



FANLESS MINI COMPUTER

BCO-500-RK3568J

Semi-Rugged Fanless Mini Computer with Rockchip ARM Cortex-A55 RK3568J, 1x HDMI, 2x USB, 1x CAN, 2x COM, 2x LAN



Features

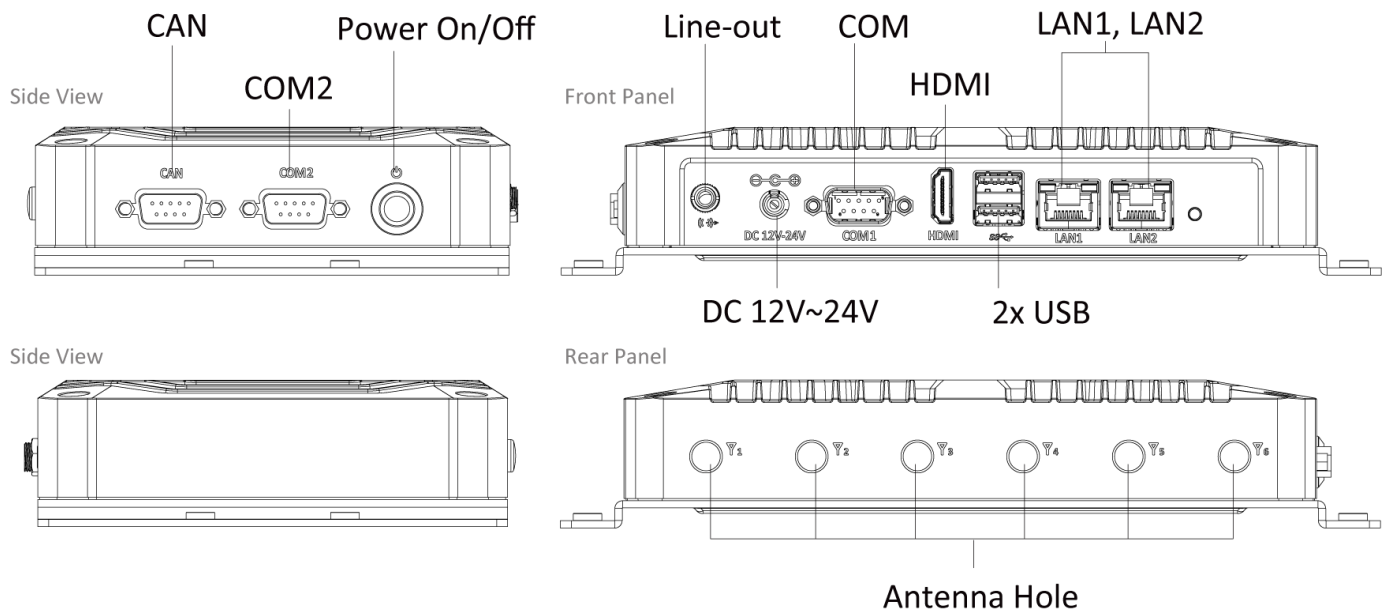
- Supports Rockchip RK3568J ARM Quad Cortex-A55, up to 2.0 GHz
- LPDDR4 2133MHz 4 GB
- 64GB of eMMC for OS
- 1x M.2 B-Key, 1x M.2 E-Key
- 2x RS-232/422/485, 2x USB 3.0 Type A, 2x LAN
- 4K Independent Display by 1x HDMI
- Wide Operating Temperature: -40°C to 70°C
- Power Input: 12 to 24VDC
- Android 13 / Debian 11 / Ubuntu 22.04
- UL 61010-1, UL 61010-2-201, CE, FCC Class A, UKCA, IC

