

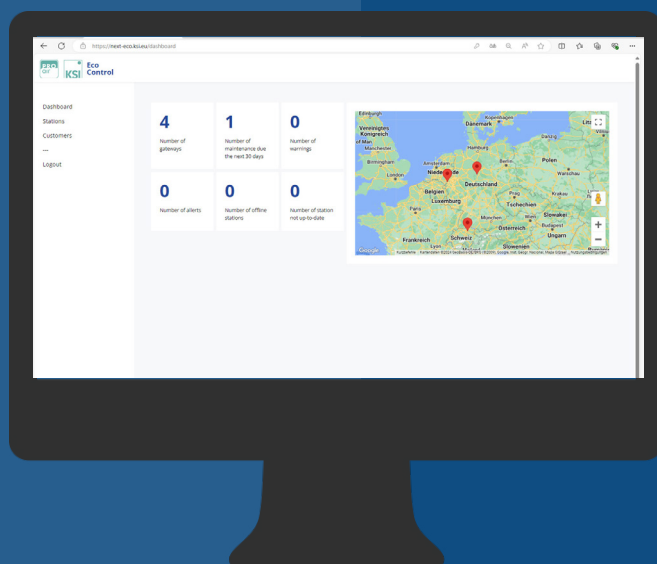
KSI|PROair ECOCONTROL

Online system monitoring



Rev 04_1124

Solutions for monitoring pressurised air installations



INDUSTRY
4.0



Real-time monitoring of the pressurised air system

The solutions in the **ECOCONTROL** product range bring every compressed air system into the cloud.

Online monitoring of the most important measured values, analysis of historical data, planning support for service assignments, flexibly expandable to meet your requirements!

The unlimited and exportable data logging provides a view into the history of the compressed air station in order to find the reason for recurring problems. All data can be visualised.

The basis is either the **KSI ETC4.0** dew point control or, in case of compressed air stations without desiccant dryers, the **KSI|PROair GT4.0** gateway.

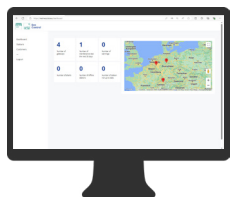
As all settings are saved locally in the control unit or the gateway, internet connectivity problems don't affect your business.

The ECOCONTROL effects +++

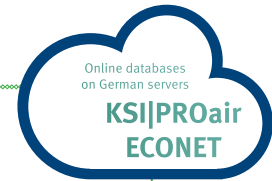
- + identify critical situations online at any time
- + no unnecessary trips to the client site
- + **Data logging and visualisation of current and past data (without limit to the amount of data)**
- + Warnings and error messages by e-mail
- + Prevention through optimised service and deployment planning
- + No access to user data by KSI
- + Private label version for user presentation (optional)
- + Additional data boxes enable the connection and the definition of a large number of sensors
- + Switching of electrical components via defined conditions
- + Software as a web app: no installation on end devices necessary ▶ Access with any internet-enabled device
- + Databases and servers at German locations, encrypted connection between server and user device

