Additional information for Octopus NET manual

Octopus Net Rack

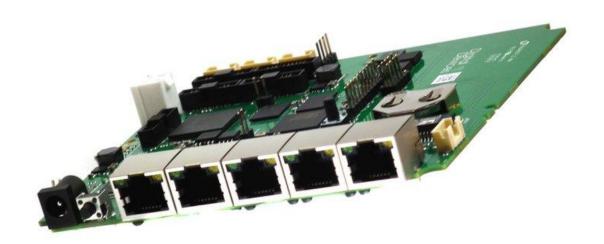


Table of Contents

1.	Classification	. 3
	Delivery Content	
	Expansion	
	Konfigurationsbeispiele:	
	Description oft he MainBoard	
	Installation	
7.	Specials	C

1. Classification

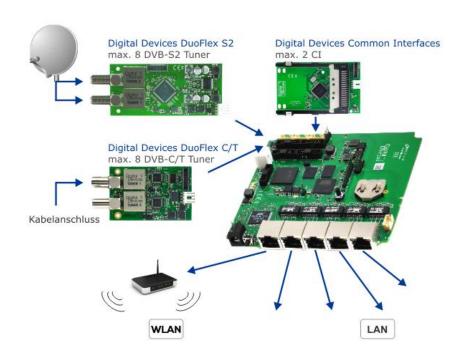
The Digital Devices Octopus Net Series consists of the desktop version (Octopus Net) and the customizable version of the Octopus Net Rack.



Octopus Net

Octopus Net Rack

The Octopus Net always consists of a preconfigured system with 1 or 2 twin tuner, a DuoFlex-CI (since Version 2.0), desktop case and power supply. The built-in tuner are at any time simply by additional or alternative DuoFlex twin tuner (eg for a different reception mode) expandable.



Due to the dimension in a $13 \text{cm} \times 13 \text{cm} \times 5 \text{cm}$ "large" housing, the maximum is reached with the expansion stage (2/4 Tuner + $1 \times 10 \text{cm}$ Flex CI/DuoFlex CI). With the use of an Octopus Net rack all available expansion ports can be used.

The Octopus NET Rack Version contains a basic frame for a mini ITX cases. So it can be installed in an individual case at mini-ITX and ITX specifications. For installation in an custom case, the model is supplied with a comprehensive installation kit.

2. Delivery Content

- Octopus Net Rack (4 free expansion ports for DuoFlex and DuoFlex/Flex CI expansion)
- mini ITX I/O Shield
- mini ITX adapter-frame
- Mounting-bridge (for max. of 4 DuoFlex expansions)
- 4x 25 cm power cable adapter (for direct connecting of expansion modules to the main board for power), screws

3. Expansion

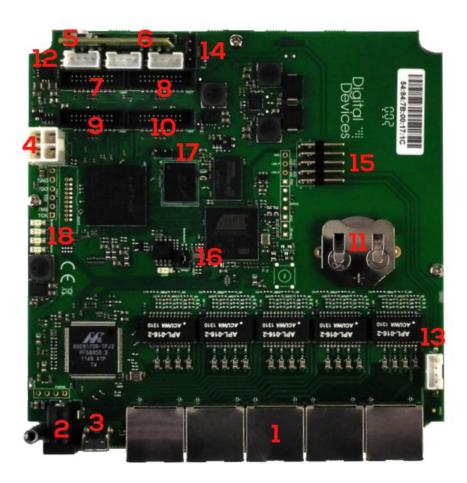
The Octopus Net Rack are expandable with the Twin-Tuner expansions DuoFlex (from Rev. V2 or higher) for DVB-S/S2, DVB-T/T2 and DVB-C/C2) and also the Flex-CI/DuoFlexCI modules. It can be plugged per Octopus Net rack up to 4 extensions. Thus up to 4 DuoFlex twin tuner (8 tuners) are available. Also in combination with (at most two) CI Slots are individual configurations possible (see configuration examples). Mixed operation at the Reception is also possible. The extensions are always works together.

4. Konfigurationsbeispiele:

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1x DuoFlex Twin-Tuner S/S2 or
1x DuoFlex Twin-Tuner S/S2 + 1 x DuoFlex Twin-Tuner C/T2 or
1x DuoFlex Twin-Tuner + 1x Flex CI or
2x DuoFlex Twin-Tuner + 2x Flex-CI or
4x DuoFlex Twin-Tuner
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All extensions must be necessarily supplied with a data cable and a power cable, the appropriate cables come with the Octopus Net Rack or the respective extension. The Octopus Net rack must be powered by an AC adapter. Therefore it can be used an internal or external supply (external PSU included).

