

## Specification

Environmental Characteristics	When operating (powered)	When non-operating (not powered)
Temperature	+15 to +30 °C	-10 to +50 °C
Humidity (non-condensing)	10 to 90%	5 to 95%
Altitude	≤ 2000 m	≤ 10000 m

Specification	Rating/Description	Notes
Rackmount Dims (H × W × D)	(1U) 44 × 424 × 500 mm	Width incl. mounting ears: 483 mm
Rackmount weight (approx.)	7.2 kg	
Power Supply	100-240 V, 1.5 A, 60-50 Hz	Autoranging, IEC 60320 inlet
Power	100 W	
Cooling	Forced air	Inlets at front, exhaust at side & rear
BTU Rate	341	

## 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.

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 their 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.

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# Juggler Pixel Processor

## User Guide: Safety and Handling



Customer Support Portal : <https://portal.7thsense.one>

### Support

For any support issues with Juggler Pixel Processor units, please contact 7thSense directly.

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 one year, return-to-supplier. Please contact 7thSense if you require an extended warranty.

Please ask for instructions and request authorisation before returning a unit for repair.

### Operating Instructions

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

## Handling and Installation

### Unpacking

Unpack your Juggler carefully onto a clean and level surface and examine it for any signs of transit damage. Contact 7thSense immediately if anything appears to be damaged, or any parts missing. Please retain all packaging in case of future need to return a Juggler.

### Lifting

The weight of the Juggler unit is stated below and on the product label. Observe your internal manual handling recommendations to avoid injury, especially when manoeuvring into a rack.

### Rack mounting

Juggler units must be installed in a rack with load-bearing support along the sides, or on a shelf. The front panel should be secured using an M6 rack mount bolt in each of the top and bottom mounting holes on each side of the unit's front panel. These ears alone will not support the weight of the unit.

Mount Jugglers with a minimum one-third rack-unit spacing.

### Rack stability warnings:

- Ensure the rack is stable (e.g. bolted to the floor) before sliding out the Juggler unit.
- 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.

## Airflow and cooling

Airflow intake is through the filtered vents in the front panel, and exhaust is out through the rear panel and the rear right-hand side. These vents must all have a clearance of at least 50 mm.

## Switching on

Juggler must first be connected to an appropriate power source using the supplied IEC power cord. The front panel power button will show a dim blue ring indicating this connection. Press and release the power button to start the unit. The power button will show a bright blue ring and the display panel will go through a start-up cycle before settling to status information and the Juggler logo.

## Reset

Should you need to reset the internal FPGA board only, the power button can be pressed and held for 3 seconds then released when the blue light dims. The blue light will flash for 2 seconds before returning to normal status.

## Connecting External Equipment

To ensure best performance from the Juggler 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 unit. All equipment and accessories shall comply to the relevant standard for the port or ports to which it is connected.

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## Environment

### General

Juggler is intended for use in a commercial (not domestic) environment and should be operated in a clean, dust free area (e.g. a server room). It is intended for operation in benign environments (not subject to corrosive or explosive atmospheres, moisture or flammable gases). Units are not protected against ingress of liquid (IPx0) or designed to be subject to excessive mechanical shock or vibration.



Only used at altitude not exceeding 2000 m



Only used in not-tropical climate regions

### Thermal

Do not block any of the unit's air vents and ensure the ambient temperature around the Juggler is compatible with the environmental characteristics stated in this document.

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

## Electrical

Before connecting power to the unit, ensure the electricity supply is compatible with the electrical ratings shown in this document and on the unit's product label. The unit 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.

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

The Juggler is protected by twin (live and neutral) fuses in the IEC mains connector block. These are the only user-serviceable part of the Juggler. If either malfunctions, both must only be replaced by a qualified person using only F 2A H 250V, 5 × 20 mm ceramic cartridge fuses. Disconnect the Juggler from the mains supply before releasing the clip with a suitable tool to withdraw the fuse drawer, and replace both fuses. Push the drawer back in securely before reconnecting.

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## Maintenance

### Air Filter

A user-serviceable air filter is located behind each of two vents on the unit's front panel. It is important to remove and clean or replace the filters periodically to avoid overheating.

Spare filter pads for Juggler units can be provided by 7thSense. Juggler should not be run without filters, since accumulations of dust inside the chassis can also cause overheating.

### Cleaning

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

### Internal maintenance

Other than the mains inlet fuses, Juggler contains no user-serviceable parts.



**Warning:** Do not operate the Juggler with any covers removed as the air flow through the unit will be compromised and may lead to overheating.



**Warning:** Atom CPU 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, e.g. additional/alternative components, may invalidate the warranty or impact the unit'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 any equipment.