

# rBOX101-4COM

Robust Din-rail Fanless Embedded System with Intel® Atom™ Processor Z510PT/ Z520PT up to 1.33 GHz, Intel® US15WPT Chipset and 4 Isolated COM



## Features

- Fanless operation
- Wide temperature operation of -40°C ~ +70°C
- Supports 4 isolated COM ports, 2 USB ports, VGA port
- Supports one isolated 10/100/1000Mbps & one isolated 10/100Mbps Ethernet
- SNMP V1/V2c
- Support one CompactFlash™
- Two power paths with terminal block and 12-48VDC
- Supports AXView monitoring software package



Front view



Rear view

## Introduction

rBOX101-4COM 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 rBOX101-4COM is equipped with four isolated RS-232/422/485, one isolated 10/100/1000Mbps Ethernet & one isolated 10/100Mbps Ethernet for offering magnetic isolation protection. Two power paths input minimize the risk of data loss in the event of a

single power failure. Powered by IP30 housing, wide operating temperature range and Safety/EMI/EMS compliance, rBOX101-4COM is ideal for intelligent computing and communication solutions in critical environments such as power utility, transportation and more.

The ready-to-run rBOX101-4COM equipped with AXView monitoring software is a total solution for power plant automation, facility monitoring systems, intelligent transportation systems, and more.

## Specifications

Standard Color	Sliver-Black		Power Consumption	With no load on 2 USB ports: (COM port link up)
Construction	Extruded aluminum and heavy-duty steel, IP30			1.05A @ 12V, 12.6W
CPU	Intel® Atom™ processor Z510 PT (1.1 GHz) or Z520 PT (1.33 GHz)			0.53A @ 24V, 12.72W
System Board	RM820			0.36A @ 36V, 12.96W
System Memory	1 x 200-pin DDR2 SO-DIMM max. up to 2 GB			0.28A @ 48V, 13.44W
System I/O Outlet	4 x isolated RS-232/422/485 (COM 1 - 4) 1 x isolated 10/100/1000Mbps Ethernet 1 x isolated 10/100Mbps Ethernet 2 x USB 2.0 1 x VGA 1 x DC power input with terminal block			With full load on 2 USB ports: 1.48A @ 12V, 17.76W
Watchdog Timer	255 levels, 0 ~ 255 sec.			0.74A @ 24V, 17.76W
Storage	Supports 1 x CompactFlash™			0.50A @ 36V, 18W
Installation	Din-rail			0.38A @ 48V, 18.24W
Power Supply	2 power paths	12-48VDC	Operating Temperature	-40°C ~ +70°C (-40°F ~ +158°F)
	Power Input Range	DC Version:	Storage Temperature	-45°C ~ +85°C (-49°F ~ +185°F)
	Power Protection	OVP (over voltage protection) UVP (under voltage protection) Reverse protection	Humidity	5% ~ 95%
			Weight (net/gross)	1.38 kg (3 lb)/1.72 kg (3.78 lb)
			Dimensions	81 mm (3.18") (W) x 110 mm (4.33") (D) x 135 mm (5.31") (H)
			EOS Support	XPE, WinCE, Linux, Windows® 7
			ISO	Manufactured in an ISO9001 facility
			Safety	UL508
			Compliance	UL60950-1 EN60950-1 IEC60950-1
			EMI	FCC part 15, class A
			Compliance	EN61000-6-4 * EN55022 * EN61000-3-2 * EN61000-3-3

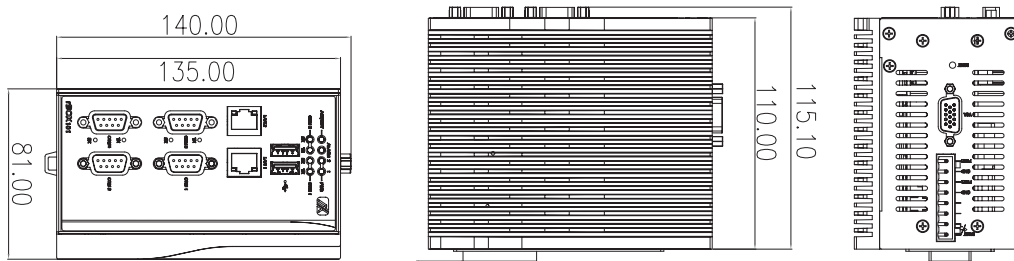
EMS Compliance	<p>EN61000-6-2                  EN61000-4-2 (ESD standards)                  * Contact: +/- 6 KV; criteria B                  * Air: +/- 8 KV; criteria B                  EN61000-4-3 (radiated RFI standards)                  * 10V/m, 80 to 1000 MHz; 80% AM criteria A                  EN61000-4-4 (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</p>
Environmental Test Compliance	<p>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)</p>

## Ordering Information

Standard	
rBOX101-4COM-FL 1.1G	Fanless embedded system with Intel® Atom™ processor Z510PT 1.1 GHz
rBOX101-4COM-FL 1.33G	Fanless embedded system with Intel® Atom™ processor Z520PT 1.33 GHz
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™	1 GB or above (with W.T. CF)

\*Specifications and certifications are based on options and may vary.

## Dimensions



Overview

Embedded Systems

Embedded Systems for Transportation

Embedded Field Controllers

Embedded MicroBoxes

Industrial Barebone Systems

Industrial Chassis

Backplanes

Power Supplies

Peripherals & Accessories