Specifications

System	
Processor	Rockchip RK3568J ARM Quad Cortex-A55, up to 2.0 GHz
System Chipset	SoC integrated
LAN Chipset	GbE1/2: RTL8211FDI 10/100/1000 Mbps
System Memory	LPDDR4 2133MHz 4 GB
Graphics	Mali-G52 support OpenGL ES 1.1/2.0/3.2, Vulkan 1.0/1.1, OpenCL 2.0
Display	
HDMI	1 x HDMI Max. resolution 4096 x 2160 @60Hz
Storage	
eMMC	64GB
Expansion	
M.2	1x M.2 B Key (3042, USB 2.0) support 4G/LTE 1x M.2 E Key (2230, USB 2.0) for Wi-Fi/Bluetooth
I/O	
COM	2x RS-232/422/485
USB	2x USB 3.0 Type A
LAN	2x GbE RJ45 (10/100/1000 Mbps)
Audio	1x Line-out
CAN	1x CAN
DC-in Jack	1x DC IN Power Jack with Lock
Others	6x Antenna Holes 1x Power Switch with LED
Internal I/O	
USB	2x USB 2.0
Others	1x Micro SD Slot 1x SIM Nano Socket
Operating System	
Linux	Debian 11 Ubuntu 22.04
Android	Android 13 (Default)
Power	
Power Adapter	AC/DC 12V/5A, 60W
Power Mode	AT/ATX (Default ATX)
Power Supply Voltage	12~24VDC
Power Connector	DC in Power Jack
Power Protection	OVP (Over Voltage Protection) OCP (Over Current Protection) Reverse Protection
Environment	
Operating Temperature	-40°C to 70°C
Storage Temperature	-40°C to 85°C
Relative Humidity	10% to 95% (non-condensing)
Certification	UL 61010-1, UL 61010-2-201 CE, FCC Class A, UKCA, IC
Vibration	With SSD: 5 Grms (5 - 500 Hz, 0.5 hr/axis)
Shock	With SSD: 50G half-sin 11ms
Physical	
Dimensions	225mm x 130mm x 41mm
Weights	1.2 Kg
Construction	Extruded Aluminum with Heavy Duty Metal
Mounting Options	Wall Mounting Vesa Mounting Din-Rail Mounting (Optional)

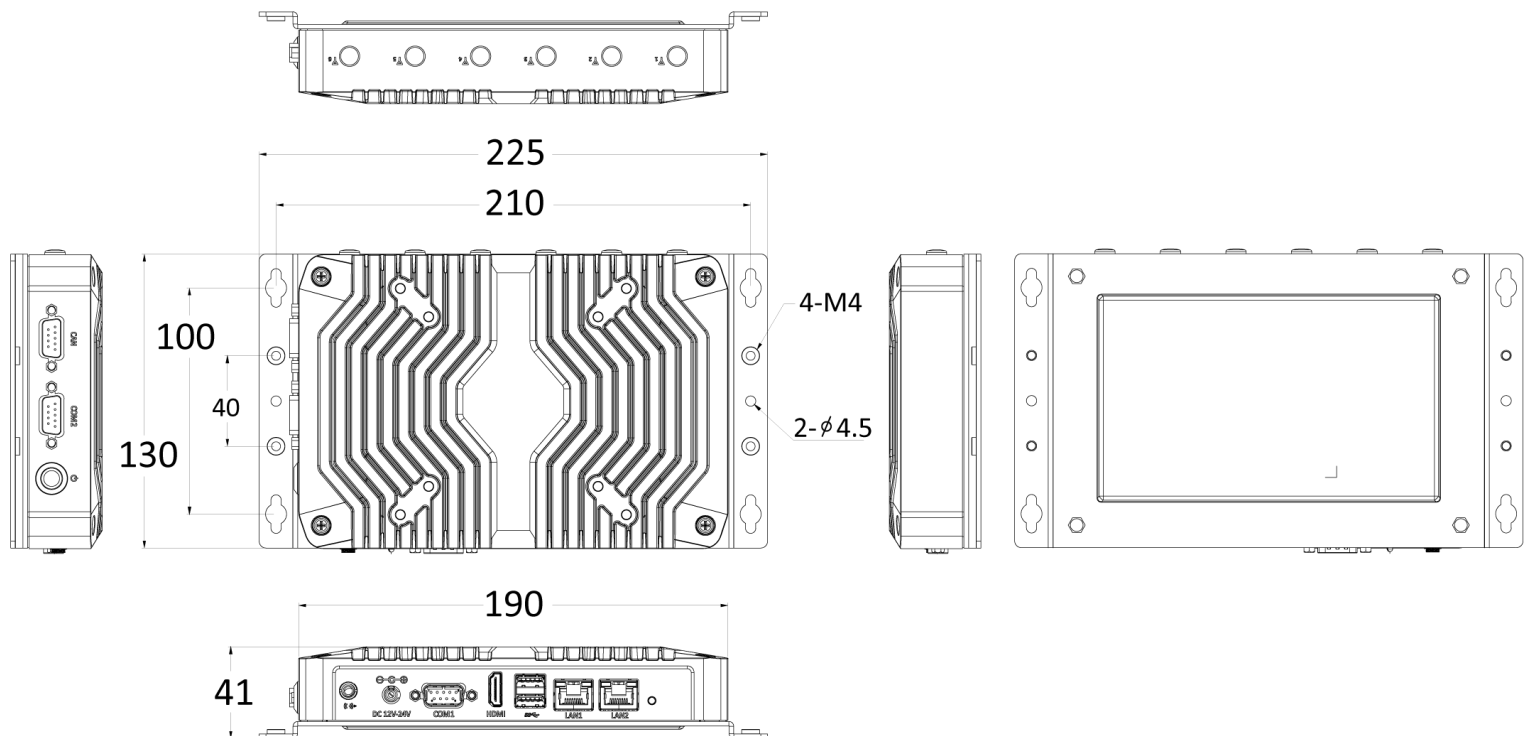
* All specifications and photos are subject to change without notice.