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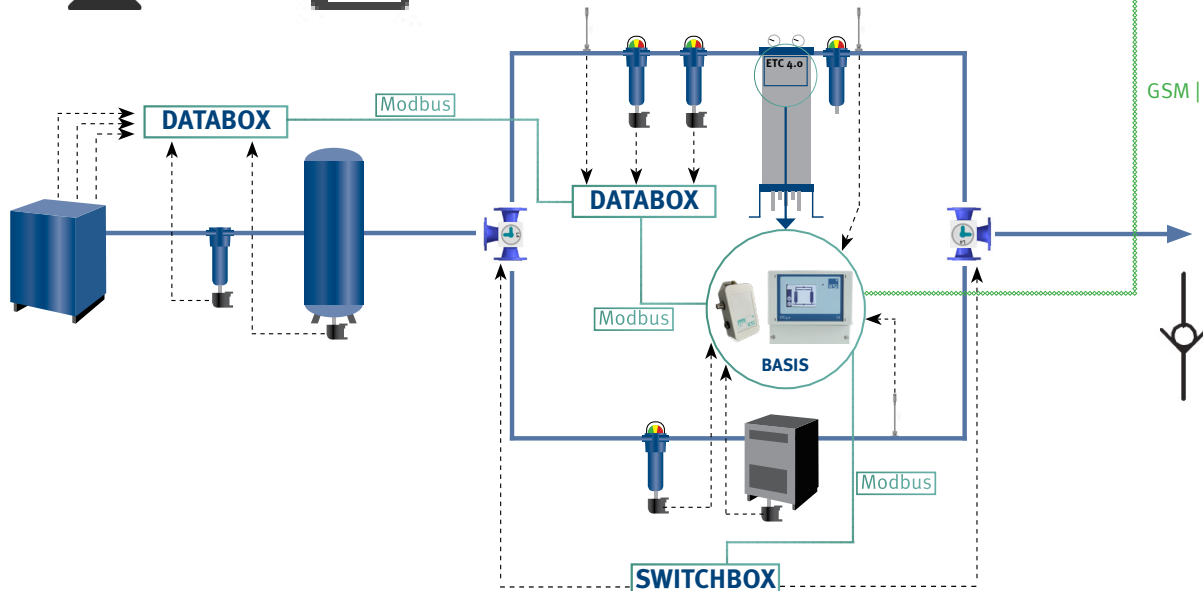
Online system monitoring



Internet-enabled end devices: monitoring, switching, service planning, notification by email



GSM | WLAN



The functional principle

Basic equipment

The **ETC4.0** dew point control is a component of the entire **KSI|PROair ECOCONTROL** system. This has several advantages for the user:

With the installation of an adsorption dryer with **ETC4.0** everything is already in place to connect the entire system to the Internet immediately or at a later date. No additional devices are required as a „gateway“.

6 sensors can already be connected to the basic device without any additional hardware. It also provides two outputs (more information on page 3).

The control unit is operated via a coloured panel. For more convenient set-up, the control unit and gateway can be accessed via a browser and Wi-Fi, for example from a tablet or notebook. The set-up areas are of course passwordprotected.

The new **KSI|PROair GT 4.0** gateway is used to monitor a pressurised air station without an desiccant dryer. An **ETC 4.0** dew point controller is no longer necessary in this case.

Integration of additional hardware

The **ETC4.0** and the **GT4.0** offer the option of connecting various boxes via Modbus. is a choice of two different **data boxes** - in sizes „S“ and „L- with a different number of inputs as well as our switch box, which forwards current signals as a **relay box**.

The software

Our self-developed software **KSI|PROair ECONET** works as a web app. It is therefore accessible via any internet-enabled end device. Of course, the display adapts to the respective end device (mobile phone, tablet, computer, ...) on.

KSI|PROair ECONET is accessed via an encrypted connection. Data traffic between the database on German servers and the controller/gateway is also encrypted.

Possibilities

All system values such as volume flow, pressure dew point, system pressure, operating hours and much more can be sent. Unlimited data logging allows extensive analyses.

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Online system monitoring



The hardware:

ETC4.0

- + Sends the data to the cloud
- + Plug&Play connection of sensors with Modbus
- + GSM LTE & WiFi with worldwide coverage
- + 6 inputs for sensors: 5 x 4 - 20 mA, 1 x PT1000



GT 4.0

- + Sends the data to the cloud
- + Plug&Play connection of sensors with Modbus
- + GSM LTE & WiFi with worldwide coverage
- + 1 input for sensors/databox: 1x Modbus M8 plug



Databox S - „The small extension“

- + Connection to ETC 4.0 or GT 4.0 via System Modbus (max. 5 Databoxes in series)
- + 1 x PT1000
- + 3 x 4 - 20 mA (optional for potential-free fault contacts)
- + 2 x Modbus

