



RevPi Flat
The open source platform
for the energy industry

# Revolutionize the energy industry

Possible application ideas that are just waiting to be implemented by you with the RevPi Flat:

- Modern, decentralized energy management
- · Virtual power plants
- Providing balancing power/controlling power range in the control of small power plants
- Energy trading
- Control of photovoltaic, biogas and wind power plants
- Control of charging stations and hydrogen cells
- Cost- and time-optimized charging of electric cars/charging time optimization
- Management of alternative temporary buffer stores, such as for electric cars
- One-site administration of digital master data, files and maintenance protocols
- · Remote meter-reading
- Cloud solutions
- IT security with trusted platform module (TPM)

The energy industry today faces enormous challenges. Renewable energies, electromobility and grid expansion are just some of the buzzwords being discussed in politics, the media and society. In addition, the liberalisation of the electricity market and the resulting increase in competition as well as digitalisation allow completely new structures and business models.



The associated complex requirements and tasks can be realized by using our RevPi Flat. This module basing on Raspberry Pi convinces with its genuine industrial suitability and a large number of interfaces. Thanks to the open platform concept (including full root rights), the device guarantees maximum design freedom when implementing your projects.

The RevPi Flat forms a versatile, Raspberry Pi and LINUX-based and freely programmable platform for process optimization, more efficient data handling and the implementation of new marketing strategies in the energy industry.

In addition, we support you with comprehensive services, such as programming, sensor selection and much more.

#### Talk to us!



## Highlights of our platform

- Designed for subdistribution system installation
- Wifi & ISM 868 MHz
- Two separate Ethernet interfaces
- Integrated 3 port switch
- Two RS485 interfaces
- 8 GB internal eMMC memory
- TPM & IT security

### **Interfaces**

$4 \times RJ45 \ 10/100 \ Ethernet$ (two separate MAC addresses for LAN0 and	
I AN1 -> I AN0: 1 x Ethernet: I AN1: 3 x Ethernet switched)	

#### 2 x USB A

1 x RS485 (spring-loaded terminal)

1 x RS485 (RJ12 socket)

1 x digital output (potential free)

1 x analog output (0-10 V DC)

1 x analog input (0-10 V DC)

1 x Wifi (RP-SMA socket)

1 x ISM 868 MHz (SMA socket)

# **Specifications**

Size (H x W x D)	90 x 106 x 70 mm (w/o connector)
Housing type	DIN rail housing
Housing material	Polycarbonate
Protection class	IP20
Weight	арргох. 248 д
Processor	Broadcom BCM2837B0 with quad-core processor ARM Cortex A53
Clock rate	1.2 GHz
RAM	1 GB
eMMC flash memory	8 GB (16 GB and 32 GB on request)
Power supply	typ. 24 V DC (12.0 28.8 V DC), reverse polarity protected
Max. power consumption	16 W (incl. 5 W USB)
Operating temperature	-20 °C+55 °C
Humidity	93 %, non-condensing
EMC interference emission	according to EN 61000-6-4
EMC immunity	according to EN 61000-6-2
RoHS conformity	Yes
CE conformity	Yes



# **REVOLUTION PI**

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