5. Description oft he MainBoard



- 1. 5 Port 1 Gb mang. Switch
- 2. Plug for external power supply
- 3. Reset-button
- 4. Molex plug for internal power supply
- 5. On/Off switch with LED
- 6. Status LED 1 and 2
- 7. Expansion port 2 (No CI Connection possible)
- 8. Expansion port 1 (No CI Connection possible)
- 9. Expansion port 3 (CI Connection possible)
- 10. Expansion port 4 (CI Connection possible)
- 11. Backup battery (Older Versions)
- 12. 3x Power plug for extension modules (Flex CI / DuoFlex)
- 13. 1x Power plug for extension modules (Flex CI / DuoFlex)
- 14. Control for internal power supply
- 15. Connector, for production
- 16. Pin header, for production
- 17. Pin header, for production
- 18. Status LEDs, for production

6. Installation

The Octopus Net Rack comes with the following mounting accessories:

- mini ITX I/O Shield
- mini ITX Basic frame
- Mounting-bridge (for max 4 DuoFlex expansions)
- 4x 25 cm power cable
- 5 screws for Octopus Net Rack

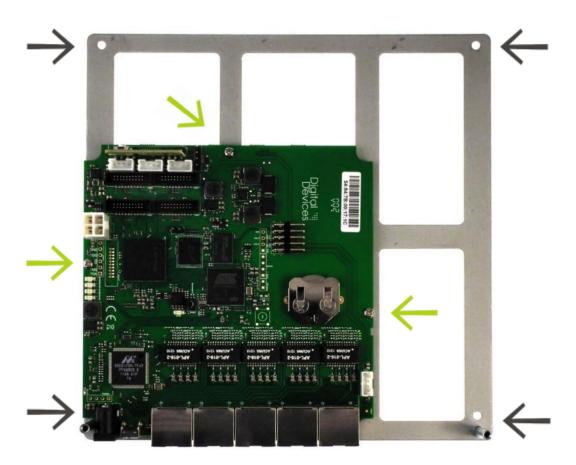


The power supply of DuoFlex twin tuner or Flex CI modules is done directly from the board for each extension. The data cables are included to the extensions module products at factory. Special lengths of data cables can be ordered as an optional accessory.

Optional accessories:

• Additional data cables in 10cm, 15cm, 25cm and 50cm length

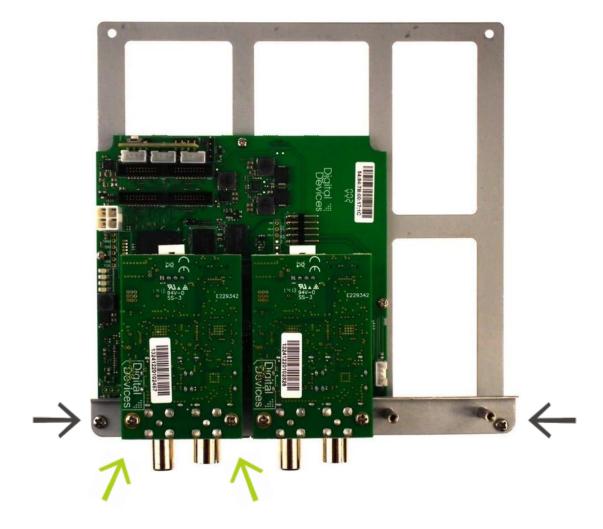
The Octopus Net rack is screwed onto the mini-ITX basic frame using the supplied screws (green arrows). Use the attachment points of the mini-ITX base frame (black arrows), the Octopus Net Rack are installed properly in a mini-ITX or ITX case. For mounting, please use the respective housing screws and / or standoffs.



Octopus Net Rack Mainboard on basic frame

The installation of a DuoFlex twin tuner is carried out as follows.

The slot bracket is removed by loosening the two screws from the Twin-Tuner and is not needed. These two screws (green arrows) are then used to attach the twin tuner to the mounting bridge. For each twin tuner these mounting steps are repeated.

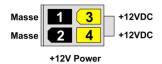


The two black arrows mark the position of the enclosed mounting bolts for the mounting bridge to the basic frame.

7. Specials

<u>Internal power supply</u>

When using the internal power plug from an ATX power supply the connector (4) is used.



An ATX power supply starts only when it gets a request for that. For this, a circuit must be closed on the ATX plug from the PSU, either by help of a cable bridge by pulling the pin 14 (20 pin connector) or pin 16 (24 pin connector) to ground (Attention: Colors are only examples), or alternatively, an ATX Test cables must used.



The Octopus NET rack can not control the ATX power supply. The power supply must run, the connection for the power button serves only to turn on and off the Net Octopus Rack.

The pin header (14) has the following assignment and can be used for power switching in addition if required.

Pin 1 PWR LED +3V Pin 2 PWR LED **GND** Pin 3 PWR Switch WakeUp Pin 4 PWR Switch GND

Caution: An ATX power supply should not be operated for a long time without electrical consumers.

Caution: Any modification to the hardware must be performed by trained personnel.