Switchbox - „Execution on site“

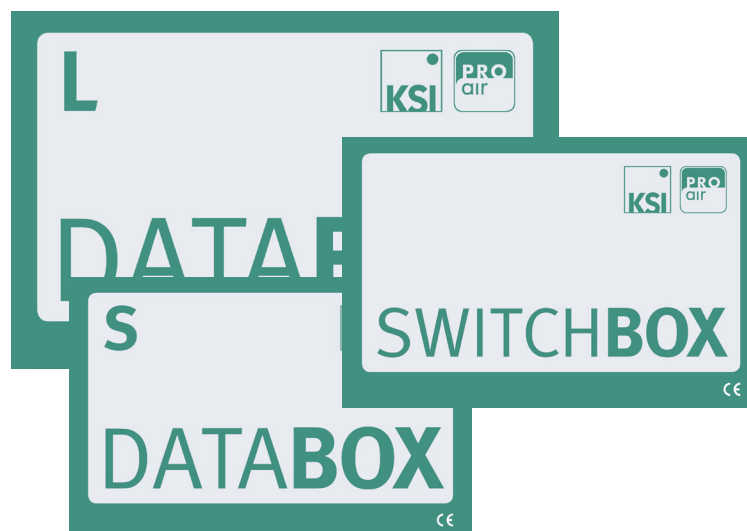
- + 5 x potential-free changeover contact (relay output)
- + Execution of interlinked conditions, e.g. for automated summer/winter Changeover or pressurisation systems

Databox L – „Die große Erweiterung“

- + Connection to ETC 4.0 or GT 4.0 via System Modbus (max. 5 Databoxes in series)
- + 3 x PT1000
- + 9 x 4 - 20 mA (optional for potential-free fault contacts)
- + 7 x Modbus

„IoT Flex SIM“ card

- + Comprehensive coverage in 30 countries
- + 10 years, 500 MB
- + Third-party IoT cards can also be used (ETC 4.0 only)



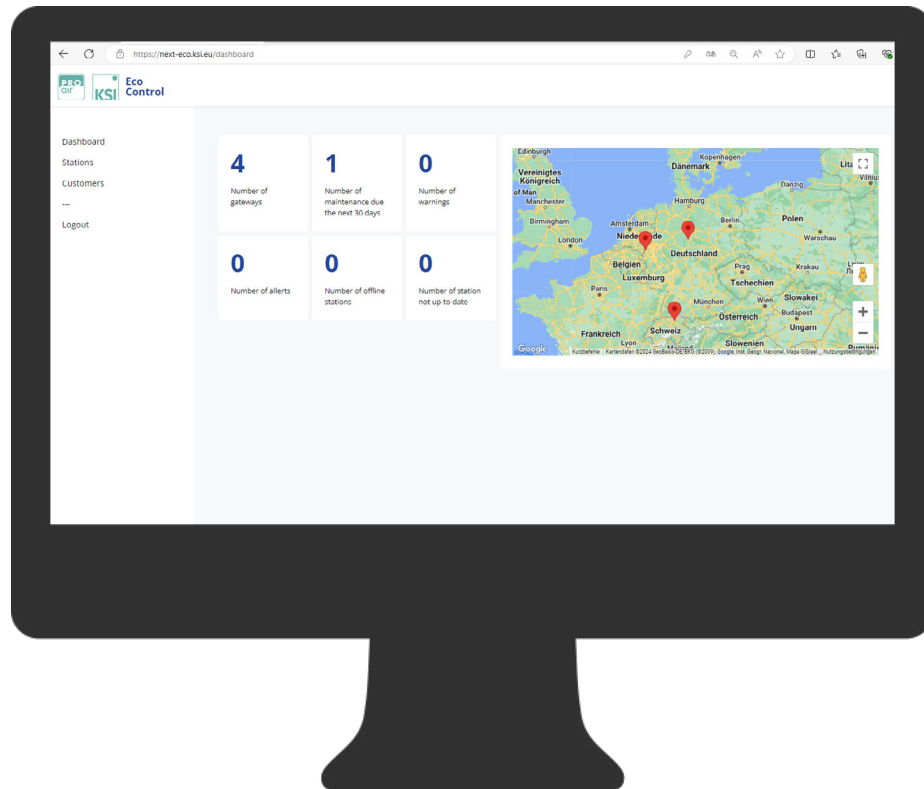
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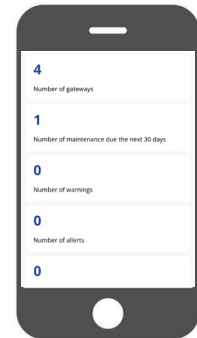


