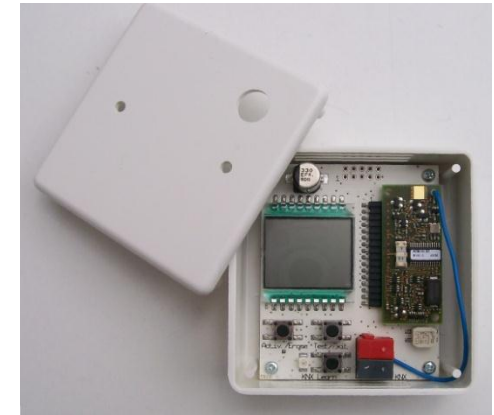


KNX EnOcean Gateway 'KNX ENO'

- EnOcean Technology
- Initial start up
 - ETS configuration
 - Learn sensors
- Reference
 - Torre de Cristal



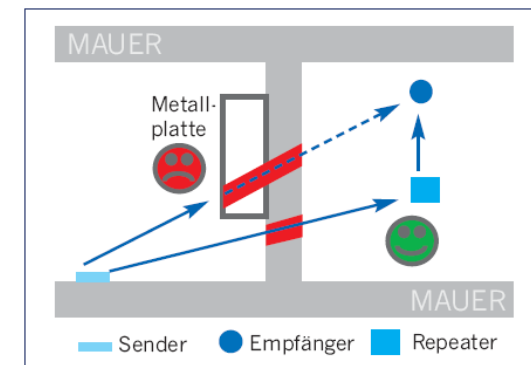
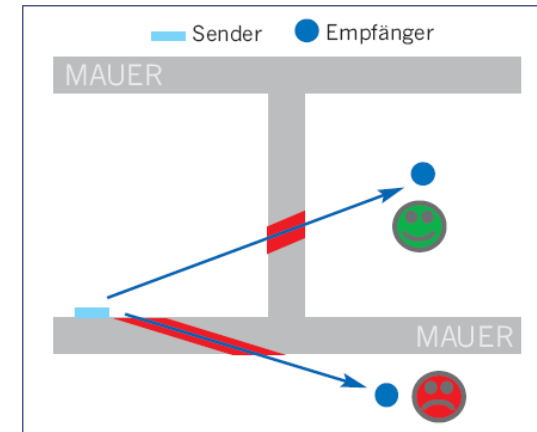
Weinzierl Engineering GmbH
Dipl.-Ing. (FH) F. Häusl, Dipl.-Ing. (FH) K.-H. Buchner
84558 Tyrlaching
www.weinzierl.de

- Wireless
 - Flexible Mounting
 - No Laying of cables
- Battery-free
 - Transformation of energy in the environment into electrical energy, e.g.
 - Keypress
 - Light
 - Maintenance-free
 - Environment-friendly



Radio range

- Line of sight
 - Typ. 30 m range in corridors,
 - up to 100 m in halls
- Drying wall / wood
 - Typ. 30 m range, through max. 5 walls
- Brick / concrete
 - Typ. 20 m range, through max. 3 walls
- Reinforced brick walls /- floors
 - Typ. 10 m range, through max. 1 floor



Pictures: EnOcean

Device Overview

- KNX ENO 610
 - 32 sensor channels
- KNX ENO 612
 - SW as 610
 - For installation on metal or on a flush mounted box
- KNX ENO 620
 - 32 sensor channels
 - 6 channels for temperature or constant light control
 - Configuration software
- KNX ENO 622
 - SW as 610
 - For installation on metal or on a flush mounted box