External I/O Mechanical Layout



Dimension

Unit: mm



Available Models

Model No.	Description
BCO-500-RK3568J	Semi-Rugged Fanless Mini Computer with RK3568J Quad-core Cortex-A55, 1x HDMI, 2x USB, 1x CAN, 2x LAN, 2x COM

Optional Accessories

Model No.	Description
1-TPCD00005	Power Cord, 3-pin US Type, 180cm
1-TPCD00002	Power Cord, European Type, 180cm
1-TPCD00001	Power Cord, 3-pin UK Type, 180cm
1-TPCD00003	Power Cord, Japan Type, 180cm
3-BC5AD110S10-S0	Din-Rail Mounting Kit

Packing List

1x BCO-500-RK3568J Series Fanless Mini Computer
1x Accessory Kit

Compliances and Standards

Shock	With SSD: 5 Grms (5 - 500 Hz, 0.5 hr/axis) IEC60068-2-27:2008 Designed to comply with MIL-STD-810G Method 516.7 Procedure I
Vibration	With SSD: 50G half-sin 11ms IEC60068-2-64:2008 Designed to comply with MIL-STD-810G Method 514.7 Procedure I
Operating Temperature	-40°C to 70°C IEC60068-2-1:2007 (Cold test procedure) IEC60068-2-2:2007 (Dry heat test procedure) IEC60068-2-3:2007 (Damp heat, steady state, test procedure) IEC60068-2-14:2009 (Wide temperature range thermal shock)
EMC	• FCC Class A (47 CFR part 15.109 and part 15.107) • CE • ICES-003 • UKCA • VCCI • RCM • Industrial EMC Compliance - EN 61000-4-2: 2009 - EN IEC 61000-4-3: 2020 - EN 61000-4-4: 2012 - EN 61000-4-5: 2014 +A1: 2017 - EN 61000-4-6: 2014
Safety	• cULus • UL 61010-1, 3rd Ed. • UL 61010-2-201, 2nd Ed. • CAN/CSA-C22.2 No. 61010-1-12, 3rd Ed. • CSA C22.2 No. 61010-2-201:18, 2nd Ed.