC Part 18 Heavy Industrial CE, including: EN61000-6-4, EN61000-3-2, EN61000-3-3 | |
| | EMS Compliance | EN50121-4 (Railway application) |
| EMS | Heavy Industrial CE, including: EN61000-6-2 EN61000-4-2 (ESD standards) * Contact: +/- 6 KV; criteria B * Air: +/- 8 KV; criteria B EN61000-4-3 (radiated RFI standards) * 10V/m, 80 to 1000 MHz; 80% AM criteria A | |

Dimensions



| | |
|--------------------|---|
| | EN61000-4-4 (burst standards) * Signal ports: +/- 2 KV; criteria B * DC power ports: +/- 2 KV; criteria B |
| | EN61000-4-5 (surge standards) * Signal ports: +/- 1 KV; line-to-line; criteria B * DC power ports: +/- 0.5 KV; line-to-earth; criteria B |
| | EN61000-4-6 (induced RFI standards) * Signal ports: 10 Vrms @ 0.15 ~ 80 MHz; 80% AM criteria A * DC power ports: 10 Vrms @ 0.15 ~ 80 MHz; 80% AM criteria A |
| | EN61000-4-8 (magnetic field standards) * 30 A/m @ 50, 60 Hz; criteria A |
| Environmental Test | IEC60068-2-6 Fc (vibration resistance) 5 g @ 10 ~ 150 Hz, amplitude 0.35 mm (operation/storage/transport) IEC60068-2-27 Ea (shock) 25 g @ 11 ms (half-sine shock pulse; operation); 50 g @ 11 ms (half-sine shock pulse; storage/transport) IEC60068-2-32 Ed (free fall) 1 M (3.281ft) |

Ordering Information

| Standard | |
|---|--|
| rBOX120-2COM-FL1.1G-DC | Robust din-rail fanless embedded system with Intel® Atom™ processor Z510PT 1.1 GHz and 2 isolated COM ports (-40°C ~ +70°C) |
| rBOX120-2COM-FL1.33G-DC | Robust din-rail fanless embedded system with Intel® Atom™ processor Z520PT 1.33 GHz and 2 isolated COM ports (-40°C ~ +70°C) |
| Optional | |
| DDR2 SODIMM | 1 GB ~ 2 GB (with W.T. memory) |
| DDR2 SODIMM | 1 GB ~ 2 GB (with 0°C ~ +85°C memory; operating temperature: 0°C ~ +70°C) |
| CompactFlash™ | 2 GB or above (with W.T. CF) |
| 2.5" SATA SSD or HDD | |
| Wall mount kit | |
| Wireless (3G/GPRS or Wi-Fi) module for rBOX series | |
| *Specifications and certifications are based on options and may vary. | |

