TECHNICAL DATA SHEET

mercury

RESX07-1U18F
18" Deep, Front I/O Rugged Rack Server

Low-latency,
high-throughput
rugged rack server

- Dual Intel® 3rd generation Xeon® Scalable processors up to 32 cores
- Designed, tested and manufactured in the U.S.
- Configurable – up to 4 expansion slots
- Memory – up to 16 DIMM slots

TECHNICAL SPECIFICATIONS

Dual Intel 3rd generation Xeon Scalable processors

3 UPI links up to 11.2 GT/s

16 DIMM slots, up to 2,048 GB DDR4-3200 MHz

Intel Trusted Execution Technology (TXT) with integrated TPM 2.0

Management and Operating System

Windows, Linux OS

Contact factory for OpenBMC

IPMI 2.0 management

Expansion and Modular Maintainability

Up to 4 expansions slots:

- Slot 1: PCIe gen 4.0 single-width x16 FH, up to 6.8" length w/ FIO
- Slot 2: PCIe gen 4.0 single-width x16 FH, up to 6.8" length w/ FIO
- Slot 3: OCP 3.0 gen 4.0 x16 w/ FIO
- Slot 4: OCP 3.0 gen 4.0 x16 w/ FIO

1 NVMe M.2 slots

Power Supply Options

Single or Redundant 100/240 V VAC (47/63 Hz, 400 Hz)

Single or Redundant 10-36 VDC, 32 Amps

Single or Redundant 36-72 VDC, 18 Amps

MIL-STD 461

Environmental*

Operating

Temperature: 0°C to 50°C, configuration dependent

Humidity: 5% - 90%, non-condensing

Shock: 3 axis, 35 g, 25 ms

Vibration: 4.7 Grms vertical, 4.5 Grms longitudinal, 5 Hz to 2000 Hz

Non-Operating

Temperature: -40°C to 70°C, configuration dependent

Humidity: 5% - 90%, non-condensing

Additional Options

Shock pins

Slide rails

Cable accessories

Partnering with

intel. XEON GOLD

intel partner Titanium IoT Solutions

NVIDIA PREFERRED PARTNER

mercury

Mechanical

Height: 1U or 1.75" (44.45 mm)

Width: 17.06" (433.32 mm)

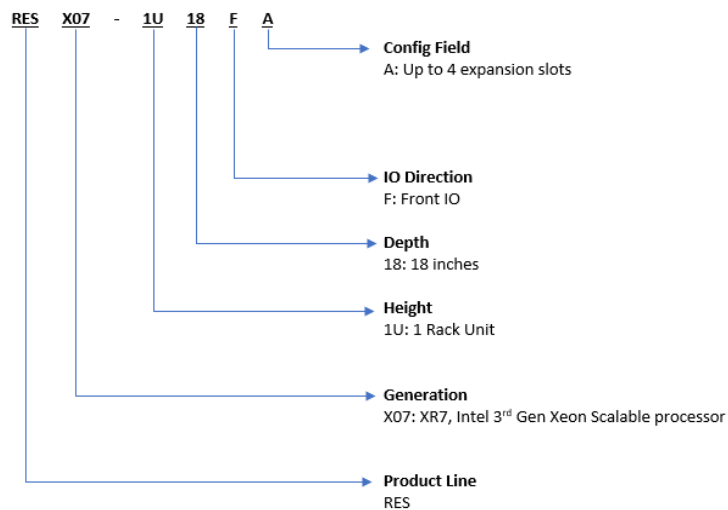Depth: 18" (457.2 mm) from front to back

Weight (Typical)*: 23 lb

19" rackmountable

* Mercury Systems designs all products to meet or exceed listed data sheet specifications. Some specifications including I/O profiles, weight and thermal profiles are configuration dependent. Contact Mercury for information specific to your desired configuration requirements.

Front View

Product Naming Chart

RES X07 - 1U 18 F A

Config Field
A: Up to 4 expansion slots

IO Direction
F: Front IO

Depth
18: 18 inches

Height
1U: 1 Rack Unit

Generation
X07: XR7, Intel 3rd Gen Xeon Scalable processor

Product Line
RES

mercury

Corporate Headquarters

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MADE IN USA

TECHNICAL DATA SHEET

mercury

RESX07-1U21R
21" Deep, Rear I/O Rugged Rack Server

Low-latency, high-throughput rugged rack server

- Dual Intel® 3rd generation Xeon® Scalable processors up to 32 cores
- Designed, tested and manufactured in the U.S.
- Configurable – up to 4 expansion slots
- Storage – up to 8, 2.5" SSDs

TECHNICAL SPECIFICATIONS

Dual Intel 3rd generation Xeon Scalable processors

3 UPI links up to 11.2 GT/s

16 DIMM slots, up to 2,048 GB DDR4-3200 MHz

Intel Trusted Execution Technology (TXT) with integrated TPM 2.0

Management and Operating System

Windows, Linux OS

Contact factory for OpenBMC

IPMI 2.0 management

Expansion and Modular Maintainability

Up to 4 expansions slots:

- Slot 1: PCIe gen 4.0 single-width x16 FH, up to 6.8" length w/ RIO
- Slot 2: PCIe gen 4.0 single-width x16 FH, up to 6.8" length w/ RIO
- Slot 3: OCP 3.0 gen 4.0 x16 w/ RIO
- Slot 4: OCP 3.0 gen 4.0 x16 w/ RIO

