



ABB i-bus® KNX, STO/G, 2014

# ABB Stotz-Kontakt GmbH

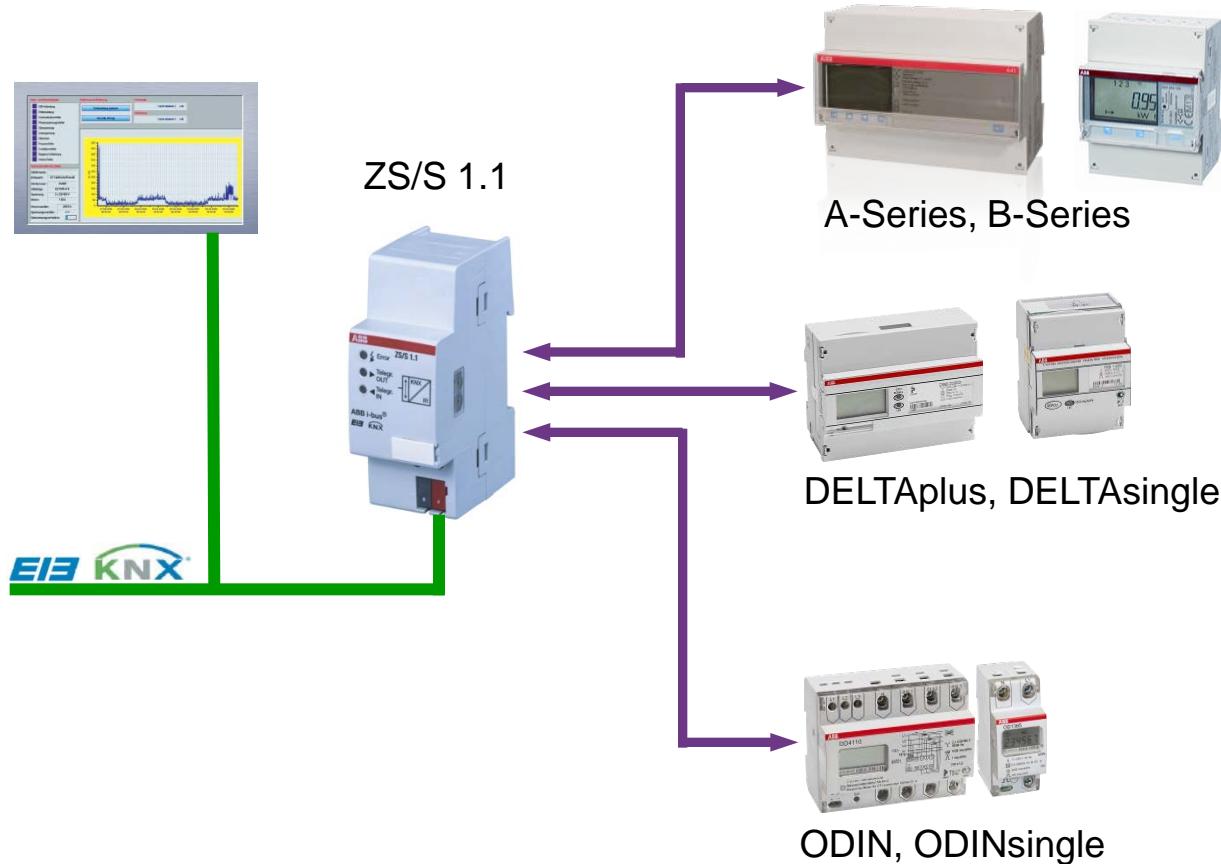
## ZS/S 1.1 Meter Interface Module

# ZS/S 1.1 Meter Interface Module Principle

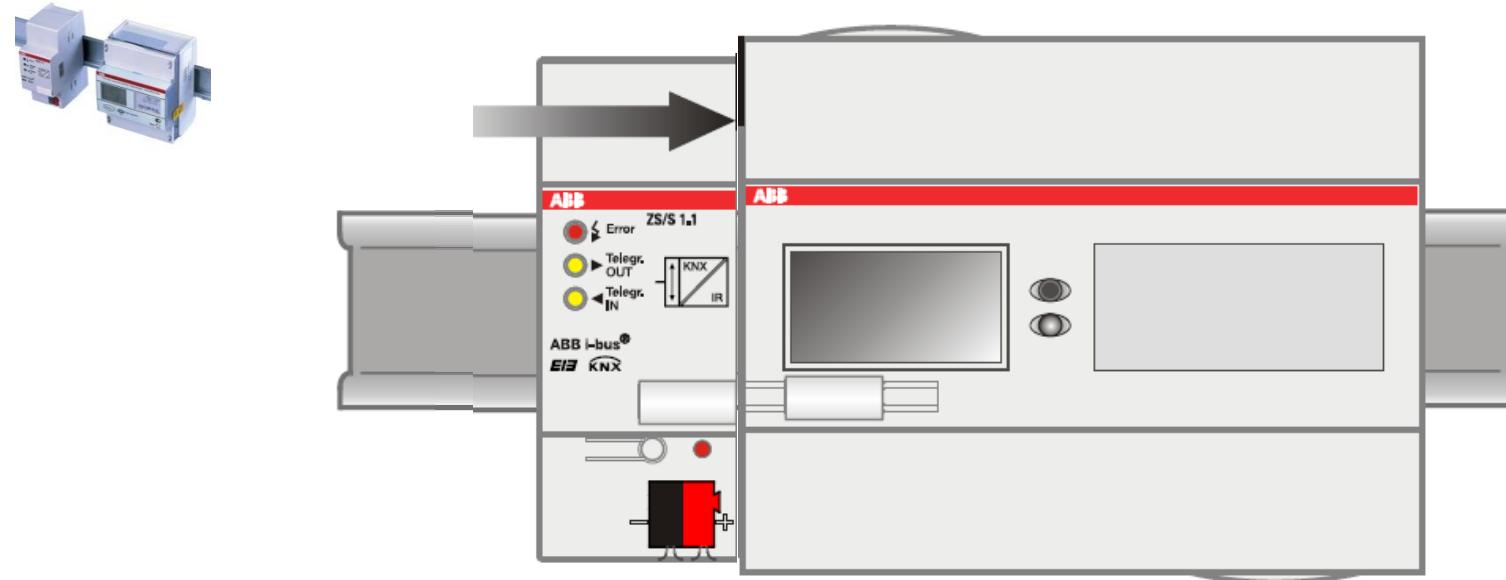


- Meter data will be read out via optical interface (IR) and send on KNX.
- Compatible for the complete ABB meter range:
  - A-Series
  - B-Series
  - DELTAplus
  - DELTAsingle
  - ODIN
  - ODINsingle

# ZS/S 1.1 Meter Interface Module Principle and compatible ABB meters



# ZS/S 1.1 Meter Interface Module Installation



- IR-communication will automatically be established by applying bus voltage.

# ZS/S 1.1 Meter Interface Module Application

- Remote meter reading via KNX.
- Provide meter data for
  - Displaying and visualization
  - Cost allocation
  - Energy optimization
  - Installation monitoring
  - Smart metering
- Ideal usage in residential, commercial and industrial buildings.

# ZS/S 1.1 Meter Interface Module Features and benefits



- Quick and easy installation.
- ABB meters from A-Series and B-Series, as well as DELTAplus, DELTAsingle, ODIN and ODINsingle can be connected/read out.
- Automatic assembling of IR-communication with monitoring.
- Energy values (import & export) and instrument values such as currents, voltages, power factors, frequency etc. can be sent.
- Perfect for subsequently installations.
- No approvals required.

# ZS/S 1.1 Meter Interface Module Hardware



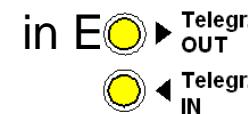
- 2 modules width (36 mm)
- Infrared interface
- Supply voltage via KNX
- Display and status LEDs

LED Error

- 
- 
- setting



ON: Communications error  
Flashing: False meter



LEDs Telegram

- 
- in/out