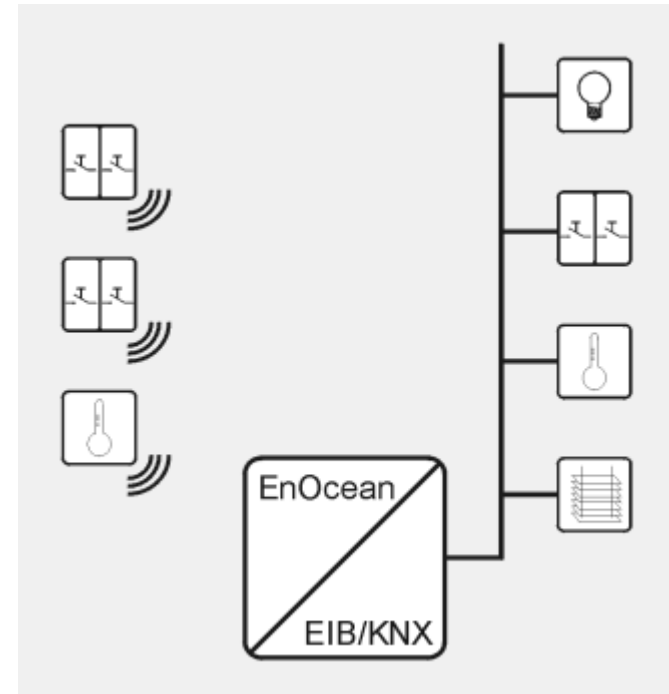
KNX ENO 610
KNX ENO 620



KNX ENO 612
KNX ENO 622

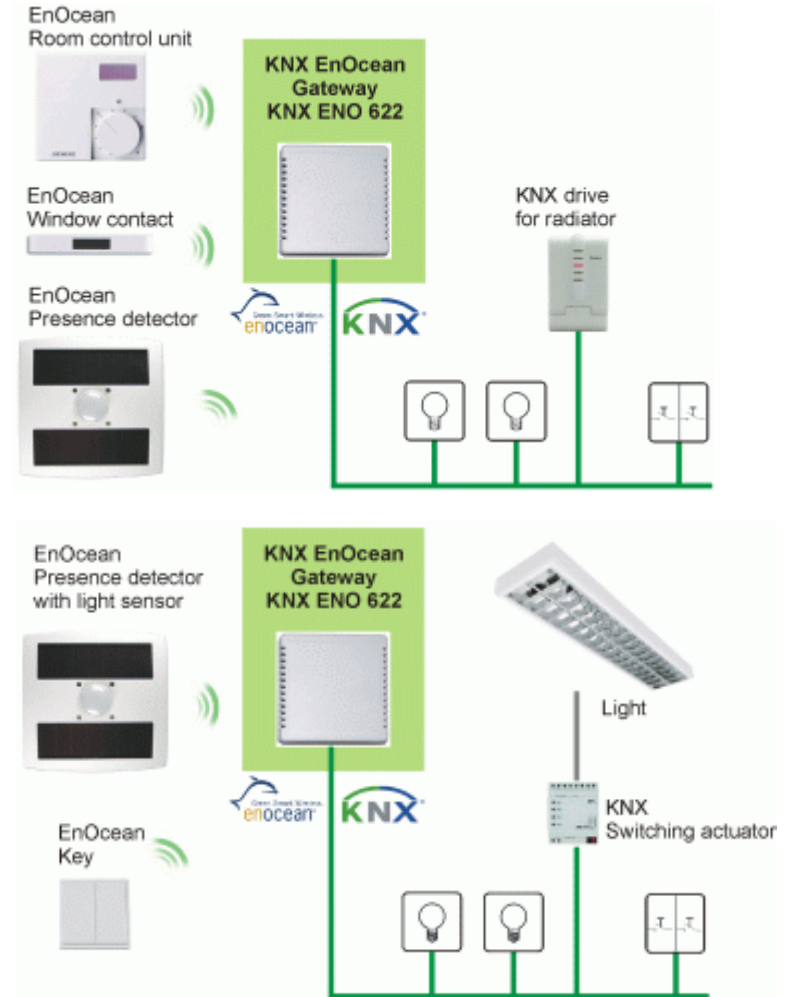
KNX ENO 610/612

- Gateway between EnOcean-radio sensors and EIB/KNX
- Supported sensors
 - Push button sensor (switching module)
 - Temperature sensor
 - Window contact
 - Binary input
 - Light sensor
 - Motion detector
- 32 channels
 - Up to 4 sensors per channel (when using switching functionality)