Up to 8, 2.5" SATA/SAS drives (U.2 option available)

1 NVMe M.2 slots

Power Supply Options

Single or Redundant 100/240 V VAC (47/63 Hz, 400 Hz)

Single or Redundant 10-36 VDC, 32 Amps

Single or Redundant 36-72 VDC, 18 Amps

MIL-STD 461

Environmental*

Operating

Temperature: 0°C to 50°C, configuration dependent

Humidity: 5% - 90%, non-condensing

Shock: 3 axis, 35 g, 25 ms

Vibration: 4.7 Grms vertical, 4.5 Grms longitudinal, 5 Hz to 2000 Hz

Non-Operating

Temperature: -40°C to 70°C, configuration dependent
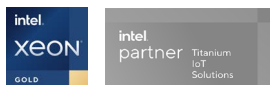
Humidity: 5% to 90%, non-condensing

Additional Options

Shock pins

Slide rails

Cable accessories

Partnering with

intel XEON GOLD

intel partner | Titanium IoT Solutions

NVIDIA | PREFERRED PARTNER

Innovation That Matters®

TECHNICAL DATA SHEET

RESX07-1U21R

mercury

Mechanical

Height: 1U or 1.75" (44.45 mm)

Width: 17.06" (433.32 mm)

Depth: 20.73" (526.5 mm) from front to back, 20" (508 mm) from ear to back

Weight (Typical)*: 23 lb

19" rackmountable

* Mercury Systems designs all products to meet or exceed listed data sheet specifications. Some specifications including I/O profiles, weight and thermal profiles are configuration dependent. Contact Mercury for information specific to your desired configuration requirements.
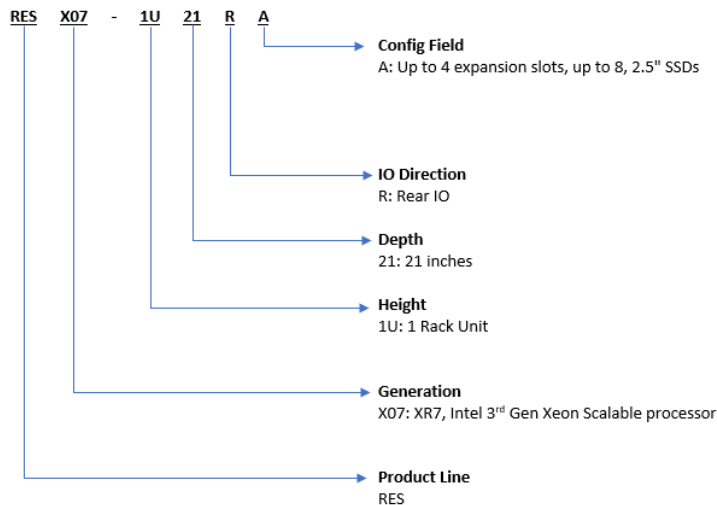

Front View

Rear View

Product Naming Chart

RES X07 - 1U 21 R A

Config Field
A: Up to 4 expansion slots, up to 8, 2.5" SSDs

IO Direction
R: Rear IO

Depth
21: 21 inches

Height
1U: 1 Rack Unit

Generation
X07: XR7, Intel 3rd Gen Xeon Scalable processor

Product Line
RES

mercury

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MADE IN USA

TECHNICAL DATA SHEET

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RESX07-1U22F
22" Deep, Front I/O Rugged Rack Server

Low-latency,
high-throughput
rugged rack server

- Dual Intel® 3rd generation Xeon® Scalable processors up to 32 cores
- Designed, tested and manufactured in the U.S.

- Configurable – up to 6 expansion slots that support 1 NVIDIA A100 GPU
- Memory – up to 20 DIMM slots

TECHNICAL SPECIFICATIONS

Dual Intel 3rd generation Xeon Scalable processors

3 UPI links up to 11.2 GT/s

20 DIMM slots, up to 2,560 GB DDR4-3200 MHz

Intel Trusted Execution Technology (TXT) with integrated TPM 2.0

Management and Operating System

Windows, Linux OS

Contact factory for OpenBMC

IPMI 2.0 management

Expansion and Modular Maintainability

Up to 6 expansions slots:

- Slot 1: PCIe gen 4.0 dual-width x16 FHFL, up to 12" w/ FIO *(only available on 1U22FA)*

- Slot 2: PCIe gen 4.0 single-width x16 FHHL, up to 7.5" w/ no IO *(not available on 1U22FB)*

- Slot 3: PCIe gen 4.0 single-width x16 FHHL, up to 7.0" w/ RIO

- Slot 4: PCIe gen 4.0 single-width x16 HHHL, up to 7.0" w/ FIO

- Slot 5: PCIe gen 4.0 single-width x8 HHHL, up to 7.5" w/ FIO

- Slot 6: OCP3.0 PCIe gen 4.0 x16 w/ FIO

Up to 2 M.2 slots

Power Supply Options

Non-redundant AC and DC power options:

- 1000 W 120 VAC
- 1300 W 240 VAC
- 1000 W 48 VDC
- 750 W 28 VDC

Environmental*

Operating

Temperature: 0°C to 50°C, configuration dependent

Humidity: 5% - 90%, non-condensing

Shock: 3 axis, 35 g, 25 ms

Vibration: 4.7 Grms vertical, 4.5 Grms longitudinal, 5 Hz to 2000 Hz

Non-Operating

Temperature: -40°C to 70°C, configuration dependent
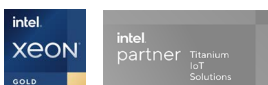
Humidity: 5% to 90%, non-condensing

Additional Options

Shock pins

Slide rails

Cable accessories

Partnering with

intel. XEON GOLD

intel partner Titanium IoT Solutions

NVIDIA PREFERRED PARTNER

Innovation That Matters®

TECHNICAL DATA SHEET

RESX07-1U22F

mercury

Mechanical

Height: 1U or 1.75" (44.45 mm)

Width: 17.36" (440.9 mm)

Depth: 22" (558.8 mm) from front to back, 21" (533.4 mm) from ear to back
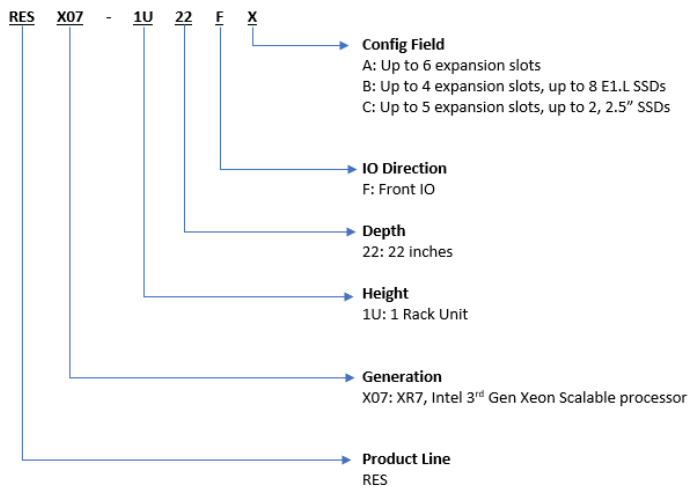
Weight (Typical)*: 27 lb

19" rackmountable

* Mercury Systems designs all products to meet or exceed listed data sheet specifications. Some specifications including I/O profiles, weight and thermal profiles are configuration dependent. Contact Mercury for information specific to your desired configuration requirements.

Front View

Product Naming Chart

RES   X07   -   1U   22   F   X

Config Field
A: Up to 6 expansion slots
B: Up to 4 expansion slots, up to 8 E1.L SSDs
C: Up to 5 expansion slots, up to 2, 2.5" SSDs

IO Direction
F: Front IO

Depth
22: 22 inches

Height
1U: 1 Rack Unit

Generation
X07: XR7, Intel 3rd Gen Xeon Scalable processor

Product Line
RES

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MADE IN USA

TECHNICAL DATA SHEET

mercury

RESX07-1U22R
22" Deep, Rear I/O Rugged Rack Server

Low-latency, high-throughput rugged rack server

- Dual Intel® 3rd generation Xeon® Scalable processors up to 32 cores
- Designed, tested and manufactured in the U.S.

- Configurable – up to 6 expansion slots that support 1 NVIDIA A100 GPU
- NVMe storage – up to 8 E1.L SSDs

TECHNICAL SPECIFICATIONS

Dual Intel 3rd generation Xeon Scalable processors

3 UPI links up to 11.2 GT/s

20 DIMM slots, up to 2,560 GB DDR4-3200 MHz

Intel Trusted Execution Technology (TXT) with integrated TPM 2.0

Management and Operating System

Windows, Linux OS

Contact factory for OpenBMC

IPMI 2.0 management

Expansion and Modular Maintainability

Up to 6 expansions slots:

- Slot 1: PCIe gen 4.0 dual-width x16 FHFL, up to 12" w/ RIO *(not available on 1U22RB)*

- Slot 2: PCIe gen 4.0 dual-width x16 FHHL, up to 7.5" w/ no IO *(only available on 1U22RA)*

- Slot 3: PCIe gen 4.0 dual-width x16 FHHL, up to 7.5" w/ FIO *(not available on 1U22RC)*

- Slot 4: PCIe gen 4.0 single-width x16 HHHL, up to 7.0" w/ RIO

- Slot 5: PCIe gen 4.0 single-width x8 HHHL, up to 7.5" w/ RIO

- Slot 6: OCP3.0 PCIe gen 4.0 x16 w/ RIO

Up to 4, 2.5" SATA/SAS drives (U.2 option available) or 8 E1.L NVMe storage drives

Up to 2 M.2 slots

Power Supply Options

Non-redundant AC and DC power options:

- 1000 W 120 VAC
- 1300 W 240 VAC
- 1000 W 48 VDC
- 750 W 28 VDC

Environmental*

Operating

Temperature: 0°C to 50°C, configuration dependent

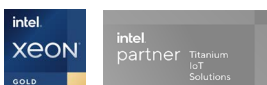Humidity: 5% - 90%, non-condensing

Shock: 3 axis, 35 g, 25 ms

Vibration: 4.7 Grms vertical, 4.5 Grms longitudinal, 5 Hz to 2000 Hz

Non-Operating

Temperature: -40°C to 70°C, configuration dependent

Humidity: 5% to 90%, non-condensing

Partnering with

intel XEON GOLD

intel partner Titanium IoT Solutions

NVIDIA PREFERRED PARTNER

Innovation That Matters®

TECHNICAL DATA SHEET

RESX07-1U22R

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Additional Options

Shock pins

Slide rails

Cable accessories

Mechanical

Height: 1U or 1.75" (44.45 mm)
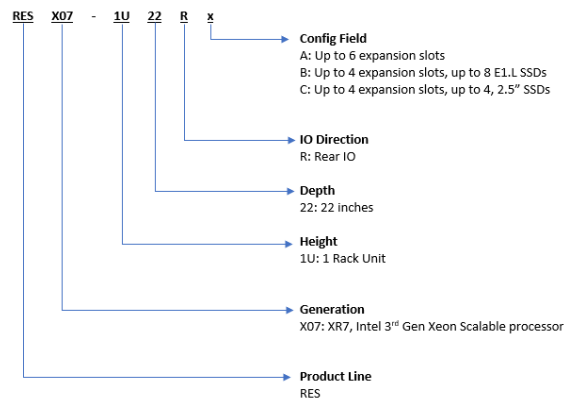
Width: 17.36" (440.9 mm)

Depth: 22" (558.8 mm) from front to back, 21" (533.4 mm) from ear to back

Weight (Typical)*: 27 lb

19" rackmountable

* Mercury Systems designs all products to meet or exceed listed data sheet specifications. Some specifications including I/O profiles, weight and thermal profiles are configuration dependent. Contact Mercury for information specific to your desired configuration requirements.

Product Naming Chart

```
RES   X07  -  1U  22  R   x
```

Config Field
A: Up to 6 expansion slots
B: Up to 4 expansion slots, up to 8 E1.L SSDs
C: Up to 4 expansion slots, up to 4, 2.5" SSDs

IO Direction
R: Rear IO

Depth
22: 22 inches

Height
1U: 1 Rack Unit

Generation
X07: XR7, Intel 3rd Gen Xeon Scalable processor

Product Line
RES

RESX07-1U22RA

Front View

Rear View

RESX07-1U22RB

Front View

Rear View

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MADE IN USA

TECHNICAL DATA SHEET

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RESX07-2U22F
22" Deep, Front I/O Rugged Rack Server

Low-latency, high-throughput rugged rack server

- Dual Intel® 3rd generation Xeon® Scalable processors up to 32 cores
- Designed, tested and manufactured in the U.S.

- Configurable – up to 6 expansion slots that support 4 NVIDIA A100 GPUs

TECHNICAL SPECIFICATIONS

Dual Intel 3rd generation Xeon Scalable processors

3 UPI links up to 11.2 GT/s

16 DIMM slots, up to 2,048 GB DDR4-3200 MHz

Intel Trusted Execution Technology (TXT) with integrated TPM 2.0

Management and Operating System

Windows, Linux OS

Contact factory for OpenBMC

IPMI 2.0 management

Expansion and Modular Maintainability

Up to 6 expansions slots:

- Slot 1: PCIe gen 4.0 dual-width x16 FHFL, up to 12" w/ FIO
- Slot 2: PCIe gen 4.0 dual-width x16 FHFL, up to 12" w/ FIO
- Slot 3: PCIe gen 4.0 dual-width x16 FHFL, up to 12" w/ FIO
- Slot 4: PCIe gen 4.0 dual-width x16 FHFL, up to 12" w/ FIO
- Slot 5: PCIe gen 4.0 single-width x8 HHHL, up to 7.5" w/ FIO
- Slot 6: OCP3.0 PCIe gen 4.0 x16 w/ FIO

Up to 2 M.2 slots

Power Supply Options

Dual-redundant (1+1) AC and DC power options:

- 1600 W 48 VDC per PSU
- 800 W 28 VDC per PSU
- 1600 W 120 VAC per PSU
- 240 VAC per PSU
- MIL-461 options: 2x MIL-STD 750 W 120 VAC, 28 VDC 500 W

Environmental*

Operating

Temperature: 0°C to 50°C, configuration dependent

Humidity: 5% - 90%, non-condensing
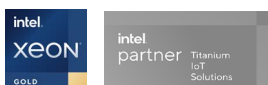
Shock: 3 axis, 35 g, 25 ms

