Lime
INTERNATIONAL

PRODUCTS CATALOUGE
SMART HOME

KNX

WELCOME

Since its founding, Lime International has been committed itself to providing the best experience in Building Automation Technology to meet the customers need, we put our customers first and strive to secure their loyalty through top quality product

I would like to appreciate deeply to the support of customers and Partners which enabled us to continue to expand and grow the services we offer to provide our clients with the highest level of product and support.

Lime International now has taken the first step forward to a new growth stage. Expand our market share through an aggressive sales force, new product offerings and enhanced customer and partner support. To fulfill our mission of becoming the leading building automation provider by satisfying our customers and creating value, we will implement our strategies through strong and swift management practices that can adapt to the ever changing global business environment. We appreciate your business and look forward to providing you with quality products and excellent customer service.

President Sincerely
Isaac Shami

GETTING TO KNOW US

We are a Company primarily engaged in providing total building automation solutions. We are committed to providing quality and comprehensive, innovative solutions in Intelligent Automation coupled with technical expertise and applied to create total system Solutions to our customers.
Best quality at a convincing cost performance ratio, user-oriented way of thinking and a close and productive cooperation with customers are the key notes for our company

KNX Member
As a member of the KNX Association, we are specialized in the development, manufacture, and distribution of building control systems for the KNX bus. The KNX bus allows internetworking across the trades and integration of all building functions.

Quality Assurance
Most of our products are designed and manufactured in our factory in Germany and we have manufacturing facilities in UK and China. Our manufacturing operations hold the most stringent quality management certification from the International Organization for Standardization (ISO 9001).

INDEX

INDEX

How Smart Is Your Home?

What if all the devices in your life could connect to the Internet? Not just computers and smartphones, but everything: clocks, speakers, lights, door bells, cameras, windows, window blinds, hot water heaters, appliances, cooking utensils, you name it. And what if those devices could all communicate, send you information, and take your commands? It's not science fiction; it's the Internet of Things (IoT), and it's a key component of home automation and smart homes.

Home automation is exactly what it sounds like: automating the ability to control items around the house—from window shades to setting up a lamp to turn on and off at your whim —with a simple push of a button .

Lime has many smart home product categories, so you can control everything from lights and temperature to locks and security in your home.

Why Lime?

Lime is the smart choice, providing the most comprehensive range of automation solutions to meet the needs of today's residential and commercial buildings.

- One of the strengths of the Lime system is that our entire product labeled with the KNX trademark and majority of our product manufacturing in Germany.

- Quality system according to ISO 9001.
- European standard EN 500902-2- (EMC and CE declaration).

The KNX trademark is not a mere declaration of the manufacturer but is based on conformity testing carried out by KNX accredited third party test labs. During these tests, it is not only checked that the device supports the KNX protocol but that it's useful data is coded according to the KNX standardized Data types.

KNX is the world's only open standard for building control and automation and can make major energy savings of up to 60%, significantly reducing the carbon footprint of a building. This is truly green sustainable technology that can be applied to small and large buildings alike.

KNX The Standard is Approved as:

European Standard (CENELEC EN 50090 and CEN EN 133211-)
International Standard (ISO/IEC 145433-)
Chinese Standard (GB/Z 20965)
US Standard (ANSI/ASHRAE 135)

The Main Advantages of KNX are:

It is an International Standard and therefore future proof
By product certification, KNX guarantees interoperability and interworking
KNX can be used for all applications in home and building control and fit for use within buildings of all types
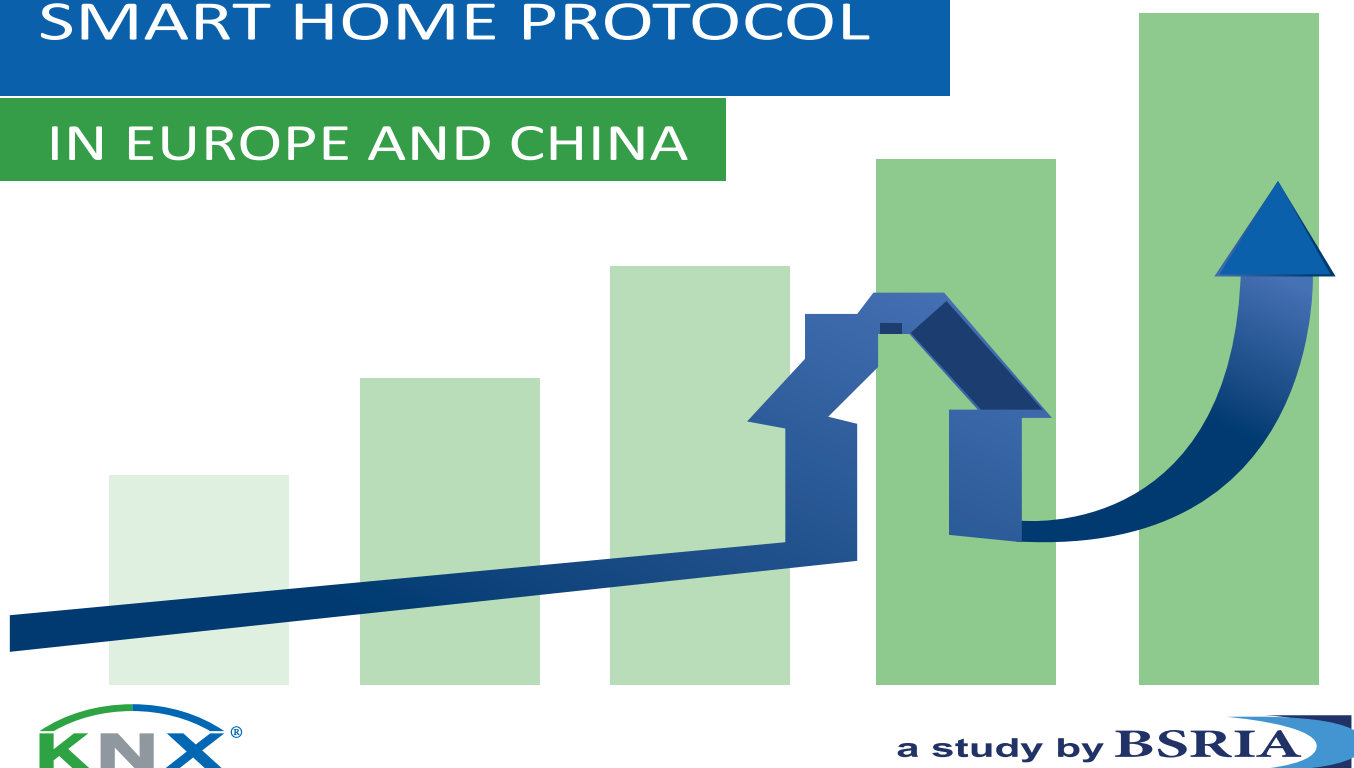KNX supports several Communication Media
KNX can be coupled to other systems
KNX is independent from any hardware or software technology

