



Smart Battery



USB 3.0

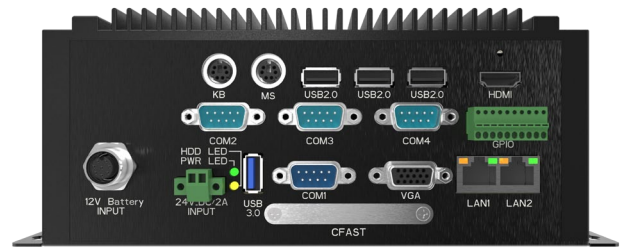


CFast

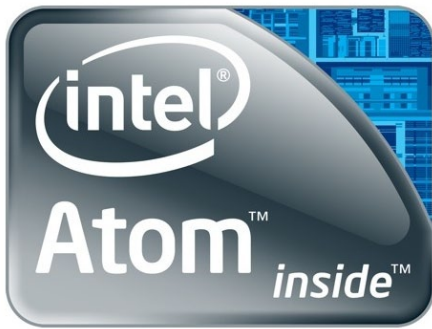
MicroBox-7824B Series

Embedded Computers

Arista Corporation's 4th generation MicroBox compact industrial computer MicroBox-7824B-E01, which is powered by Intel's Atom processors and packs more muscle in comparison to its predecessors. Its compact dimensions and minimal footprint means that it requires very little space in a control cabinet. Arista's 4th generation MicroBox cooling system has been completely revamped for optimal heat transfer out of the housing. The heat generated by the CPU and Core Chip is directed towards the housing via heat pipes to provide maximum heat dissipation. The large surface area of the fins provide extensive space to maximize heat dissipation as well.



MicroBox-7824B-E01



Powerful CPU and Low Power Consumption

The 4th generation MicroBox-7824B is extremely well suited to run applications where good performance needs to be combined with particularly compact dimensions. The MicroBox-7824B-E01 is powered by an Intel 1.91GHz Atom E3845 quad core processor, which also provides quite a bit of computing power at a very low power consumption. The unit can be populated up to 8GB of DDR-3 memory. VGA and HDMI dual display are all part of the standard package as well.

The following I/O and connection ports all come as a standard:

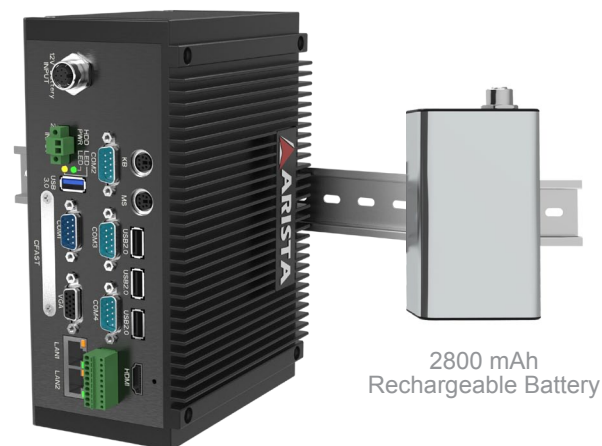
- 2 x Gigabit Ethernet
- 4 x RS-232/422/485
- 1 x USB 3.0, 3 x USB 2.0
- 8-bit GPIO

Built-in UPS Capability

An exciting new feature that has been integrated into the MicroBox-7824B-E01 is battery charging technology. With an external rechargeable lithium battery, the MicroBox-7824B-E01 can still operate when a power outage occurs. The external battery can function as a UPS and triggers the MicroBox-7824B-E01 to shut down its Windows Operating System when a power outage occurs. This exciting feature enables uninterrupted operation when power outage occurs.

Multiple Mounting Schemes

All I/O connections are located on the same side, which makes it easily accessible to the user. The MicroBox-7824B-E01 has multiple mounting schemes available; benchtop, wall mount and DIN-Rail mounting. The mounting brackets that come with the unit allows versatile installation depending on the space and layout available in a control cabinet.

