# **Specification**

Environmental Characteristics	Operating	Non-operating
Temperature	+15 to +30 °C	-10 to +50 °C
Humidity (non-condensing)	10 to 90%	5 to 95%
Altitude	<2000 m	<10000 m

Product	Electrical Rating	Weight (kg)	Dimensions (H $\times$ W $\times$ D)
NanoR	100-240 V, 3 A, 50-60 Hz	4.5	1U × 483 mm × 241 mm
NanoSDI	100-240 V, 4.5 A, 50-60 Hz	6	1U × 483 mm × 321 mm
Proton	100-240 V, 7 A, 50-60 Hz	18	2U × 483 mm × 545 mm
Nucleus	100-240 V, 10 A, 50-60 Hz	15	3U × 483 mm × 497 mm
Infinity	100-240 V, 10 A, 50-60 Hz	21	3U × 483 mm × 603 mm

## **End of Service Life**

Dispose of the equipment and any components in accordance with all local and national safety and environmental requirements. Caution: risk of explosion or leakage of flammable liquids or gas. Any batteries should not be subject to extremely low pressure, extremely hot environments, disposed of in fire or mechanically crushed or cut.

# **Regulatory Compliance Statements**

## **FCC**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with this user guide, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

# **European Union**

This is a Class A product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

**7thSense Design Ltd**: 2 The Courtyard, Shoreham Road, Upper Beeding, BN44 3TN, UK www.7thsense.one

# Copyright © 7thSense Design Ltd : M282-8 March 2023

# **Delta Media Server**, Hardware User Guide For NanoR, NanoSDI, Proton, Nucleus, Infinity



# Customer Support Portal: https://portal.7thsense.one

## Support

If your Delta Media Server was purchased through one of our regional distributors, please contact your supplier directly for support.

Visit our customer support portal where you can find a wide range of support documentation and video tutorials, together with contact information.

## Warranty

Standard warranty is 24 months, return-to-supplier. Please contact your supplier if you require an extended warranty. Please ask for instructions and request authorisation before returning a server to your supplier.

# **Operating Instructions**

Operating instructions for your server can be found in the Online User Guides section of the customer support portal.

# Handling and Installation

# Unpacking

Unpack your server carefully onto a clean and level surface and examine it for any signs of transit damage. Contact your supplier immediately if anything appears to be damaged, or any parts missing. Please retain all packaging in case of future need to return a server.

# Lifting

Delta Media Server weight depends on model, the weight is stated below and on the server's product label. Larger servers may require a two-person lift, especially when manoeuvring them into a rack. Observe your internal manual handling recommendations to avoid injury.

# Rack mounting and stability

Delta 2U and 3U servers are supplied with rack mount slide rails and fixings, installation instructions are included with the slide rails.

Delta 1U servers should be installed in a rack using a minimum of an M6 rack mount bolt in each of the top and bottom mounting holes on each side of the server's front panel.

Ensure that each server is properly secured to the rack cabinet and that the cabinet is stable.

- Ensure the rack is stable (e.g. bolted to the floor) before sliding out the server.
- Do not place objects on equipment projecting from a rack (e.g. do not use as a shelf).
- Only slide out one piece of equipment from the rack at a time.

## **Connecting External Equipment**

To ensure best performance from the server and compliance with relevant EMC regulations, this equipment should only be used with high-quality shielded data and signal cables.

Only equipment and accessories approved to IEC 60950-1 and SELV circuits may be connected to the server. All equipment and accessories shall comply to the relevant standard for the server's port to which it is connected.

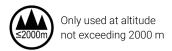
#### **Environment**

#### General

Delta Media Servers are intended for use in a commercial (not domestic) environment and should be operated in a clean, dust free area (e.g. a server room).

The server is intended for operation in benign environments; that is, not subject to corrosive or explosive atmospheres, moisture or flammable gases. The server is non-protected against ingress of liquid (IPx0). The server is not designed to be subject to excessive mechanical shock or vibration.

This equipment is not suitable for use in locations where children are likely to be present.





Only used in not-tropical climate regions

## **Thermal**

Do not block any of the server's air vents and ensure the ambient temperature around the server is compatible with the environmental characteristics stated below.

Particularly when mounted in a rack cabinet with front or rear doors the ambient temperature around the server may be higher than the ambient room temperature.

#### **Electrical**

Before connecting power to the server, ensure the electricity supply is compatible with the electrical ratings shown here and on the server product label. The server shall not be connected to an IT (unearthed neutral) power distribution system and the mains socket-outlet used shall connect to the building installation ground.

The server is connected to and disconnected from the mains supply with the IEC 60320 power connector on the rear of the unit.

## Maintenance

#### Air Filter

A user-serviceable air filter is located on the server's front panel. It is important to remove and clean or replace the filter periodically to avoid overheating.

Delta Media Servers are supplied with one spare filter pad, others can be provided by your supplier. Servers should not be run without filters, since accumulations of dust inside the server can affect performance.

# Cleaning

External casing and the front panel should be carefully wiped with a soft cloth and antistatic solution.

#### Server internal maintenance

Internal maintenance must only be undertaken by suitable qualified service personnel.



**Warning**: Do not operate the server with any covers removed as the air flow through the unit may be compromised leading to overheating. The lid of the NanoR forms an integral part of the CPU's cooling circuit. Operation of the NanoR with the lid removed will cause the CPU to overheat.



**Warning**: Motherboard CMOS battery replacement: Danger of explosion if incorrect battery used or battery incorrectly installed. Contact your supplier for further instructions.

Any alterations to the product's specification, including additional/alternative components, BIOS changes, overclocking, etc., may invalidate the warranty or impact the server's performance. Additionally, such changes or modifications could cause equipment no longer to comply with the relevant EMC regulations, and void the user's authority to operate the equipment. If in doubt, please contact your supplier.

## Electrostatic discharge (ESD)

When handling electronic assemblies, take precautions to avoid electrostatic discharge (ESD) causing damage. Precautions should include the wearing of an ESD protective wrist strap and using antistatic bags for electronic assemblies when not installed in a server.

## **PSU** removal

Delta Media Servers (3U models only) are fitted with a removable power supply unit (PSU). This can be replaced as follows:

- **To remove**: Power down the server. Remove the IEC 60320 power connector from the server's PSU. Press the PSU's release tab and pull the handle to slide the power supply out of the server.
- **To replace**: Slide the replacement power supply into the server until it is fully clicks home. Refit the IEC 60320 power connector and power on the server.



**Warning**: The IEC 60320 power connector should never be inserted into the PSU when the PSU is not fitted in a server.