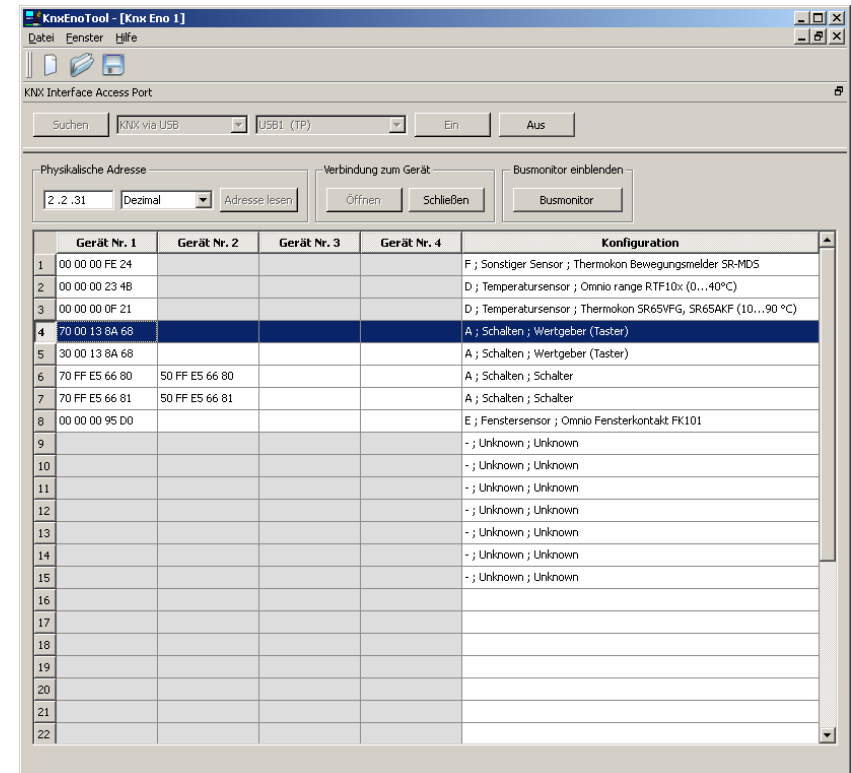
KNX ENO 620/622

- Same functionality as 610
- Additional supported sensors
 - Window handle by Hoppe
 - Additional room control devices (Siemens, Stuhl)
 - Presence detector SR-MDS by Thermokon
- 6 control channels
 - Continuous: light, temperature
 - 2-level: light, temperature, general 0...255, 0...100% and KNX-float



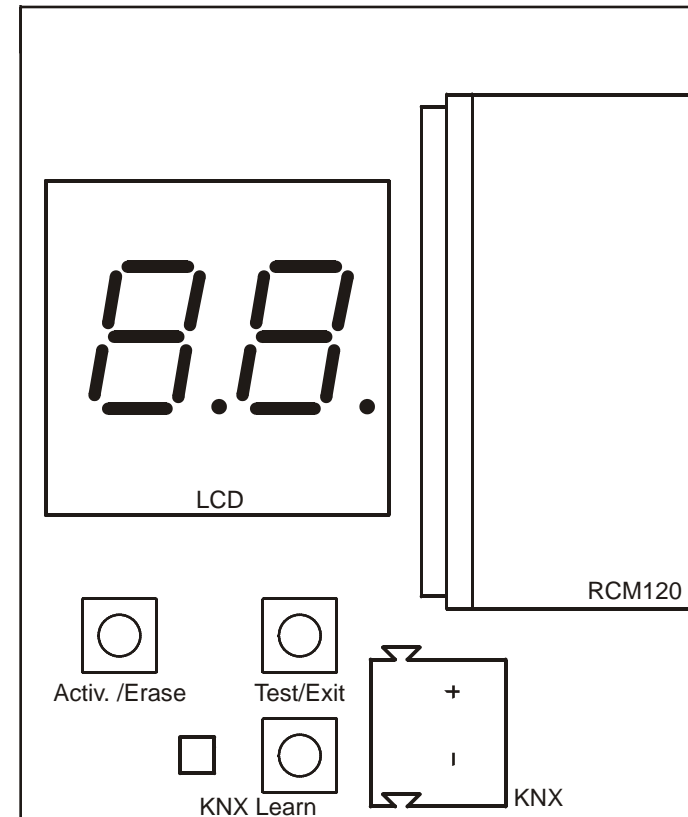
KNX ENO 620/622

- Additional functionality
 - Switch on- and switch off delay for various functions
 - New switching functions: scene, switch, stair light
 - 3-times learn (Protection against unintentional learning)
- Remote control via KNX
 - Administration of links to EnOcean-sensors
 - EnOcean-busmonitor via KNX



