

This product is discontinued!

# FE230

Function extension unit  
Ex-barrier and data communication  
for volume correctors



## Applications

Provides EK260\* or EK230 volume correctors with data communication in gas stations with no power supply and no telephone connection

## Brief information

The FE230 function extension unit is a battery-operated communication module with an integrated GSM modem. The main reason for the use of the FE230 function extension unit is to provide a data communication link for EK260 or EK230 volume correctors which are installed in gas stations where there is no existing power supply or telephone network.

**Data Communication:** The FE230 includes a GSM modem for data communication via public mobile telephone networks. The modem's antenna is built into the housing of the device. In order to improve the quality of the reception on site, it is also possible to use an external antenna (optional).

**Power Supply:** In order to optimise the operational life of the battery, the modem is only activated within a programmable, cyclical time frame and the data is accessed within this period. If this time period is one hour per week and the GSM reception quality is of a normal standard, the two battery packs in the device will achieve an operational life of around 5 years. Up to four battery packs can be built into the device in order to increase the operational life.

**Versions:** The FE230 is designed to be mounted on a wall. The cable between the volume corrector and the FE230 is connected at both ends via simple screw-type terminals. The input for the interface is intrinsically safe so that the FE230 can also be connected to a volume corrector installed in Ex-Zone 1. The cables are available in a variety of different lengths making the installation of the device as simple as possible (optional).

## Main features

- Associated apparatus for Ex zone 1 Ex II (2)G [E Ex ia] IIB/IIC
- Ex-barrier for data interface
- Protection class IP65 in accordance with EN 60529
- Integrated GSM data radio modem including antenna
- Battery operated
- Simple connection to volume corrector
- Suitable for EK230 and EK260 volume correctors

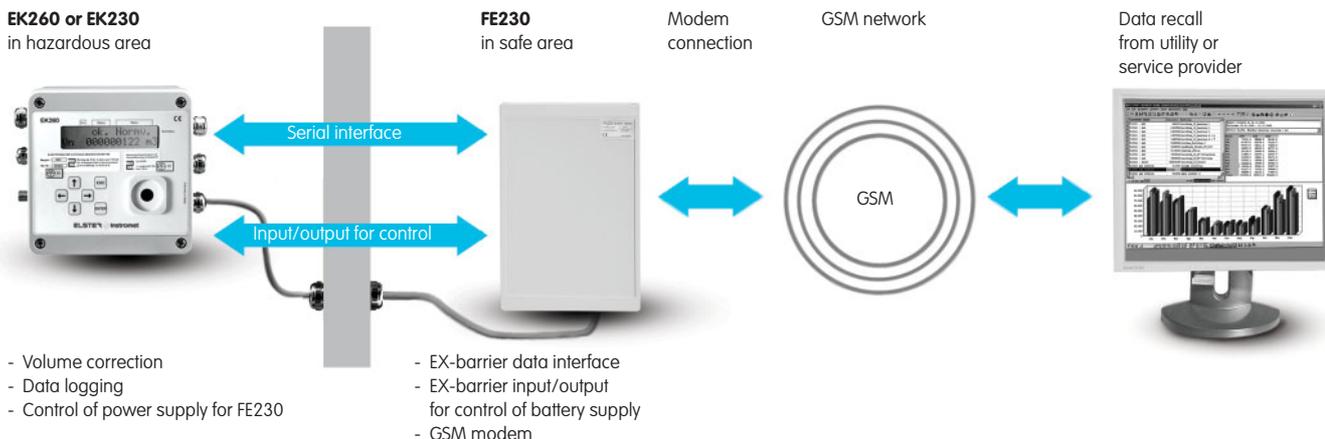
## Options

- External antenna
- Two additional battery packs
- Connection cable in different lengths

\* starting from software version 2.02

# FE230: Function extension, ex-barrier and data communication for volume correctors

## FE230 Function extension – Battery-operated GSM modem for data communication



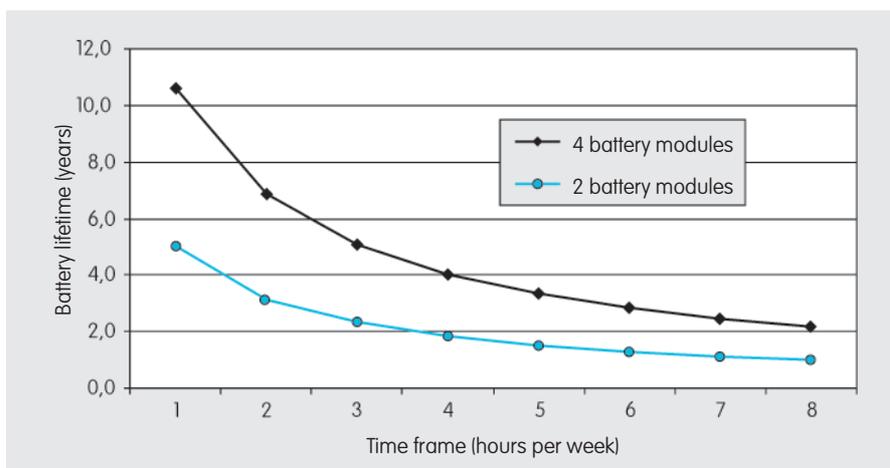
### Technical data

Order number	83480550
Housing	Plastic housing for wall mounting
Dimensions	H 270 mm x W 160 mm x D 90 mm including cable connection
Weight	approx. 1.6 kg (with 4 battery packs)
Protection class	IP 65 in accordance with EN 60529
ATEX protection	Associated apparatus for Ex zone 1, Ex II (2)G [E Ex ia] IIB/IIC
Ambient conditions	Temperature: -20 °C to +50 °C (humidity max. 93%, non-condensing)
Power supply (battery operation)	Standard: 2 battery packs each with 2 batteries Optional: up to 4 battery modules each with 2 batteries
Data interface	RS-485 four-wire system (full duplex), intrinsically safe
Modem	Integrated GSM modem with antenna in the housing Optional: external antenna
Connection cable for data interface (Option)	Connection cable for data interface up to 1000m possible on detailed request

### Operational life of the batteries by weekly readout of the measurement period archive

The operational life of the batteries depends primarily on the extent and interval of the time frame selected as well as the duration of the readout. Further factors influencing the battery life include the ambient temperature and the reception quality of the GSM network on site. The diagram shows the life expectancy of the battery when the device is connected to a volume corrector, the readout is once a week and there is a normal GSM reception.

Further diagrams for different readout intervals can be found in the technical documentation.



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