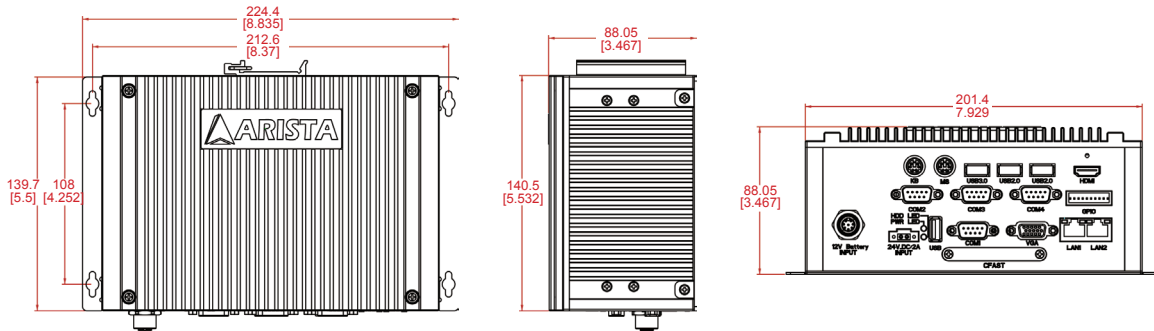


MicroBox-7824B-E01

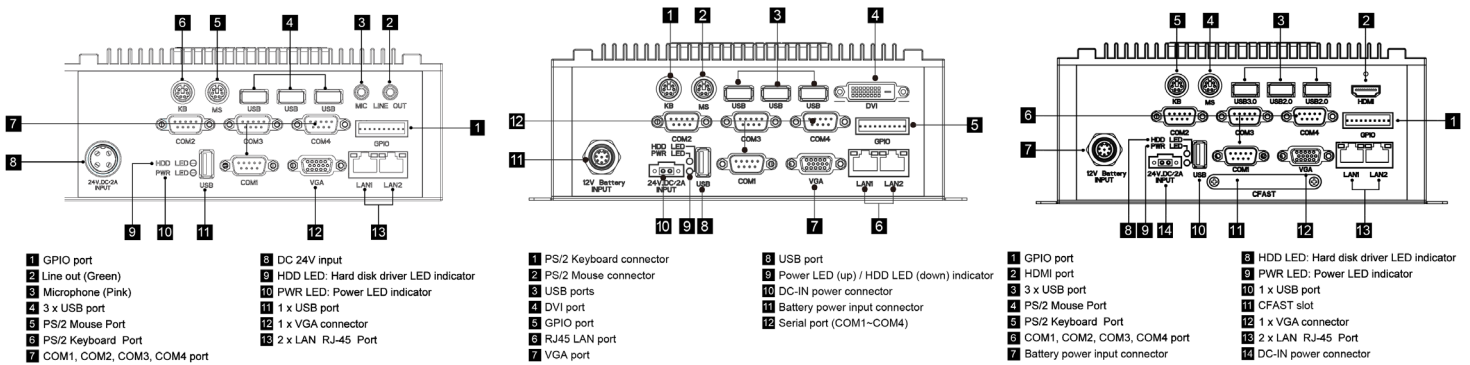
Specifications	MicroBox-7824B-B01	MicroBox-7824B-C01	MicroBox-7824B-E01
System			
CPU	Intel N270 1.6GHz ATOM CPU	Intel N2800 1.86GHz ATOM CPU	Intel E3845 1.91GHz ATOM CPU
Chipset	945GSE + ICH7M	NM10	(By CPU)
Memory	Up to 2GB DDR2 SO-DIMM	Up to 4GB DDR3 SO-DIMM	Up to 8GB DDR3 SO-DIMM
Video Controller	Intel Integrated Graphic Controller	Intel Integrated Graphic Controller	Intel Gen7 Intel Graphics DX 11, OGL3.2
Video Interface	VGA	VGA & DVI	VGA & HDMI
Storage Option	SATA DOM	SATA DOM, 2.5" HDD, 2.5" SSD	SATA DOM, 2.5" HDD, 2.5" SSD
Compact Flash	N/A	N/A	N/A
Keyboard/Mouse	USB / PS2	USB / PS2	USB / PS2
Audio	Mic In, Line Out	N/A	N/A
Watchdog Timer	YES	YES	YES
Remote Boot	PXE, ACP	PXE	PXE
Expansion Slot	Mini PCIe x 1	Mini PCIe x 1	Mini PCIe x 2
I/O Communication			
USB Port	4 x USB 2.0	4 x USB 2.0	1 x USB 3.0, 3 x USB 2.0
Serial Port	1 x RS-232/422/485, 3x RS-232	1 x RS-232/422/485, 3x RS-232	4 x RS-232/422/485
IEEE 1394	N/A	N/A	N/A
LAN	2 x Gigabit	2 x Gigabit	2 x Gigabit
Parallel	N/A	N/A	N/A
GPIO	4 x DI, 4x DO	4 x DI, 4x DO	4 x DI, 4 x DO
Smart Battery			
External Smart Battery	N/A	Optional	Optional
OS SUPPORT			
OS Support	WinXP Pro, Win7 Pro	Win7 Pro, Win Embedded 7	Win7 Pro, Win Embedded 7
Power / Thermal Specs			
Power Requirement (Max)	24VDC / 1A	24VDC / 1A	24VDC / 1A
Power Consumption (Max)	24W	24W	24W
Heat Dissipation	82 BTU / Hr	82 BTU / Hr	82 BTU / Hr
Physical Information			
Mounting	Wall Mount, DIN-Rail Mount	Wall Mount, DIN-Rail Mount	Wall Mount, DIN-Rail Mount
Net Weight	5.1 Lbs / 2.3Kg	5.1 Lbs / 2.3Kg	5.1 Lbs / 2.3Kg
Physical Dimension (WxHxD)	8.84 x 3.16 x 5.50 inch 224.4 x 139.7 x 80.2 mm	8.84 x 3.16 x 5.50 inch 224.4 x 139.7 x 80.2 mm	8.84 x 3.16 x 5.50 inch 224.4 x 139.7 x 80.2 mm
Environmental			
Operating Temperature	0~50°C (32~122°F)	0~50°C (32~122°F)	0~50°C (32~122°F)
Storage Temperature	-20~60°C (-4~140°F)	-20~60°C (-4~140°F)	-20~60°C (-4~140°F)
Relative Humidity	0~95%	0~95%	0~95%
IP/NEMA Rating	meets IP50	meets IP50	meets IP50
Certification	FCC, CE, UL 508	FCC, CE, UL 508	

