



# RD-107

Rugged 1U Embedded Server / Modular PC



## Fanless Industrial PC

- Wide range of CPU - from 1.5 GHz Celeron to 2.5 GHz Intel Core™ i7
- Up to 16GB DDR3 memory, up to 960 GB SSD
- Dual 10/100/1000 LAN, 2x RS-232, 4x USB2.0 & VGA
- Fanless operation
- Wide range of pre-installed operating systems available
- Long term availability
- Customised artwork option



The RD-107™ provides the user with a 1U based building block allowing up to three RD-107s™ to be fitted into a specially designed 1U tray also providing sliding rails for ease of maintenance. Supporting a wide range of high performance Intel processors with up to a 2.5GHz Intel® Core™ i7, the RD-107™ makes an excellent solid state server with no moving parts. Performance is further enhanced by the use of high quality DDR3 SO-DIMM modules (up to 16GB capacity), solid state SATA II hard drives with two internal bays providing up to 960GB and two Intel® Ethernet ports providing Gigabit Ethernet.

LOW POWER option - if its performance and low power the RD-107™ can provide both with the use of Intel®'s™ Ultra low voltage Celeron™ technology.

3 INTO 1U - ingenious packaging allows the mounting of three RD-107™ into a single 1U shelf and still has room for sliding rails making maintenance much more efficient.



Rendering showing 3 RD-107 in the new 1U tray



Rendering showing RD-107 I/O PORTS

# Specifications

## Processor/Chipset

- Intel® Core™ i7-3555LE (2x 2.50GHz, 6MB L2, QM77 chipset) 25W
- Intel® Core™ i7-3517UE (2x 1.70GHz, 6MB L2), QM77 chipset 17W
- Intel® Core™ i3-3217UE (2x 1.60GHz, 3MB L2), QM77 chipset 17W
- Intel® Celeron® 1047UE (2x1.4GHz, 2 MB L2) HM76 chipset 17W
- Intel® Celeron® 927UE (1x 1.5GHz, 1 MB L2), HM76 chipset 17W
- Other CPU's available on request.

## DRAM

- Up to 16 GB DDR3 (1300/1600 MHz) dual channel

## Video controller

- Intel® HD Graphics 4000

## I/O Interfaces

- 14 to 28V DC input via Anti Vibration Locking DC power connector
- 2 x RS-232 Serial ports.
- 2 x 10/100/1000 Base-T Ethernet ports.
- 4 x USB ports.
- 1 x VGA port.
- 1 x PS/2 Keyboard & Mouse port.
- 2 x SATA (internal via 2.5" carrier).
- 1 x SATA Auxiliary behind front panel
- Reset switch

The following options may be fitted as a factory option

- Serial ports configured for RS-422 / RS-485 Operation.
- 2 x USB Ports on front panel.

## Front panel indicators

- Power, hard disk activity, Ethernet link/speed and activity status.
- User defined indicators (special order only)

## Storage

- Two 2.5" SATA bays - up to 960GB solid state capacity for each drive bay
- Standard hard drives available as an option.
- SATA II RAID 0/1 onboard

## Temperature

- Operation: 0° to 40°C (Core™i3/i5/i7), 0° to 50°C (Intel® Celeron®)
- Storage: -10° to 85°C

## Humidity

- Operation: 10% to 90%
- Storage: 5% to 95% (non condensing)

## Mounting

- 19" rack mount via Tray
- Bench top

## Power Supply

- 14 to 28V DC input range

## Mechanical

- Width: 140mm, Height 42mm, Depth 257 mm
- Weight: 1.5kg

## Other

- CE compliant, RoHS Compliant

## Warranty

- One year

# Ordering Information

RD-107 1U Rugged Embedded Server - Standard Configuration:

2 x RS-232 Serial ports.

2 x 10/100/1000 Base-T Ethernet ports.

4 x USB ports.

1 x VGA port.

1 x PS/2 Keyboard & Mouse port.

2 x SATA (internal via 2.5" carrier).

1 x SATA Auxiliary behind front panel

14V – 28V DC power input

RD107-		Description	
4			Intel® Core™ i7-3555LE (2x 2.5GHz)
5			Intel® Core™ i7-3517UE (2x 1.70GHz)
6			Intel® Core™ i3-3217UE (2x 1.60GHz)
7			Intel® Celeron® 927UE (1x 1.5GHz)
8			Intel® Celeron® 1020E (2x2.2GHz, 35W)
	1		1GB DDR3 memory
	2		2GB DDR3 memory
	4		4GB DDR3 memory
	8		8GB DDR3 memory (requires 64 bit OS)
	H		16GB DDR3 memory (requires 64 bit OS)
	0		Two RS-232 serial ports (standard)
	1		Two RS-422/485 serial ports
		0	4 USB2 ports via rear panel, none via front panel
		1	4 USB2 ports via rear panel, 2 USB2 ports via front panel
		0	Reset switch (standard)
		1	No reset switch
		0	No disk
		1	HD 1 32GB SATA SSD
		2	HD 1 64GB SATA SSD
		3	HD 1 128GB SATA SSD
		4	HD 1 256GB SATA SSD
		5	Standard SATA Hard Drive
		6	HD 1 512GB SATA SSD
		7	HD 1 960GB SATA SSD
		0	No disk
		1	HD 2 32GB SATA SSD
		2	HD 2 64GB SATA SSD
		3	HD 2 128GB SATA SSD
		4	HD 2 256GB SATA SSD
		5	Standard SATA Hard Drive
		6	HD 2 512GB SATA SSD
		7	HD 2 960GB SATA SSD
		0	No OS installed
		1	Microsoft Windows XP Pro For Embedded Systems (with SP3)
		3	Linux (distribution of choice)
		4	Windows 7 Professional for Embedded Systems 64 bit
		5	Windows Server 2008 R2 64bit
		6	Windows 7 Professional for Embedded Systems 32 bit
		7	Windows 8 Professional for Embedded Systems 64 bit
		8	Windows 8 Professional for Embedded Systems 32 bit

The following additional Items are available:

1U Tray house up to 3 RD-107s part no: D2595-1027

508mm slide rails part no: DZ0204-0020

610mm slide rails part no: DZ0204-0024

Universal AC power supply part no: D2598-0002

Desktop kit includes mounting feet and universal AC power supply part no: D2595-1032

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