The Software: KSI ECONET - „The web app in the cloud“

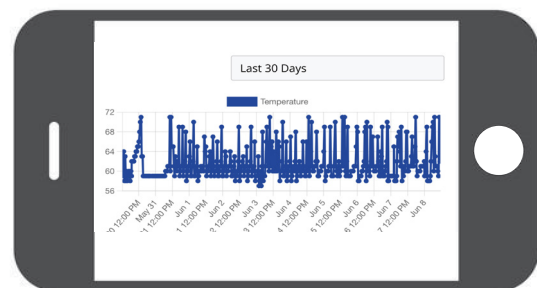
+ Overview and status information for each station / all stations



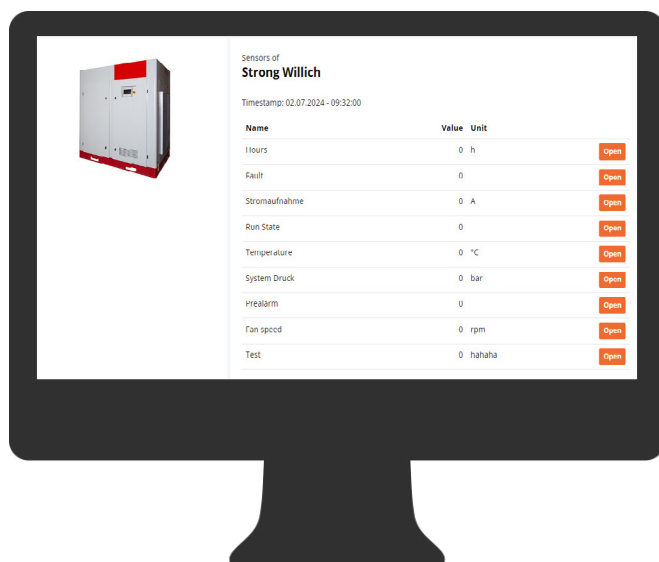
+ Access with any internetenabled device



+ Data logging without memory limitation for each sensor value



+ ETC 4.0 or GT 4.0 can be conveniently configured



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KSI| PROair ECONET: the software of the ECOCONTROL system

KSI|PROair ECONET

	Software version	
	ECONOMY	BUSINESS
Have online insight into situations (data) at all times. Avoidance of unnecessary journeys	✓	✓
Convenient configuration with any mobile device	✓	✓
Error messages by e-mail	✓	✓
Data logging and graphical visualisation of current data and all historical data (no limitation on volume)		✓
Freely configurable maintenance interval: prevention through optimised service and maintenance intervals operation coordination, maintenance by time or operating hours		✓

Visualisation

Dashboard shows a summary of all stations, all messages and errors	✓	✓
Free description options for each system component (e.g. location)	✓	✓
2 values per system are displayed in the overview	✓	✓
Up to three images can be stored per system		✓

Miscellaneous

Encrypted connection from the end device to the server	✓	✓
Server location in Germany	✓	✓
Data can only be viewed by KSI with the authorisation of the customer (support purposes)	✓	✓
Adjustable data update	✓	✓
Databox S and L configurable for the connection of sensors	✓	✓
Switchbox configurable for the control of electrical components		✓

Private label (for an extra charge)

own logo, both in the control display (when using the ETC as a gateway) and in the configuration display and in the KSI ECONET app		✓
Custom colours for the online user interface		✓

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KSI|PROair ECOCONTROL & TPK dew point measurement