KNX IS THE LEADING
SMART HOME PROTOCOL

IN EUROPE AND CHINA

KNX THE LEADING COMMUNICATION

KNX is the leading communication protocol in the European & Chinese smart homes / light commercial market

KNX is approved as:

- International Standard (ISO/IEC145433-)
- European Standard (CENELEC EN50090 and CEN EN 133211- and 133212-)
- Chinese Standard (GB/T 20965)
- ANSI/ASHRAE Standard (ANSI/ASHRAE 135)

KNX stands for high product Quality
KNX Association requires a high level of production and quality control during all stages of the product´s life. Therefore all manufacturing members have to show compliance with ISO 9001.

KNX can be used for all application areas in home and building control
KNX can be used for all possible functions / applications in home and building control ranging from lighting and shutter control to security, heating, ventilation, air conditioning, monitoring, water control, energy management, metering as well as household appliances, audio and lots more.

KNX is fit for use in different kind of buildings
KNX can be used in both new as well as existing buildings. KNX installations can therefore be easily extended and adapted to meet new requirments, with little time and financial investment .

External Services

Energy Management

Door communication

Building Control

Ventilation

Lighting

Renewable energy

Air conditioning

Visualisation

Lime INTERNATIONAL

KNX®

HomeAppliances

Shutters and Blinds

Audio & Video

Irrigation

Remote operation via web or telephone

Heating

Smoke Detection

SmartMetering

Anti-intrusion

Lime has Solutions
That Will Give Your House The Smart It Deserves

Lighting Control

From simple wall-mounted dimmers to comprehensive lighting management software systems, Lime offers the right control solution for all of your lighting needs.

Heating & Cooling Control

Ensuring a comfortable temperature in a busy home can be challenging, with our Heating, Ventilation, and Air Conditioning solutions you can save energy, while keeping everyone in the family happy.

Shutter Control

Automated curtains and blinds offer a user the ultimate in convenience. They allow a user to automatically open their curtains at sunrise, and close the blinds when the room illumination level reaches a preset level.

Security

A home should be as safe and secure as possible, thanks to the Lime security solutions users can have complete peace of mind that they have the best protection possible.

Interfaces

The fantastic thing about a smart home is that it can be controlled in so many different ways. From traditional wall switches, to your iOS/Android devices.

Music

Music forms the soundtrack to our lives, with Lime you can completely incorporate your soundtrack into your home. Our music solutions allow a user to play their favorite songs in one room, or in the entire house.

INTERFACE

PRODUCTS

Lime Knx Push Button

The Lime KNX Push Button

- Compatible with all standard 55mm frame systems
- 8 push keys
- Powered by KNX bus,21-30VDC via EIB bus
- Switching and dimming function
- Control of blinds and shutters
- Sending of values
- Recall and storage scene function
- Step-type switch function
- Setting the RTC operation mode
- Multiple operation
- LED indication function

Lime Knx Push Button

Lime KNX Metal Keypad

The push button has a lot of functions that can be used in a wide variety of application areas.

THE FOLLOWING LIST PROVIDES AN OVERVIEW:

- High end metal KNX push button

- Labeling cover can be customized with laser engraving

- Labeling cover area with back lighting design, easy to find in dark

- Extensive Operating Functions

- Configurable Bicolored LED Indicator for Each Button

- Commission and Project Design with ETS4 & ETS5

- Switching and Dimming Function

- Scene Recall and Storage Function

- Roller Blinds and Shutter Function

- Push Buttons can be adjusted for 1 or 2 button operation

- Powered by KNX Bus Power Supply, No Extra Power Supply Required

- Easy installation with a mounting bracket

Description

Lime KNX Touch Panel Keypad

Description

The push button has a lot of functions that can be used in a wide variety of application areas.