Ordering Information		
	MicroBox-7824B-B01-003-DR	MicroBox-7824B-B01-P03-DR
CPU	N270 ATOM CPU	N270 ATOM CPU
Memory	1GB DDR2	1GB DDR3
Storage	N/A	N/A
Remote Boot	ACP Enabled	PXE
Power Supply	110/220VAC Input	110/220VAC Input
Operating System		
	MicroBox-7824B-C01-011-DR	MicroBox-7824B-C01-031-DR
CPU	N2800 ATOM CPU	N2800 ATOM CPU
Memory	4GB DDR3	4GB DDR3
Storage	2.5" SATA HDD	2.5" SATA SSD
Remote Boot	N/A	N/A
Power Supply	110/220VAC Input	110/220VAC Input
Operating System	Optional	Optional
	MicroBox-7824B-E01-011-DR	MicroBox-7824B-E01-031-DR
CPU	E3845 ATOM CPU	E3845 ATOM CPU
Memory	8GB DDR3	8GB DDR3
Storage	2.5" SATA HDD	2.5" SATA SSD
Remote Boot	N/A	N/A
Power Supply	110/220VAC Input	110/220VAC Input
Operating System	Optional	Optional

Dimensional Drawing



I/O Connections



MicroBox-7824B-B01

MicroBox-7824B-C01

MicroBox-7824B-E01

2800mAh Rechargeable Smart Battery (Ordering Code: BAT-01)