Vibration: 4.7 Grms vertical, 4.5 Grms longitudinal, 5 Hz to 2000 Hz

Non-Operating

Temperature: -40°C to 70°C, configuration dependent

Humidity: 5% to 90%, non-condensing

Partnering with

intel XEON GOLD

intel partner Titanium IoT Solutions

NVIDIA PREFERRED PARTNER

TECHNICAL DATA SHEET

RESX07-2U22F

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Additional Options

Shock pins

Slide rails

Cable accessories

Mechanical

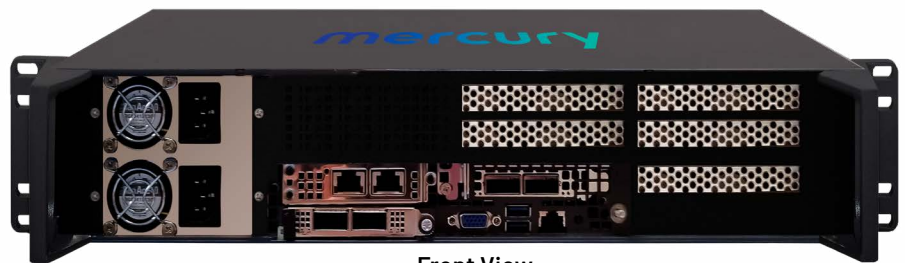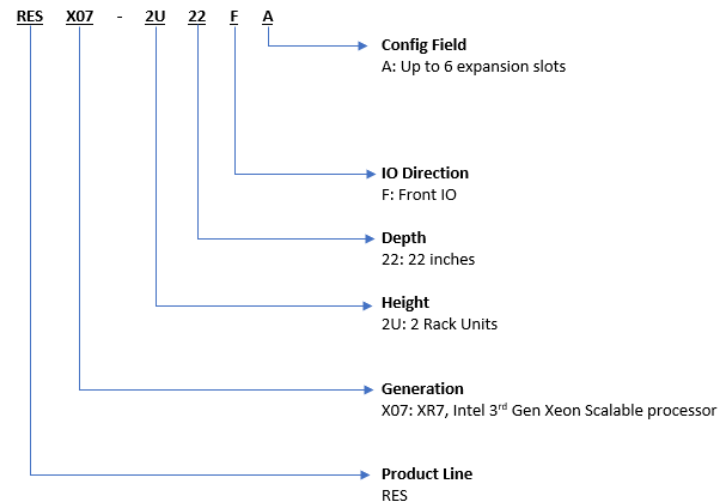Height: 2U or 3.5" (88.9 mm)

Width: 17.36" (440.9 mm)

Depth: 22" (558.8 mm) from front to back, 21" (533.4 mm) from ear to back

Weight (Typical)*: 37 lb

19" rackmountable

* Mercury Systems designs all products to meet or exceed listed data sheet specifications. Some specifications including I/O profiles, weight and thermal profiles are configuration dependent. Contact Mercury for information specific to your desired configuration requirements.

Product Naming Chart

RES X07 - 2U 22 F A

Config Field
A: Up to 6 expansion slots

IO Direction
F: Front IO

Depth
22: 22 inches

Height
2U: 2 Rack Units

Generation
X07: XR7, Intel 3rd Gen Xeon Scalable processor

Product Line
RES

Front View

mercury

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MADE IN USA

TECHNICAL DATA SHEET

mercury

RESX07-2U22R
22" Deep, Rear I/O Rugged Rack Server

Low-latency, high-throughput rugged rack server

- Dual Intel® 3rd generation Xeon® Scalable processors up to 32 cores
- Designed, tested and manufactured in the U.S.

- Configurable - up to 6 expansion slots that support 4 NVIDIA A100 GPUs
- NVMe storage - up to 16 E1.L SSDs

TECHNICAL SPECIFICATIONS

Dual Intel 3rd generation Xeon Scalable processors

3 UPI links up to 11.2 GT/s

20 DIMM slots, up to 2,560 GB DDR4-3200 MHz

Intel Trusted Execution Technology (TXT) with integrated TPM 2.0

Management and Operating System

Windows, Linux OS

Contact factory for OpenBMC

IPMI 2.0 management

Expansion and Modular Maintainability

Up to 6 expansions slots:

- Slot 1: PCIe gen 4.0 dual-width x16 FHFL, up to 12" w/ RIO

- Slot 2: PCIe gen 4.0 dual-width x16 FHFL, up to 12" w/ RIO

- Slot 3: PCIe gen 4.0 dual-width x16 FHFL, up to 12" w/ RIO

- Slot 4: PCIe gen 4.0 dual-width x16 FHFL, up to 12" w/ RIO

- Slot 5: PCIe gen 4.0 single-width x8 HHHL, up to 7.5" w/ RIO

- Slot 6: OCP3.0 PCIe gen 4.0 x16 w/ RIO

Up to 8, 2.5" SATA/SAS drives (U.2 option available) or 16 E1.L NVMe storage drives

Up to 2 M.2 slots

Power Supply Options

Dual-redundant (1+1) AC and DC power options:

- 1600 W 48 VDC per PSU

- 800 W 28 VDC per PSU

- 1600 W 120 VAC per PSU

- 240 VAC per PSU

- MIL-461 options: 2x MIL-STD 750 W 120 VAC, 28 VDC 500 W

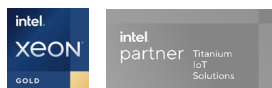### Environmental*

Operating

Temperature: 0°C to 50°C, configuration dependent

Humidity: 5% - 90%, non-condensing

Shock: 3 axis, 35 g, 25 ms

Vibration: 4.7 Grms vertical, 4.5 Grms longitudinal, 5 Hz to 2000 Hz

Partnering with

intel XEON GOLD

intel partner Titanium IoT Solutions

NVIDIA PREFERRED PARTNER

TECHNICAL DATA SHEET

RESX07-2U22R

mercury

Non-Operating

Temperature: -40°C to 70°C, configuration dependent

Humidity: 5% to 90%, non-condensing

Additional Options

Shock pins

Slide rails

Cable accessories

Mechanical

Height: 2U or 3.5" (88.9 mm)
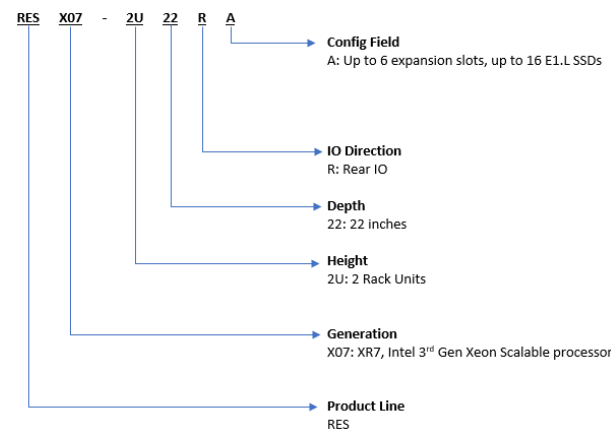
Width: 17.36" (440.9 mm)

Depth: 22" (558.8 mm) from front to back, 21" (533.4 mm) from ear to back

Weight (Typical)*: 37 lb

19" rackmountable

* Mercury Systems designs all products to meet or exceed listed data sheet specifications. Some specifications including I/O profiles, weight and thermal profiles are configuration dependent. Contact Mercury for information specific to your desired configuration requirements.

Product Naming Chart

RES X07 - 2U 22 R A

Config Field
A: Up to 6 expansion slots, up to 16 E1.L SSDs

IO Direction
R: Rear IO

Depth
22: 22 inches

Height
2U: 2 Rack Units

Generation
X07: XR7, Intel 3rd Gen Xeon Scalable processor

Product Line
RES

Front View

Rear View

mercury

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www.techway.com

MADE IN USA

mercury

RESX07-3U22F
22" Deep, Front I/O Rugged Rack Server

Low-latency, high-throughput rugged rack server

- Dual Intel® 3rd generation Xeon® Scalable processors up to 32 cores
- Designed, tested and manufactured in the U.S.

- Configurable - up to 7 expansion slots that support 4 NVIDIA A100 GPUs
- Storage - up to 3, 2.5" SSDs

TECHNICAL SPECIFICATIONS

Dual Intel 3rd generation Xeon Scalable processors

3 UPI links up to 11.2 GT/s

16 DIMM slots, up to 2,048 GB DDR4-3200 MHz

Intel Trusted Execution Technology (TXT) with integrated TPM 2.0

Management and Operating System

Windows, Linux OS

Contact factory for OpenBMC

IPMI 2.0 management

Expansion and Modular Maintainability

Up to 7 expansions slots:

- Slot 1: PCIe gen 4.0 dual-width x16 FHFL, up to 12" w/ FIO
- Slot 2: PCIe gen 4.0 dual-width x16 FHFL, up to 12" w/ FIO
- Slot 3: PCIe gen 4.0 dual-width x16 FHFL, up to 12" w/ FIO
- Slot 4: PCIe gen 4.0 dual-width x16 FHFL, up to 12" w/ FIO
- Slot 5: PCIe gen 4.0 single-width x16 FHHL, up to 7.5" w/ FIO
- Slot 6: PCIe gen 4.0 single-width x16 FHHL, up to 7.5" w/ FIO

- Slot 7: PCIe gen 4.0 single-width x8 FHHL, up to 7.5" w/ FIO

Up to 3, 2.5" SATA/SAS drives (U.2 option available)

Up to 2 NVMe M.2 slots

Power Supply Options

Triple-redundant (2+1) AC and DC options:

- 1600 W 48 VDC per PSU
- 800 W 28 VDC per PSU
- 1600 W 120 VAC per PSU
- 240 VAC per PSU
- MIL-461 options: 3x MIL-STD 750 W 120 VAC, 28 VDC 500 W
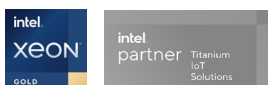
Environmental*

Operating

Temperature: 0°C to 50°C, configuration dependent

Humidity: 5% - 90%, non-condensing

Shock: 3 axis, 35 g, 25 ms

Vibration: 4.7 Grms vertical, 4.5 Grms longitudinal, 5 Hz to 2000 Hz

Partnering with

TECHNICAL DATA SHEET

RESX07-3U22F

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Non-Operating

Temperature: -40°C to 70°C, configuration dependent

Humidity: 5% to 90%, non-condensing

Additional Options

Shock pins

Slide rails

Cable accessories

Mechanical

Height: 3U or 5.25" (133.35 mm)
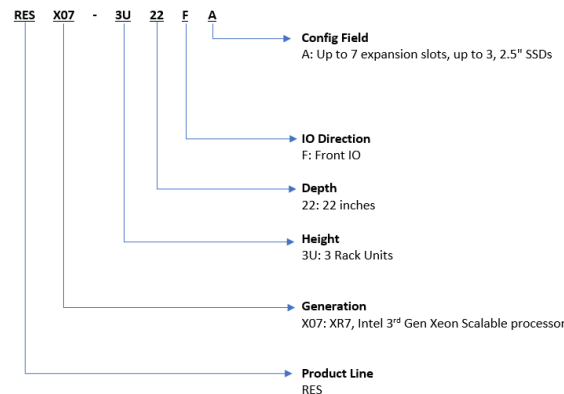
Width: 17" (431.8 mm)

Depth: 22" (558.8 mm) from front to back, 21" (533.4 mm) from ear to back

Weight (Typical)*: 35 lb

19" rackmountable

* Mercury Systems designs all products to meet or exceed listed data sheet specifications. Some specifications including I/O profiles, weight and thermal profiles are configuration dependent. Contact Mercury for information specific to your desired configuration requirements.