THE FOLLOWING LIST PROVIDES AN OVERVIEW:

- Ultra slim and luxury design
- Tempered glass front plate with high touch sensitivity
- Label can be printed and customized with the attached PVC paper
- Extensive Operating Functions
- Configurable Bicolored LED Indicator for Each Button
- Commission and Project Design with ETS4 & ETS 5
- Switching and Dimming Function
- Scene Recall and Storage Function
- Roller Blinds and Shutter Function
- Touch keys can be adjusted for 1 or 2 button operation
- Powered by KNX Bus Power Supply, No Extra Power Supply Required
- Easy installation with a mounting bracket

Lime Knx Lida Keypad

well-defined edges...
This apparel, made with every dimension of Lime skills, has unquestionable character that combines traditional taste and modern attitude.

Description
- Material : full brass.
- Windows opening : 4 holes for PB (ABCD).
- Button: round or square buttons .
- Silicone: to reduce sound impact between buttons and face plate.

INFINITE CUSTOMIZATION OF COATINGS, BUTTONS & MECHANISMS

- 4 buttons on a single panel.
- Standard buttons available in plate finish
- 15 available coatings on solid brass panel (more on demand)

Riva Knx Switch

THE INTELLIGENT SOLUTION FOR CONVENIENT BUILDING CONTROL
- Compatible with all standard 55mm frame systems
- KNX-TP connection for easiest integration into the KNX-system
- High resolution colour graphic display
- Configurable directly in the ETS without plug-in
- No additional components are required
- 4 keys (illuminated with RGB-LEDs)
- Proximity sensor (contactless activation when approaching)
- Brightness sensor
- Define up to 30 pages with functions
- Functional groups with 6 pages each (light/shading/value encoder/state display/scenes)
- Choose from 3 different icon libraries
- Standard colours: white, black

Temperature Sensor
- Installation dimensions: 55mm x 55mm x 20mm
- Temperature measurement (measurement range: °55-C - °55+C)

Temperature & air humidity measurement & motion detector
- Installation dimensions: 55mm x 55mm x 20mm
- Temperature measurement(°55-C - °55+C)
- Air humidity measurement (%0 until %100 - non-condensing)
- Motion detector (range approx. 5m.)
- Configurable RGB-Led for displaying the control status (active/inactive)
- Manufactured in Germany

Riva Knx Switch
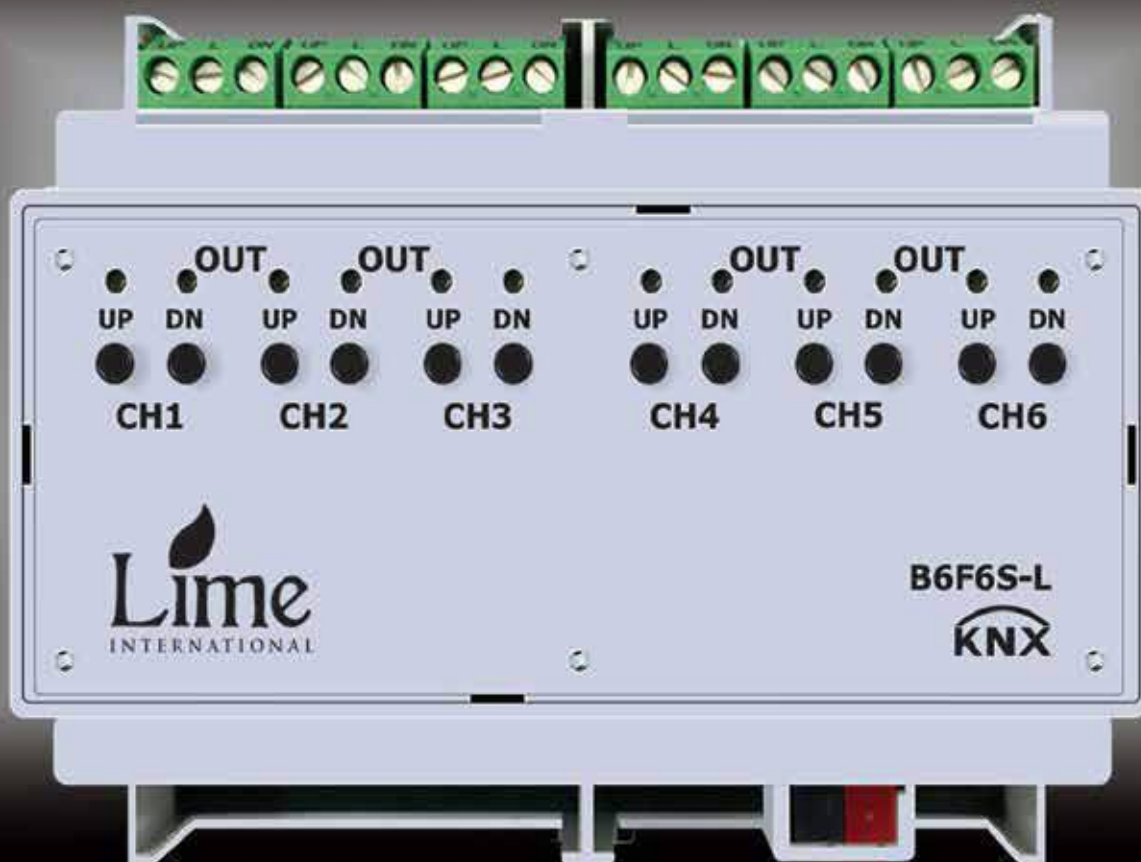
RITA Room Controller

Lime RITA KNX keypad :

- Built-in temperature and humidity sensor
- Built-in RGBW light sensor
- Additional large display LCD display
- Four interactive electronically inscribable, mechanical switching rockers
  with max. 32 switching functions
- The menu button "RITA"
- Binary input e.g. for use with conventional switches
- Socket for supplying the device via the KNX bus
- (No Additional Supply Necessary)
- Room controllers for heating and cooling
- Size: 90 x 161 x 14,6mm
- Manufactured in Germany