Flashing: Telegram traffic

# ZS/S 1.1 Meter Interface Module

## Energy values

kWh

Values depending  
on meter type

### Energy values → Import

- Active energy
- Reactive energy
- Active energy tariff 1-4, Total
- Reactive energy tariff 1-4, Total
- Active energy resettable energy register (OD1365)

### Energy values ← Export

- Active energy
- Reactive energy
- Active energy tariff 1-4, Total
- Reactive energy tariff 1-4, Total

# ZS/S 1.1 Meter Interface Module

## Instrument values



Values depending  
on meter type

- Active power L1, L2, L3, Total
- Reactive power L1, L2, L3, Total
- Apparent power L1, L2, L3, Total
- Voltage L1-N, L2-N, L3-N  
L1-L2, L2-L3, L1-L3
- Current L1, L2, L3, N
- Frequency
- Power factor L1, L2, L3, Total
- Phase angle power L1, L2, L3, Total
- Phase angle voltage L1, L2, L3, Total
- Phasenwinkel current L1, L2, L3, Total
- Quadrant

# ZS/S 1.1 Meter Interface Module

## Transformer ratios



Ratios depending  
on meter type

- Transformer ratio total
- Transformer ratio voltage
- Transformer ratio current

# ZS/S 1.1 Meter Interface Module

## Other features



Values depending  
on meter type

- Send/reset power fail counter via KNX
- Send/switch tariff via KNX
- Status byte
  - End value for active/reactive energy register is reached
  - Internal or hardware error
  - IR-communication error
  - Current I1, I2 or I3 out of specification
  - Negative power
  - No voltage, overvoltage
  - Installation error: L and N interchanged

Note: Time dependent functions (e.g. previous values, min/max demand, load profiles), harmonics, resettable energy register and I/Os can not be read out via KNX.

Power and productivity  
for a better world™