Product Naming Chart

RES X07 - 3U 22 F A

- **Config Field**
  A: Up to 7 expansion slots, up to 3, 2.5" SSDs
- **IO Direction**
  F: Front IO
- **Depth**
  22: 22 inches
- **Height**
  3U: 3 Rack Units
- **Generation**
  X07: XR7, Intel 3rd Gen Xeon Scalable processor
- **Product Line**
  RES

Front View

mercury

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MADE IN USA

TECHNICAL DATA SHEET

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RESX07-3U22R
22" Deep, Rear I/O Rugged Rack Server

Low-latency, high-throughput rugged rack server

- Dual Intel® 3rd generation Xeon® Scalable processors up to 32 cores
- Designed, tested and manufactured in the U.S.

- Configurable - up to 7 expansion slots that support 4 NVIDIA A100 GPUs
- Storage - up to 16, 2.5" SSDs

TECHNICAL SPECIFICATIONS

Dual Intel 3rd generation Xeon Scalable processors

3 UPI links up to 11.2 GT/s

20 DIMM slots, up to 2,560 GB DDR4-3200 MHz

Intel Trusted Execution Technology (TXT) with integrated TPM 2.0

Management and Operating System

Windows, Linux OS

Contact factory for OpenBMC

IPMI 2.0 management

Expansion and Modular Maintainability

Up to 7 expansions slots:

- Slot 1: PCIe gen 4.0 dual-width x16 FHFL, up to 12" w/ RIO
- Slot 2: PCIe gen 4.0 dual-width x16 FHFL, up to 12" w/ RIO
- Slot 3: PCIe gen 4.0 dual-width x16 FHFL, up to 12" w/ RIO
- Slot 4: PCIe gen 4.0 dual-width x16 FHFL, up to 12" w/ RIO
- Slot 5: PCIe gen 4.0 single-width x16 FHHL, up to 7.5" w/ RIO
- Slot 6: PCIe gen 4.0 single-width x16 FHHL, up to 7.5" w/ RIO

- Slot 7: PCIE gen 4.0 single-width x8 FHHL, up to 7.5" w/ RIO

Up to 16, 2.5" SATA/SAS drives (U.2 option available)

Up to 2 NVMe M.2 slots

Power Supply Options

Triple-redundant (2+1) AC and DC options:

- 1600 W 48 VDC per PSU
- 800 W 28 VDC per PSU
- 1600 W 120 VAC per PSU
- 240 VAC per PSU
- MIL-461 options: 3x MIL-STD 750 W 120 VAC, 28 VDC 500 W
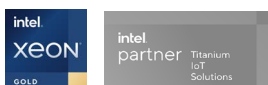
Environmental*

Operating

Temperature: 0°C to 50°C, configuration dependent

Humidity: 5% - 90%, non-condensing

Shock: 3 axis, 35 g, 25 ms

Vibration: 4.7 Grms vertical, 4.5 Grms longitudinal, 5 Hz to 2000 Hz

Partnering with

intel XEON GOLD

intel partner Titanium IoT Solutions

NVIDIA PREFERRED PARTNER

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TECHNICAL DATA SHEET

RESX07-3U22R

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Non-Operating

Temperature: -40°C to 70°C, configuration dependent

Humidity: 5% to 90%, non-condensing

Additional Options

Shock pins

Slide rails

Cable accessories

Mechanical

Height: 3U or 5.25" (133.35 mm)
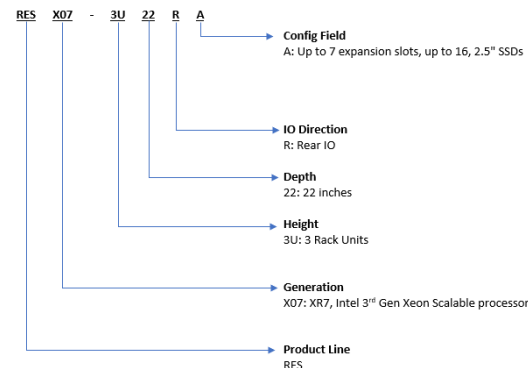
Width: 17.36" (440.9 mm)

Depth: 22" (558.8 mm) from front to back, 21" (533.4 mm) from ear to back

Weight (Typical)*: 35 lb

19" rackmountable

* Mercury Systems designs all products to meet or exceed listed data sheet specifications. Some specifications including I/O profiles, weight and thermal profiles are configuration dependent. Contact Mercury for information specific to your desired configuration requirements.