Description

WANDLAMPE

DECKENFLUTER
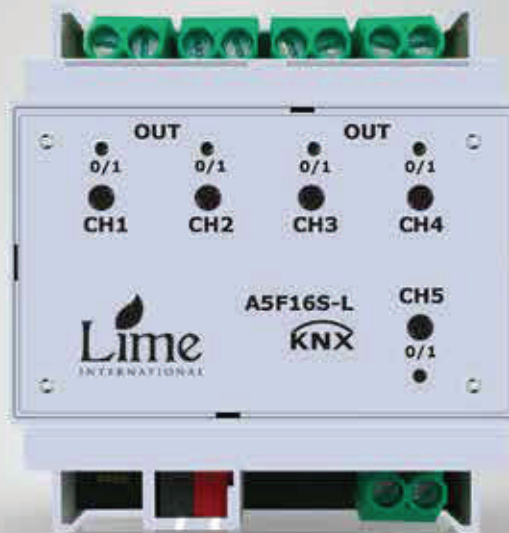
HEIZUNG

BESCHATTUNG

RITA Room Controller

NETRA
SERIES

Lime Knx Switch Actuators

- The Netra – series standard Load switching actuators are especially suited for high loads, the load for each channel is 16A at 250V AC, each channel can be assigned its own mains phase.
- Each channel is connected to a screw terminal
- Each channel has a button for manual operating and a LED for the switching status.
- 3 , 5 and 9 channels
- **Time functions, logical functions, status, scenes (32), announce function, inhibit function, hour meter**
- **Load up to 140µF**

- Power supply   24V DC via KNX
- Auxiliary power supply   not necessary
- Protection class   IP 20

- Dimensions
   A3F16S-L 53 x 90 x 60 (3 RU)
   A5F16S-L 71 x 90 x 60 (4 RU)
   A9F16S-L 106 x 90 x 60 (6 RU)

- Installation   35mm DIN rail
- Max. group addresses   96
- Rated load per contact   16A / 250V 50...60Hz
- Mechanical life-cycle   106 switching operations
- Operating temperature   45 °C

- Manufactured in Germany

Purely Ohmic Load

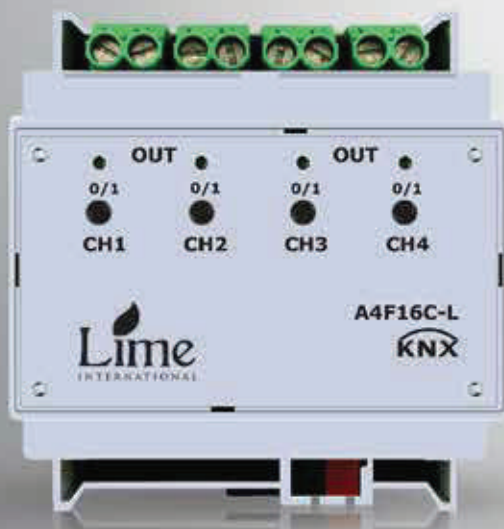# Lime Knx Switch Actuators

- The netra-series switching actuators are especially suited for high loads, also capacitive loads, with high start-up peak (C load).
- The load for each channel is 16A at 250V AC, each channel can be assigned its own mains phase. Each channel is connected to a screw terminal
- Each channel has a button for manual operating and a LED for the switching status.
- 2 , 4 , 6 and 9 channels
- **Time functions, logical functions, status, scenes (32), announce function, inhibit function, hour meter**
- **Load up to 200µF**

- Power supply   24V DC via KNX
- Auxiliary power supply   not necessary
- Protection class   IP 20

- Installation   35mm DIN rail
- Max. group addresses   96
- Rated load per contact   16A / 250V 50..60Hz
- Mechanical life-cycle   106 switching operations
- Operating temperature   -5 .... + 45 °C

- Maximum power per contact
- Incandescent lamp load 3680W
- Fluorescent lamp load
- Uncomp. (C max 200uF) 2500 W
- Compensated 3680 W
- Low volt. halogen with transf. 2000W

- Dimensions
  A2F16C-L 53 x 90 x 60 (3 RU)
  A4F16C-L 71 x 90 x 60 (4 RU)
  A6F16C-L 106 x 90 x 60 (6 RU)
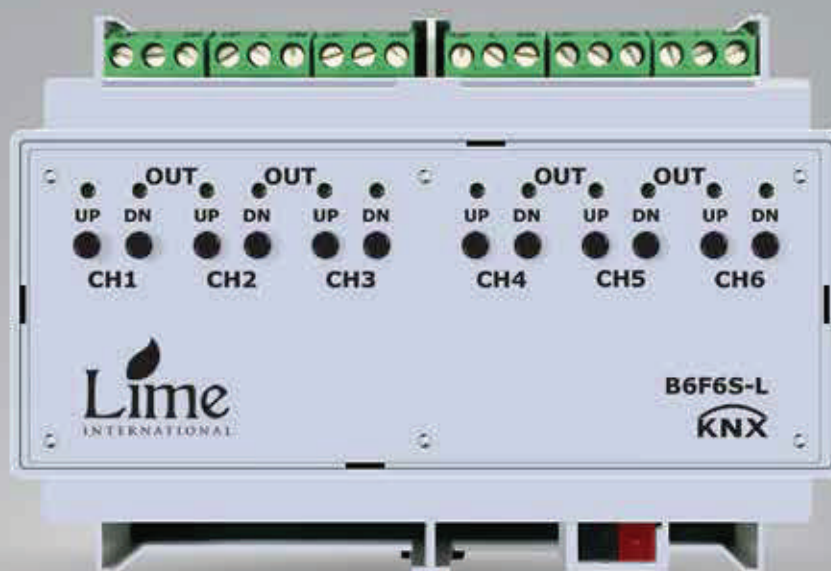 A9F16C-L 159 x 90 x 60 (9 RU)

