



The inverters of the future:
Welcome to a networked world



BOSCH

Invented for life



**Making everything
easier.
For me.**

- ▶ Inverters with integrated data logger and communication interface
- ▶ The innovative e.World simplifies planning, commissioning and monitoring
- ▶ An overview of all performance data is available at all times

Innovative networking of solar inverters

Inverters take on a number of functions that go far beyond the conversion from direct current to alternating current. They have long since become a bi-directional communication interface between generators and consumers and therefore offer an active contribution to feed-in management and to the stabilisation of the electricity grid. In order to cope with increasing complexity, Bosch Power Tec has developed the e.World: an innovative

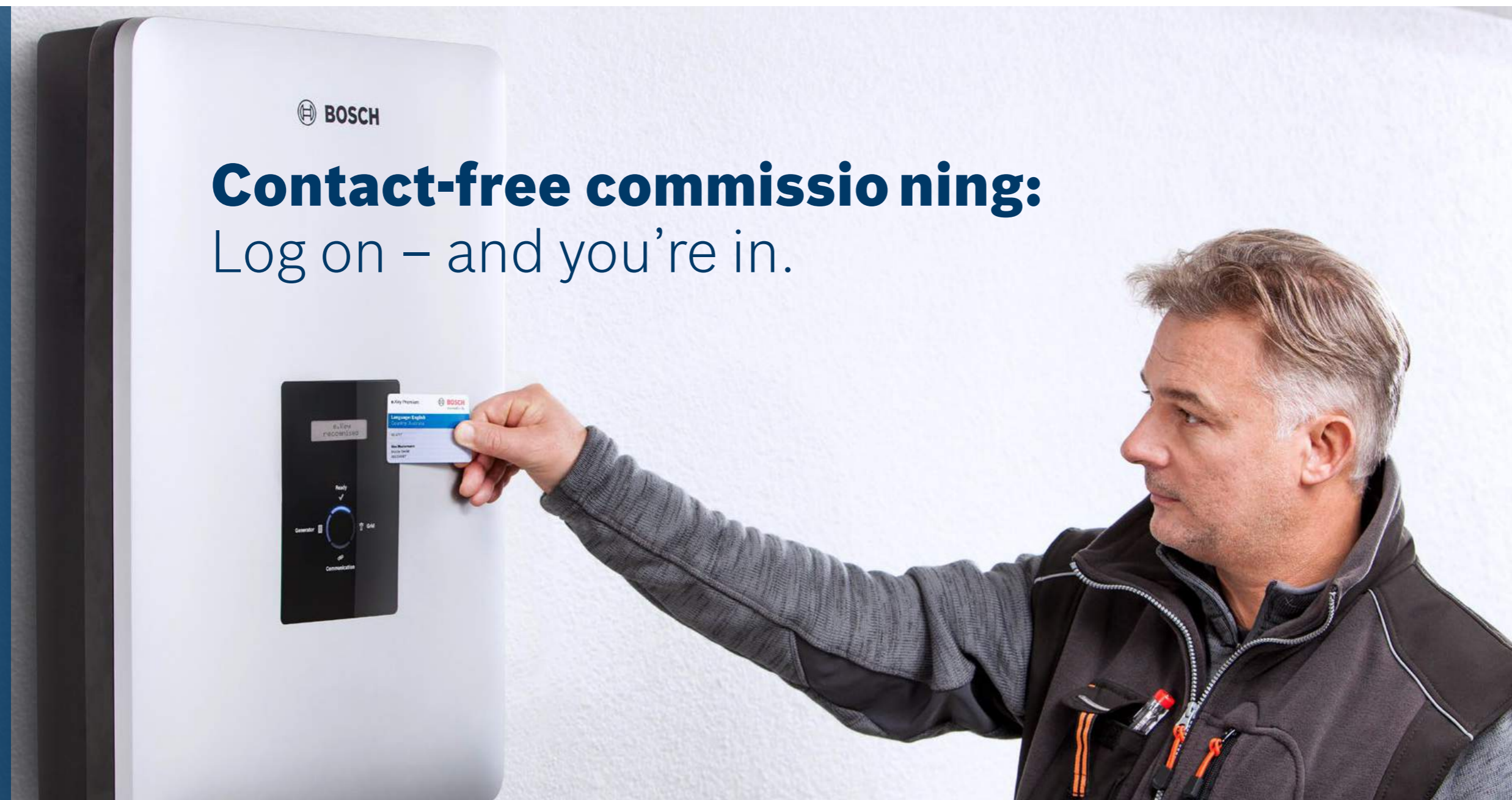
communication system that considerably simplifies the planning, commissioning and monitoring of photovoltaic systems.

Installers have access to various features within the e.World. Thanks to the innovative networking of the solar inverters with the peripheral devices, installers have several access options, even after commissioning.

System owners can go online to see an overview of all performance data for the

inverter and all energy flows within the photovoltaic system at any time; either on the go with the smartphone app or from the comfort of their own home via the internet portal e.Web.

In brief: Installers benefit from simplified planning, commissioning and monitoring and consumers can be sure of a high level of transparency.



Contact-free commissioning: Log on – and you're in.