Product Naming Chart

RES X07 - 3U 22 R A

Config Field
A: Up to 7 expansion slots, up to 16, 2.5" SSDs

IO Direction
R: Rear IO

Depth
22: 22 inches

Height
3U: 3 Rack Units

Generation
X07: XR7, Intel 3rd Gen Xeon Scalable processor

Product Line
RES

Front View

Rear View

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MADE IN USA

TECHNICAL DATA SHEET

mercury

RESX07-4U21F
21" Deep, Front I/O Rugged Rack Server

Low-latency, high-throughput rugged rack server

- Dual Intel® 3rd generation Xeon® Scalable processors up to 32 cores
- Designed, tested and manufactured in the U.S.

- Configurable - up to 13 expansion slots that support 10 NVIDIA A100 GPUs
- NVMe storage - up to 16 E1.L SSDs

TECHNICAL SPECIFICATIONS

Dual Intel 3rd generation Xeon Scalable processors

3 UPI links up to 11.2 GT/s

32 DIMM slots, up to 4,096 GB DDR4-3200 MHz

Intel Trusted Execution Technology (TXT) with integrated TPM 2.0

Management and Operating System

Windows, Linux OS

Contact factory for OpenBMC

IPMI 2.0 management

Expansion and Modular Maintainability

Up to 13 expansions slots:

- Slot 1: PCIe gen 4.0 dual-width x16 FHFL, up to 12" w/ FIO
- Slot 2: PCIe gen 4.0 dual-width x16 FHFL, up to 12" w/ FIO
- Slot 3: PCIe gen 4.0 dual-width x16 FHFL, up to 12" w/ FIO
- Slot 4: PCIe gen 4.0 dual-width x16 FHFL, up to 12" w/ FIO
- Slot 5: PCIe gen 4.0 dual-width x16 FHFL, up to 12" w/ FIO
- Slot 6: PCIe gen 4.0 single-width x16 FHFL, up to 12" w/ FIO

- Slot 7: PCIE gen 4.0 single-width x16 FHFL, up to 12" w/ FIO
- Slot 8: PCIe gen 4.0 dual-width x16 FHFL, up to 12" w/ FIO
- Slot 9: PCIe gen 4.0 dual-width x16 FHFL, up to 12" w/ FIO
- Slot 10: PCIe gen 4.0 dual-width x16 FHFL, up to 12" w/ FIO
- Slot 11: PCIe gen 4.0 dual-width x16 FHFL, up to 12" w/ FIO
- Slot 12: PCIe gen 4.0 single-width x16 FHFL, up to 12" w/ FIO
- Slot 13: OCP 3.0 PCIe gen 4.0 x16 w/ FIO

Up to 8, 2.5" SATA/SAS drives (U.2 option available) or 16 E1.L NVMe storage drives
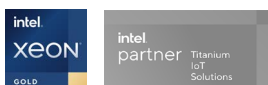
Up to 2 NVMe M.2 slots

Power Supply Options

Dual-redundant (2+2) AC power option:

2000 W per PSU 120V AC/240 VAC, 4000 W total with redundancy

Partnering with

Innovation That Matters®

TECHNICAL DATA SHEET

RESX07-4U21F

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Environmental*

Operating

Temperature: 0°C to 50°C, configuration dependent

Humidity: 5% - 90%, non-condensing

Shock: 3 axis, 35 g, 25 ms

Vibration: 4.7 Grms vertical, 4.5 Grms longitudinal, 5 Hz to 2000 Hz

Non-Operating

Temperature: –40°C to 70°C, configuration dependent

Humidity: 5% to 90%, non-condensing

Additional Options

Shock pins

Slide rails

Cable accessories

Mechanical

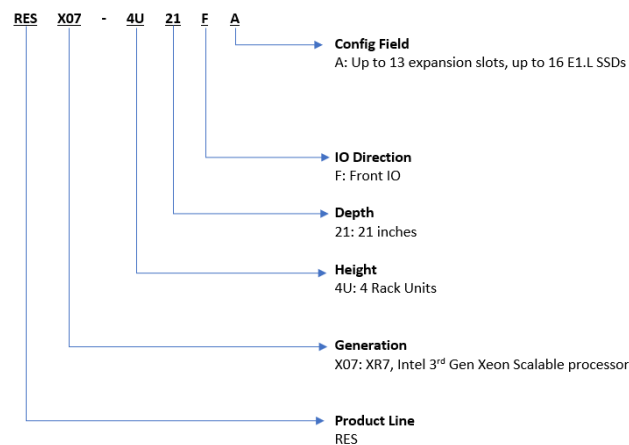Height: 4U or 7" (177.8 mm)

Width: 17.26" (438.4 mm)

Depth: 20.73" (526.5 mm) from front to back, 20" (508 mm) from ear to back

Weight (Typical)*: 48 lb

19" rackmountable

* Mercury Systems designs all products to meet or exceed listed data sheet specifications. Some specifications including I/O profiles, weight and thermal profiles are configuration dependent. Contact Mercury for information specific to your desired configuration requirements.

Product Naming Chart

RES X07 - 4U 21 F A

Config Field
A: Up to 13 expansion slots, up to 16 E1.L SSDs

IO Direction
F: Front IO

Depth
21: 21 inches

Height
4U: 4 Rack Units

Generation
X07: XR7, Intel 3rd Gen Xeon Scalable processor

Product Line
RES

Front View

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