- Manufactured in Germany

C-Load Type

Lime Knx Shutter Actuators

- The netra series 2-fold / 4-fold/ 6-fold shutter/blind-control actuator can control
  2 , 4 , 6 independent shutter/blind motors.
- The load for each channel is 6A at 250V AC, each channel can be assigned its own
  mains phase.
- Each channel has buttons for manual operating and switching status LED`s .
- **Time functions, positions, scenes (8), alarm function, inhibit function, status**
- **Mechanical contact locking for each channel**

Technical Data

- Max. Group addresses: 32
- Power supply: 24V DC via KNX

- Auxiliary power supply: not necessary

- Protection class: IP 20

- Dimensions: B2F6S-L   53 x 90 x 60 (3 RU)
                                 B4F6S-L   71 x 90 x 60 (4 RU)
                                 B6F6S-L   106 x 90 x 60 (6 RU)

- Mechanical life-cycle: 10^6 switching operations
- Operating temperature: -5 ... +45°C

- Rated load per contact: 6A / 250V AC 50...60Hz   - Manufactured in Germany

Binary & Universal Interface

The netra series binary inputs can generate bus telegrams on 4 independent channels. The sensing voltage required is supplied by the devices from bus voltage (**BI4FS-L**) or is 230V (BI4F230-L) Each channel is connected to a screw terminal.
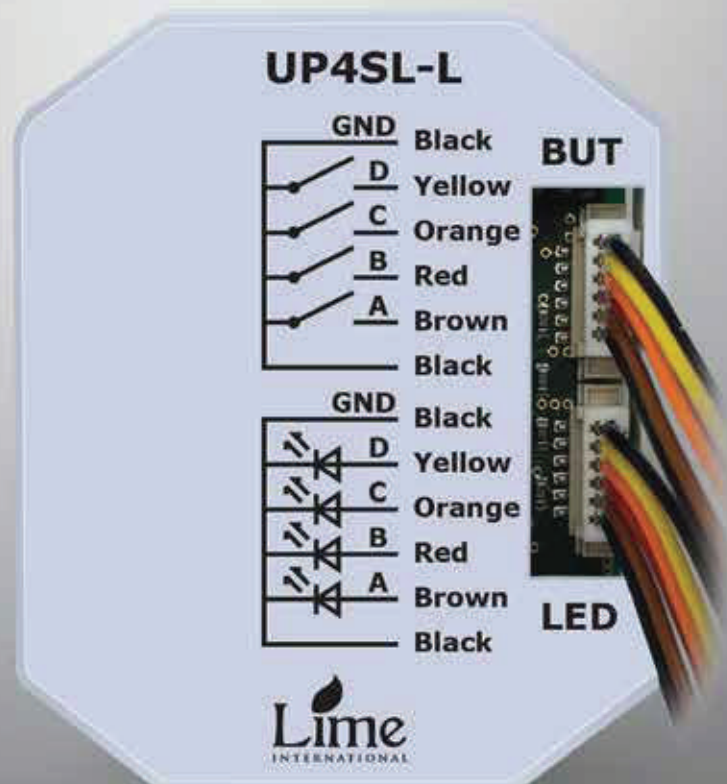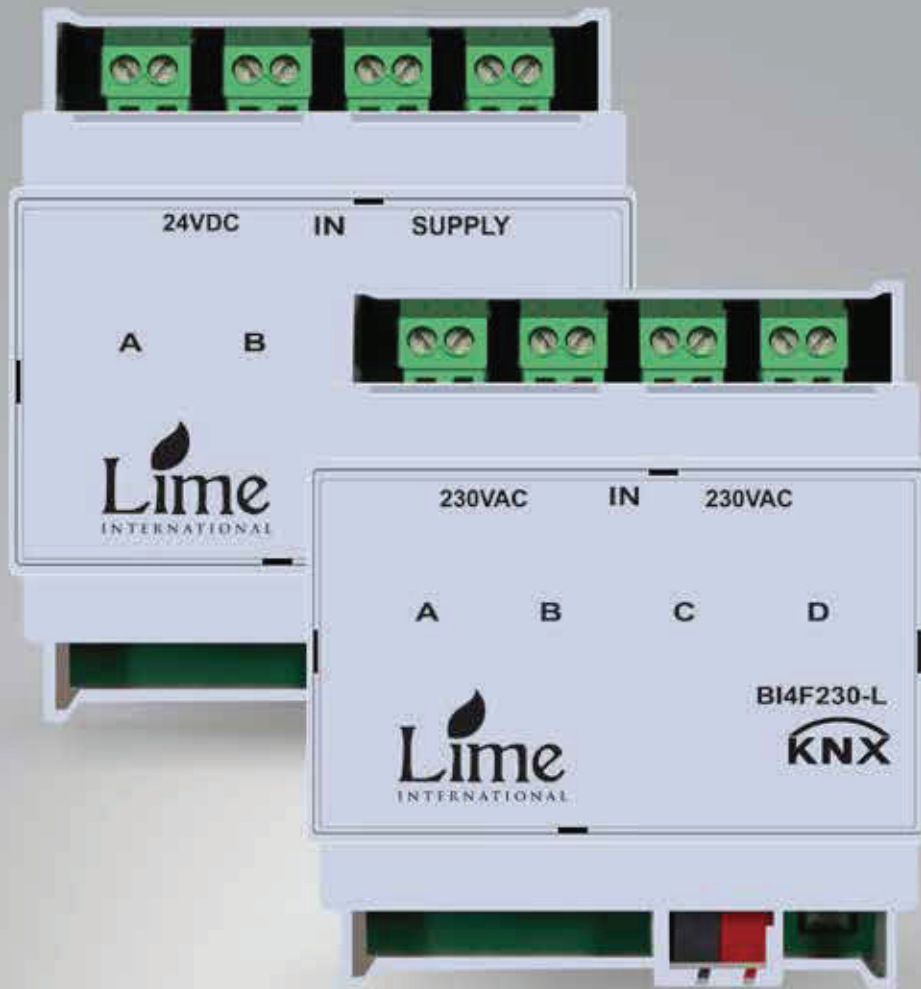
- Input voltage   potential free max.100m (**BI4FS-L**)
                                         180...250V AC/DC (BI4F230-L)
- Auxiliary power supply   not necessary
- Protection class   IP 20
- Dimensions
  BI4FS-L   71 x 90 x 60 (4 RU)
  BI4F230-L   71 x 90 x 60 (4 RU)