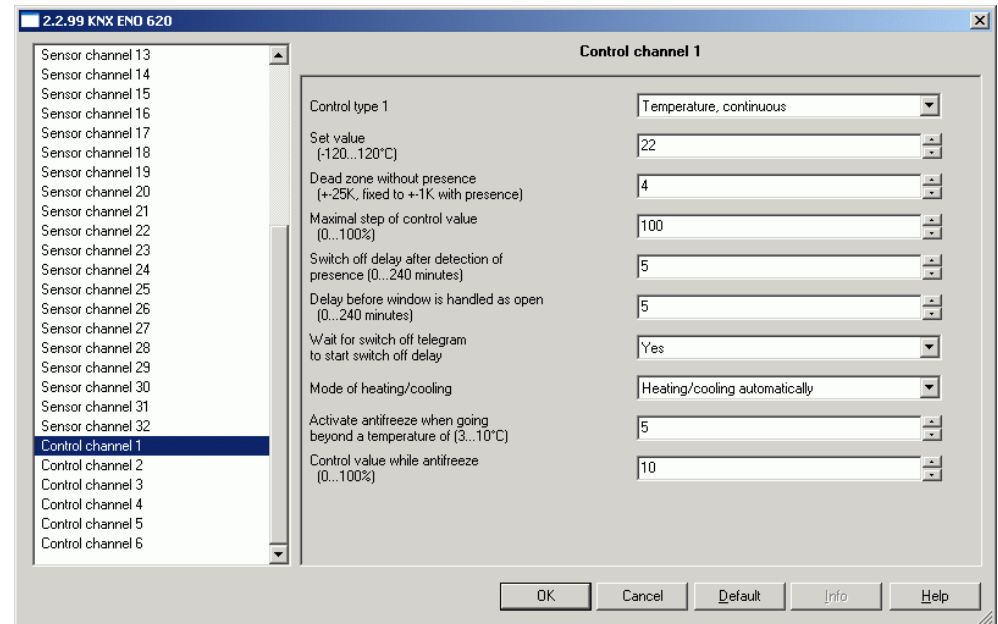
KNX ENO – control elements

- Programming key / LED KNX
 - Setting of the individual address
- Learning mode
 - Left short: „Activ.“ Start of learning mode
 - Left long: „Erase“ delete channel
 - Right short: „Test“ send test telegram
 - Right long: „Exit“ Exit learning mode



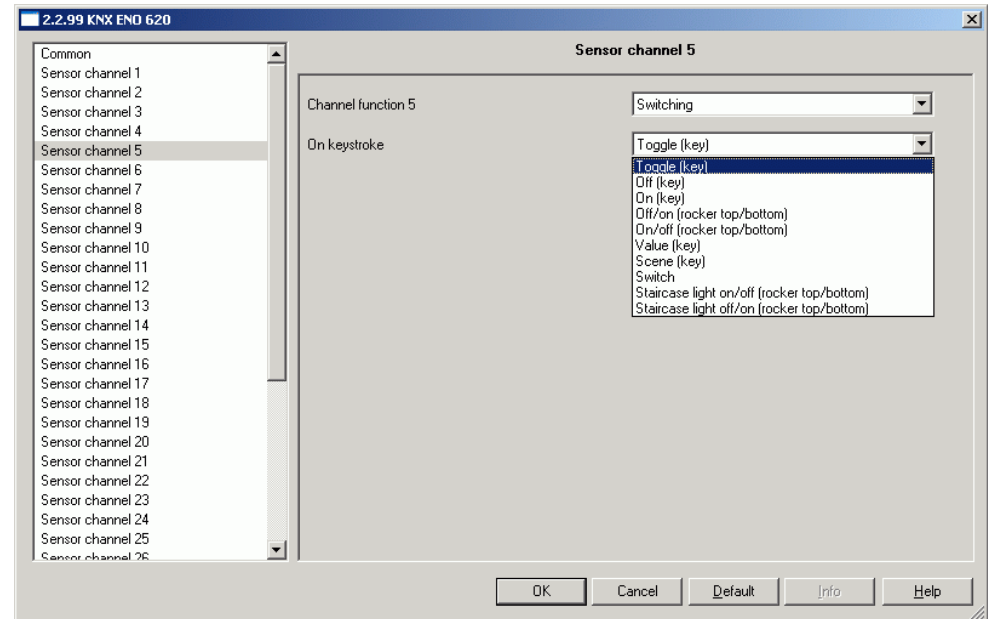
KNX ENO 620/622 - ETS

- Definition of functions
 - Switching
 - Dimming
 - Blind
 - Temperature
 - Window contact
 - Other sensors
 - Control



