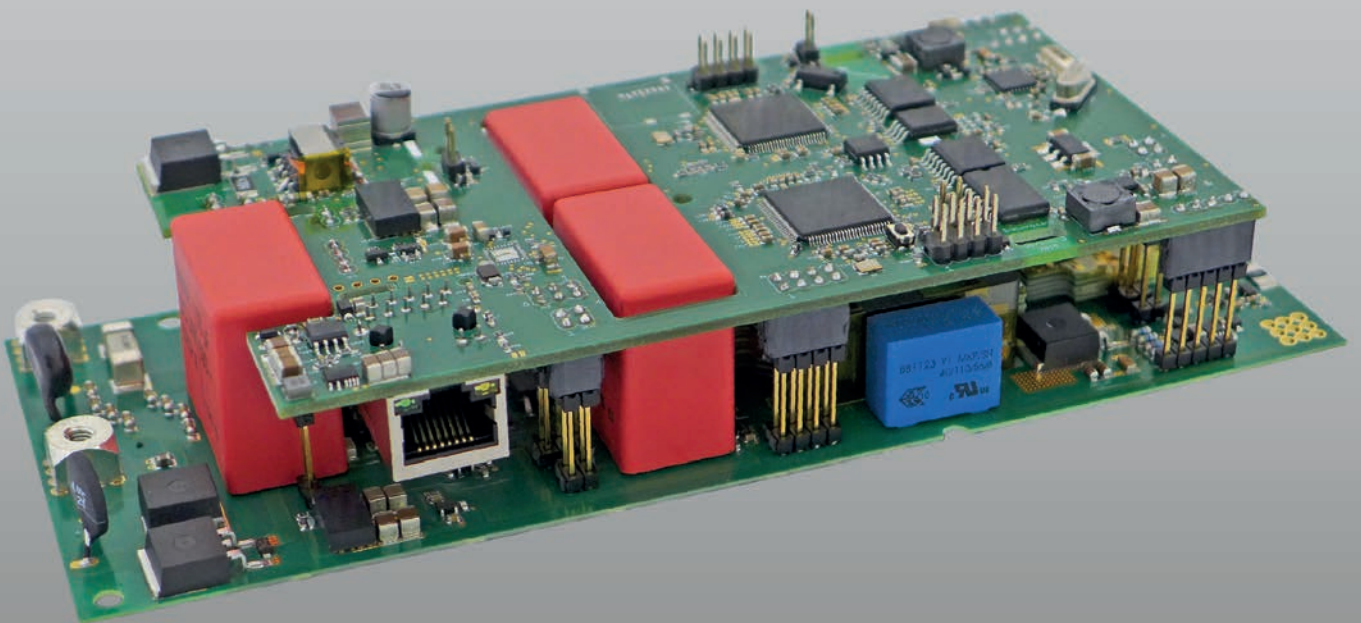
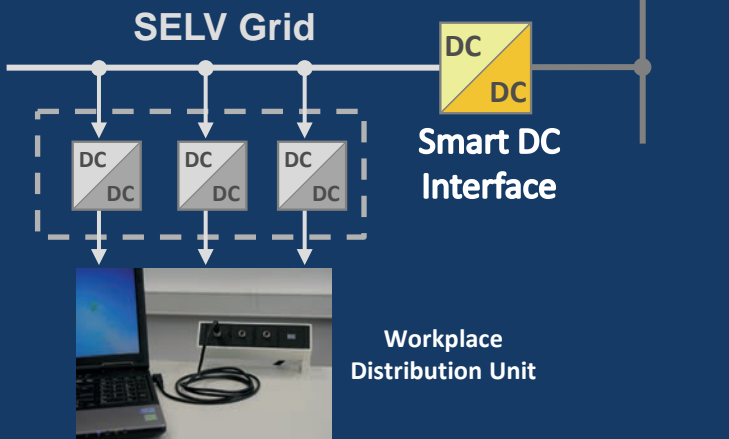


# Smart DC Interface

## Connecting DC Microgrids and SELV Grids



# Microgrid



## Smart DC Interface

Connecting DC Microgrids and SELV Grids

### Description

The **Smart DC Interface** by **Fraunhofer IISB** is an insulating and unidirectional DC/DC-converter.

One **Smart DC Interface**, with his 500 W nominal power, for example can supply a **Fraunhofer IISB** office with the equipment for four employees. The DC/DC-converter supplies itself solely from the Microgrid, no further auxiliary supply is needed.

To transmit measurement data from connected devices, for example the **Workplace Distribution Units** by **Fraunhofer IISB**, the **Smart DC Interface** features a powerline communication interface as well as CAN-Bus and Ethernet to transceive data to or from higher instances. The regulation and the change of the operating mode are implemented in a microcontroller.

The **Fraunhofer IISB** is working on a bidirectional version of the DC/DC-converter with a higher efficiency and output power.

### Technical Data

Input voltage range	360 - 400 V
Output voltage	24 V *
Maximum output power	500 W
Efficiency	up to 94%
Max. number of parallel output ports	4
Dimensions	188 mm x 75 mm x 30 mm

\* 48 V version available on request

### Features

- *Controlled by a microcontroller*
- *Communication interfaces (Ethernet and/or CAN, Powerline)*
- *Overvoltage, overcurrent- and temperature protection, inrush current limiter*
- *Auxiliary supply via Power over Ethernet*
- *Self-starting from the Microgrid*
- *Many possibilities to increase the part load efficiency through the use of a microcontroller*
- *Small dimension for this power class*

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