- Installation   35mm DIN rail
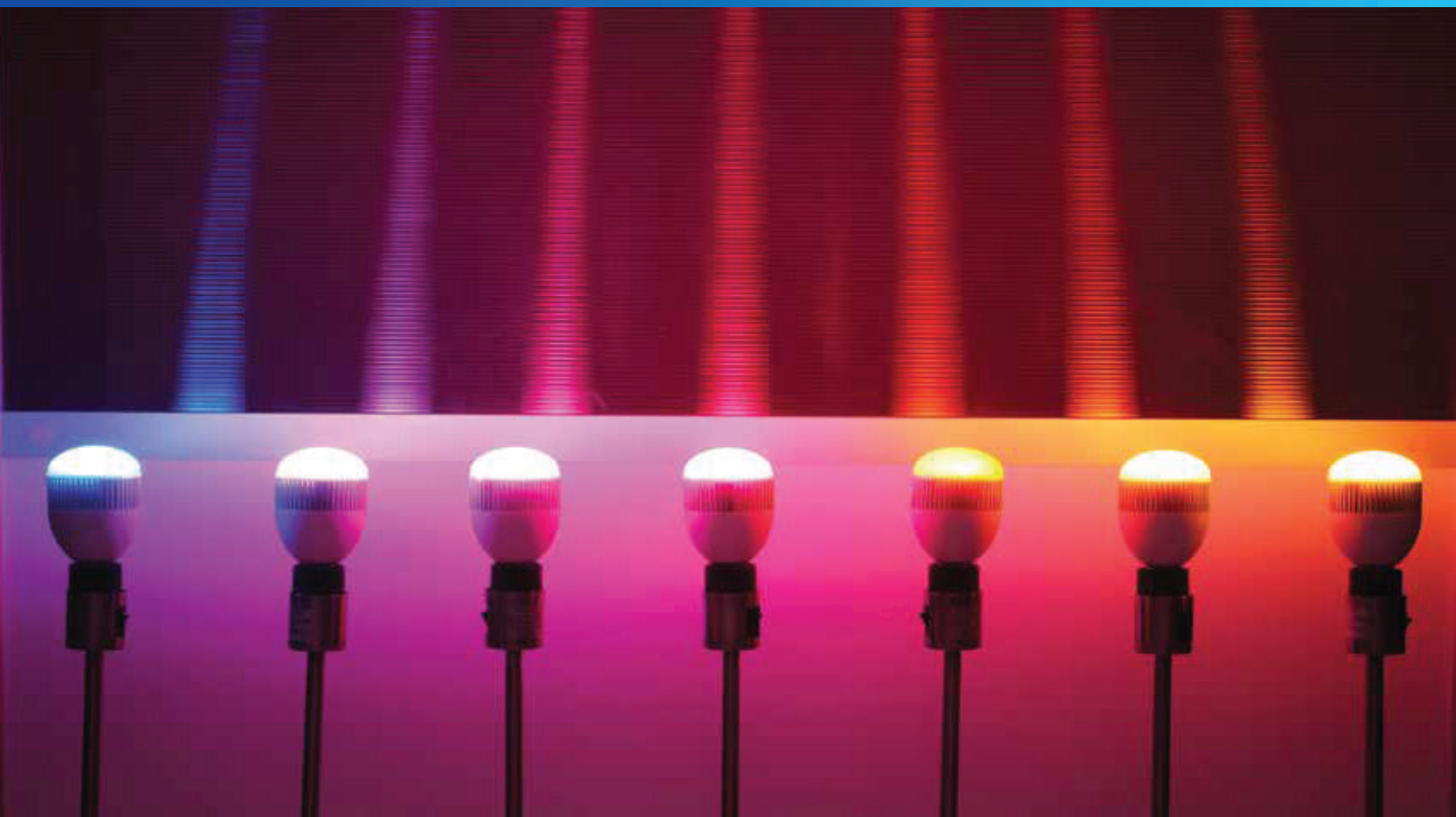- Max. group addresses   36
- Operating temperature   -5 .... +45 °C

- The new universal pushbutton devices provides separate wire connectors. Rocker function or single buttons points are programmable.