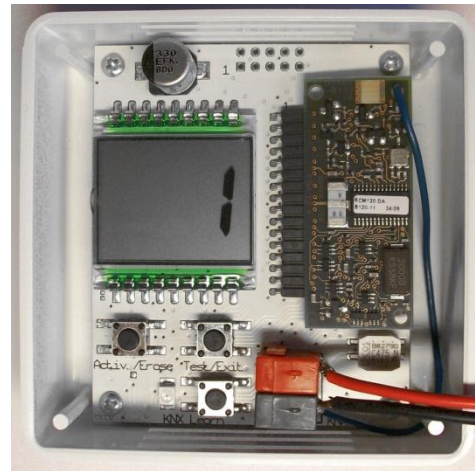
KNX ENO 620/622 - ETS

- Example „Switching“
 - Toggling
 - Off
 - On
 - Value
 - Scene
 - Switch
 - Off / on (rocker top / bottom)
 - On / off (rocker top / bottom)
 - Stair light
- Link with group address



KNX ENO - Linkmode

- Activate link mode
 - Alternate display
 - Channel number (1 to 32)
 - Channel type and count of linked devices
- Choose channel number
- Trigger telegram at sensor
 - Keypress (switching module)
 - Or dedicated link key



Channel number

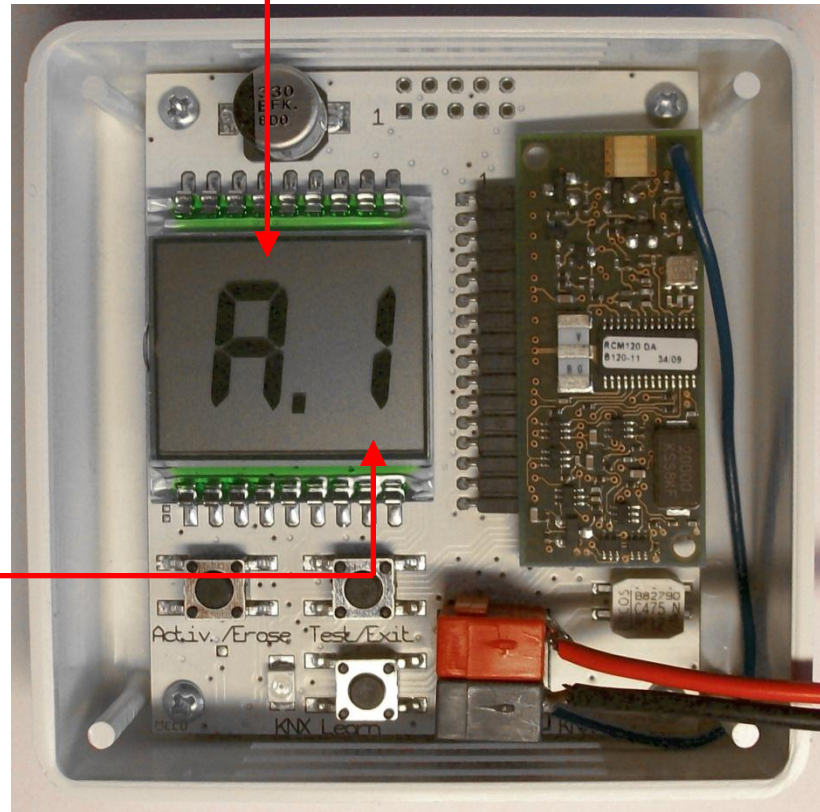


Linked devices



KNX ENO - Display

- Channel functionality
 - A: Switching
 - B: Dimming
 - C: Blind
 - D: Temperature sensor
 - E: Window contact
 - F: Other sensor
- Count of linked devices
 - 0...3: Count
 - F: Channel full
- Received channel
 - In normal mode



Reference

- Torre de Cristal
 - Location: Madrid, Spanien
 - Floors: 52
 - Height: 250 m
 - Construction: 2006-2008

 - > 250 radio gateways
KNX ENO 610



Picture: Wikipedia