

U.I. Lapp GmbH	<b>PRODUCT INFORMATION</b>	
	<b>UNITRONIC® BUS EIB / KNX</b>	12.09.2012



### Info

EIB / European Installation Bus  
KNX/communication in building management

### Application range

The product is designed for use in building management, e.g. for decentralised control of lighting, heating, air-conditioning, ventilation, energy management, blinds, time management, locking systems etc.  
The cable can be laid on or under plaster; in pipes, cable ducts; in dry, damp or wet environments.  
EIB installation mainly consists of sensors/command-transmitters (e.g. light barriers, switches, thermostats, infrared, wind meters, timers), and actuators (e.g. engines, heaters, ventilators, lights, blinds).  
KNX technology was formed from the merging of three established European bus standards: EIP, EHS (household appliances and consumer electronics) and Batibus (heating/ventilation/air conditioning)

### Design

Screened installation cable based on type J-Y(ST)Y according to DIN VDE 0815, solid bare copper conductor,  $\varnothing$  0.8 mm, measurements 2 x 2 x 0.8  $\varnothing$ . 4 solid cores twisted to a star quad; colours of cores: 1st pair red + black, 2nd pair white + yellow.  
Screening: wrapped with aluminium-laminated plastic foil  
PVC-based outer sheath  
Colour: green  
COMBI version with additional power supply cables 3 x 1.5 mm<sup>2</sup>; core colours: blue, black, green-yellow

### Product features

Serial data transmission  
EIB cable has been tested at 4 kV (1 min.) in a water bath

### Remark

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.  
Copper price basis: EUR 100/100kg. Refer to Appendix T17 for the definition and calculation of copper-related surcharges.  
Please find our standard lengths at: [www.lappkabel.de/en/cable-standardlengths](http://www.lappkabel.de/en/cable-standardlengths)  
Packaging size: coil  $\leq$  30 kg or  $\leq$  250 m, otherwise drum  
Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).  
Photographs are not to scale and do not represent detailed images of the respective products.

### Technical Data

Mutual capacitance:	(800 Hz): max. 100 nF/km
Peak operating voltage:	(not for power applications) 250 V
Conductor resistance:	(loop): max. 73.2 ohm/km
Minimum bending radius:	Fixed installation: 10 x cable diameter
Test voltage:	Core/core: 4000 V
Temperature range:	Fixed installation: -30°C to +70°C

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Part number	Article designation	Number of pairs and mm or mm <sup>2</sup> per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/m)
PVC versions					
2170240	UNITRONIC® BUS EIB	2 x 2 x 0,8	6.6	21.0	54
2170242	UNITRONIC® BUS EIB COMBI	2 x 2 x 0,8 mm + 3 x 1,5 mm <sup>2</sup>	12.7	64.0	128
Halogen-free versions					
2170241	UNITRONIC® BUS EIB H	2 x 2 x 0,8	6.6	21.0	54