- ▶ Various performance classes, ideal for small and large photovoltaic systems
- ▶ Contact-free commissioning
- ▶ Personalised e.Key
- ▶ Innovative, high-quality and elegant housing

The new solar inverters from Bosch Power Tec – tried-and-tested Bosch quality combined with innovative features

The new string inverter series from Bosch Power Tec impresses with its optimum performance and innovative features and satisfies the stringent quality requirements put in place by Bosch. The transformerless devices are available in various performance classes that are perfectly suited to both small internal consumption systems and large solar parks.

In addition to its excellent performance, flexibility and safety, the Bosch BPT-S series is setting new standards, particularly with regard to user-friendliness. A world first here is the contact-free sensor, which makes it possible to navigate around the inverter's menu using gesture commands. This innovative type of operation is characterised by robustness and a long service life, as no electromechanical elements are used.

The e.Key is also unique on the market. With this innovative and patented concept, the basic settings of any Bosch Power Tec string inverter can be configured in a matter of seconds without contact via an RFID* communication interface. All of the relevant information and data is stored on the e.Key, which is no bigger than a bank card and is provided to installers free of charge.

The BPT-S inverters also feature a comprehensive range of analysis options. All devices have an integrated data logger, which records all performance data and visualises this in the Bosch internet portal e.Web.

The Bosch inverters impress not only with their innovative features but also with their high-quality and elegant design.

* radio-frequency identification

BPT-S 3 – 4.6

- ▶ Up to two MPP trackers
- ▶ Performance classes 3, 3.68, 4 and 4.6 kVA
- ▶ Protection class IP 65



BPT-S 16 – 24

- ▶ Flexible MPP tracker concept
- ▶ Various power classes
- ▶ Protection class IP 65



For all system sizes: The powerful duo

- ▶ Simplified commissioning thanks to RFID
- ▶ Remote diagnostics during servicing
- ▶ Integrated data logger
- ▶ Maintenance-free cooling concept
- ▶ Optimum efficiency thanks to transformerless topology

High level of flexibility and increased safety

The new BPT-S series string inverters are setting new standards in terms of user-friendliness and analysis options. New communication interfaces allow fast and fault-free commissioning, along with simplified remote analysis. The wide input voltage range of 170 V to 750 V ensures maximum flexibility in the design of the photovoltaic generator.

Up to two MPP trackers also guarantee maximum yields with the single phase string inverter, even in the case of photovoltaic generators with different roof orientations.

The intelligent service switch provides additional operational safety. Before switching, the installation is checked on the DC and AC side. If an error message is issued during operation, the photovoltaic generator is automatically disconnected from the inverter.

Integrated data logger

The integrated data logger function records all data and makes it available in graphical form in the e.Web monitoring portal or in the e.UserApp. Along with the display of performance data, individual parameters are also available online. The integrated e.Data setup tool helps to avoid service calls or to plan them more precisely in advance.

Improved cooling concept

The new maintenance-free cooling concept, PowerCool, optimises the heat distribution of the inverter. The innovative cooling concept and the use of components that meet the stringent Bosch quality requirements extend the service life of the inverters. The housing with integrated anti-theft protection enables quick and easy assembly.

Planning

1



e.Designer



e.Key



e.Connect



e.Data

Commissioning

2

Accessories

4



e.Sensor



e.Control



e.UserApp



e.Web

Monitoring

3

Welcome to the e.World

- ▶ User-friendly software for optimum photovoltaic system design
- ▶ All devices are equipped to receive ripple control signals
- ▶ Integrated setup tool with WLAN and Ethernet interface

Planning

The **e.Designer** is a user-friendly design software, which enables installers to design their optimum photovoltaic system. Thanks to the ability to adjust data such as location, number of modules or product selection on an individual basis, users can be sure of the perfect design result. This can be used as the basis for detailed yield calculations, system dimensioning and economic viability calculations.

Commissioning

The **e.Key** makes inverter commissioning child's play. The e.Key, which is no bigger than a bank card, is held in front of a marked field and then communicates with the inverter and initiates the start-up configuration. The professional **e.Data** setup tool enables the inverters to be analysed and updates to be installed directly on site or remotely by means of remote access using an Ethernet interface or WLAN. A wireless connection to the internet can be established via the **e.Connect** component.

Monitoring

The **e.Web** Internet portal is a convenient solution that provides the system owners with a wide range of component and performance data from the photovoltaic system at all times. Detailed analyses of yield-relevant parameters in addition to variance comparisons are displayed in clear graphic illustrations. The **e.UserApp** allows inverter operating data and current input power values to be queried and updates to be installed using a smartphone.

Accessories

All string inverters from the BPT-S series feature **e.Control**, which means that they are equipped to receive ripple control signals. This makes it possible to regulate the active power, either in stages or infinitely variably, depending on the specifications of the grid operator. The **e.Sensor** is a robust and reliable solution for measuring solar irradiance and permits a precise analysis of photovoltaic yields with the help of sensor measured values.

Detailed information

Technical data sheets

All data at a glance

The technical data sheets for our products contain a vast amount of information on specifications, warranty and the corresponding system accessories. They also give you an overview of classifications, approvals and certifications.

The data sheets for the products in the BPT-S series can be found below.

All technical data sheets have been created in accordance with the current state of technical knowledge at Bosch Power Tec GmbH.

The latest technical data sheets for all Bosch Power Tec products can be downloaded in PDF format at any time from **www.bosch-power-tec.com**.

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Printed in Germany
100% chlorine-free paper