- The universal pushbutton interface from lime is push button interface for 4 single buttons with LED

- Manufactured in Germany

24VDC   IN   SUPPLY

A   B

Lime
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230VAC   IN   230VAC

A   B   C   D

BI4F230-L

KNX

Lime
INTERNATIONAL

UP4SL-L

GND   Black

D   Yellow

C   Orange

B   Red

A   Brown

Black

BUT

GND   Black

D   Yellow

C   Orange

B   Red

A   Brown

Black

LED

Lime
INTERNATIONAL

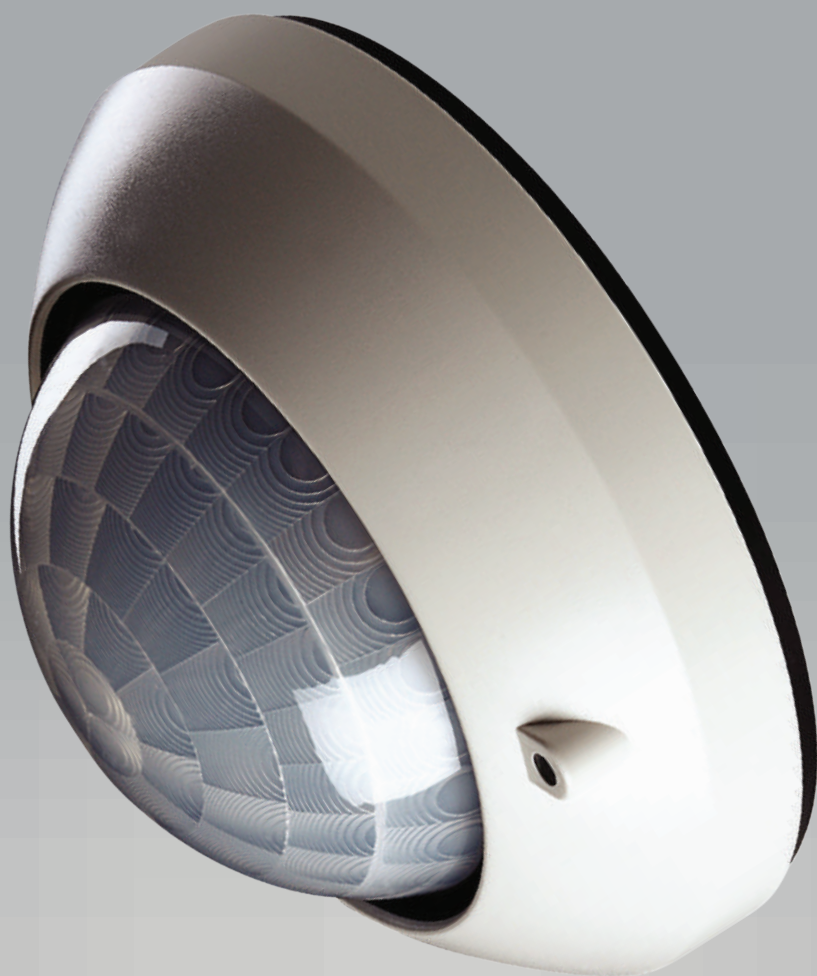Binary & Universal Interface

Dimming
Actuators

Lime Knx LED Dimmer & RGBW

- 4 Channels, each 5 A, pulse-width modulated.
- Variable voltage in- and output 12 to 24 V.
- Integrated bistable 230 VAC relay 16 A, Inrush 165A@20ms, 800A@200µs.
- Integrated protection functions for: overload, short circuit, under voltage, over temperature, reverse voltage protection
- Commissioning test functions.
- RGB or HSV, four different dimming characteristic for optimized adaption to LED module and smooth dimming over the complete color space.
- Automatic relay switching (on/off) with two parameterizable blocking times.
- Dimmer and sequencer, scenes and bit-scenes.
- 16 predefined sequences and 5 freely configurable sequences.
- Channels can be freely configured to:
    4x separate channels
    2x warm/cold white channels
    1x warm/cold white channel, 2x separate channels
    1x RGBW channel
    1x RGB channel, 1x separate channel
- KNX Objects of protection functions
- PWM 488 or 600 Hz
- REG version - Easy DIN rail mounting (4 units)   - Manufactured in Germany

Lime Knx LED Dimmer & RGBW

Sensors

Lime Knx Presence Detector

Lime Knx Presence Detector

Description

The Ceiling Presence Detector is installed on a ceiling and monitors an area below it. The device is used for the requirement-oriented control of lighting systems, room thermostats and other electrical consumers in interior rooms. Depending on the configuration, the device is operated for detecting motion (as a ceiling detector), evaluating presence (as a presence detector) and room surveillance (alert operation).

When used as a "ceiling detector", the device is normally installed in passageways of buildings for switching on the lighting automatically, as required. Lighting switched on by a ceiling detector is only switched off if there are no persons in the monitored area.
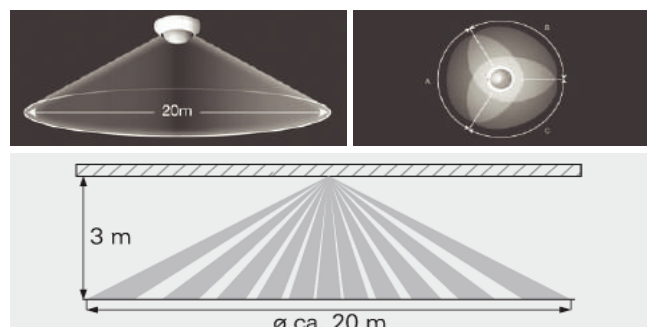
The application as a "presence detector" is normally used in areas where people spend longer periods of time (e.g. workplace as well as bathroom/toilet...) for controlling the lighting or heating/ventilation. The device can evaluate slightest motions in this application.

Unlike the ceiling detector functionality in brightness-dependent operation, brightness is evaluated continuously if the lighting is switched on, even during active motion detection. Thus, for example, lighting can be switched off when a defined brightness threshold is exceeded, e.g. by incoming daylight.

How PIR sensors work

PIR movement sensors work by detecting the movement of body heat. Ideal for spaces where a defined detection pattern is required.

System Devices

KNX PowerIP

The KNX PowerIP combines the central functions of a KNX bus line in a compact device (6TE): a 640 mA bus power supply with inductor, IP router and IP interface. In addition to the bus voltage, the power supply also has an auxiliary voltage output. The IP router in the device allows the forwarding of telegrams between different lines via a LAN (IP) as a fast backbone. Via the interface function the KNX line can be addressed directly from a PC.

The device operates according to the KNXnet/IP specification using core, device management, tunneling and routing. The configuration is done with the ETS (version 4.2 or higher). An easy-to-read OLED display on the front allows the display of the operating parameters locally on the device.

Mechanical data

- Housing: plastic
- DIN rail mounted device, width: 6 modules (108 mm)
- Weigth: approx 300 g

User Interface

- Four keys for on device settings
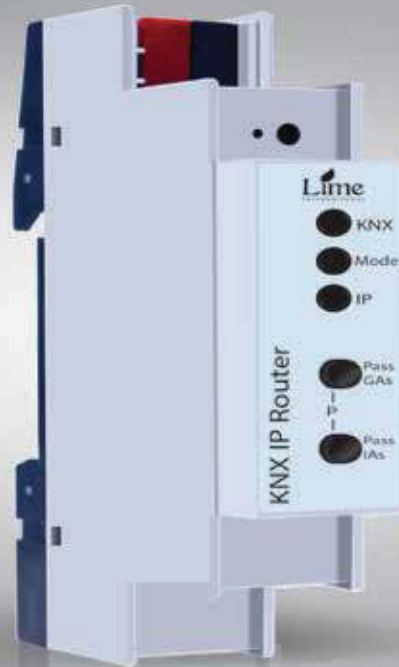- OLED display
- KNX programming LED

- Manufactured in Germany

Ethernet

- 100BaseT (100Mbit/s)
- 6 KNXnet/IP Tunneling connections KNX
- Medium IP/TP
- Filter table 8 kByte (64k group addresses)
- Compatible with ETS 4.2 (or higher)

Connectors

- Plug for external power supply 230 V AC
- Connector for KNX TP (red/black)
- Connector for auxiliary power output (yellow/white)
- LAN RJ-45 socket

KNX IP Router

The KNX IP Interface is the successor of the well-tried KNX IP Router . The new compact design has a width of only 1 module (18 mm) and is powered by the KNX bus.

The device forwards telegrams between different KNX TP lines via LAN (IP) as a fast backbone and is an alternative to KNX line coupler. The KNX IP Router can also be used in the ETS® as a programming interface. The KNX IP Router has a full-range filter table and a large telegram buffer. The buttons and LEDs on the device allow a local diagnosis including the operating status and communication errors.

Controls and indicators

- Housing: plastic
- DIN rail mounted device
- Width: 1 TE (18 mm)

Controls and indicators

- 2 buttons + KNX programming button
- 3 LEDs bicolor + KNX programming LED

Ethernet

- 10BaseT
- 5 KNXnet/IP Tunneling connections

- Manufactured in Germany

KNX

- Medium IP/TP
- Filter table 8 kByte (64k group addresses)

Power supply

- From KNX Bus, approx. 15 mA

Connectors

- KNX connector
- LAN RJ45- socket

Other Componantes

- USB Stick as Interface to KNX TP

- Successor of the KNX USB Interface Stick

- Programming interface for ETS® (ETS3 or higher)

- Support of KNX long frames • Case: USB stick, plastic /

- Weight: ca. 12g • Size: (LxWxH): 58x18x12 mm

- Connectors: KNX, USB Type

- Made in Germany

KNX Power Supply

The Lime KNX power supply KNX PS640-L is a 640 mA power supply with high efficiency and a small footprint of only 3US(52.5mm). The device has KNX bus choke output and an additional output for ancillary power.
The -30 ~ + 70 C wide temperature operation range can meet all kinds of application. LED indicators are used in case of normal operation, overload conditions and RESET operation. it is perfectly suitable to power up any products labeled with the KNX trademak. Lime KNX PS640-L is engineered to be a reliable and safe solution for KNX bus inviroment.

KNX IR Emitter

4 channels

Learning and storing up to 64 different IR functional control codes for each channel

Sending time and sending delay can be set for each control codes

Each main function can include 5 slave functions, this way is suitable for controlling

Several functions via one object at a time

You can set the emittion times and the delay time before sending for each function code.

A channel can link up to 16 group addresses

The IR functional control codes can be assigned to 1bit or 1byte type of object

1bit object can recall the control codes from all channels

1byte object can recall the control codes from its own channel

Can learn more than 95% of remote controllers in the market

The IR Learner uses a common USB port to communicate, it is easy to learn the functional

control codes of the IR remote controller and store the codes to the database of the PC Software

Made in China

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INTERNATIONAL

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