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KNX/EIB Logic Machine II

KNX/EIB Logic Machine II – the easiest way to create complex logic and visualization in KNX/EIB network

Logic Machine II enables installer to efficiently customize building automation processes, easily delivering unlimited flexibility benefit to end users in a cost-effective way.
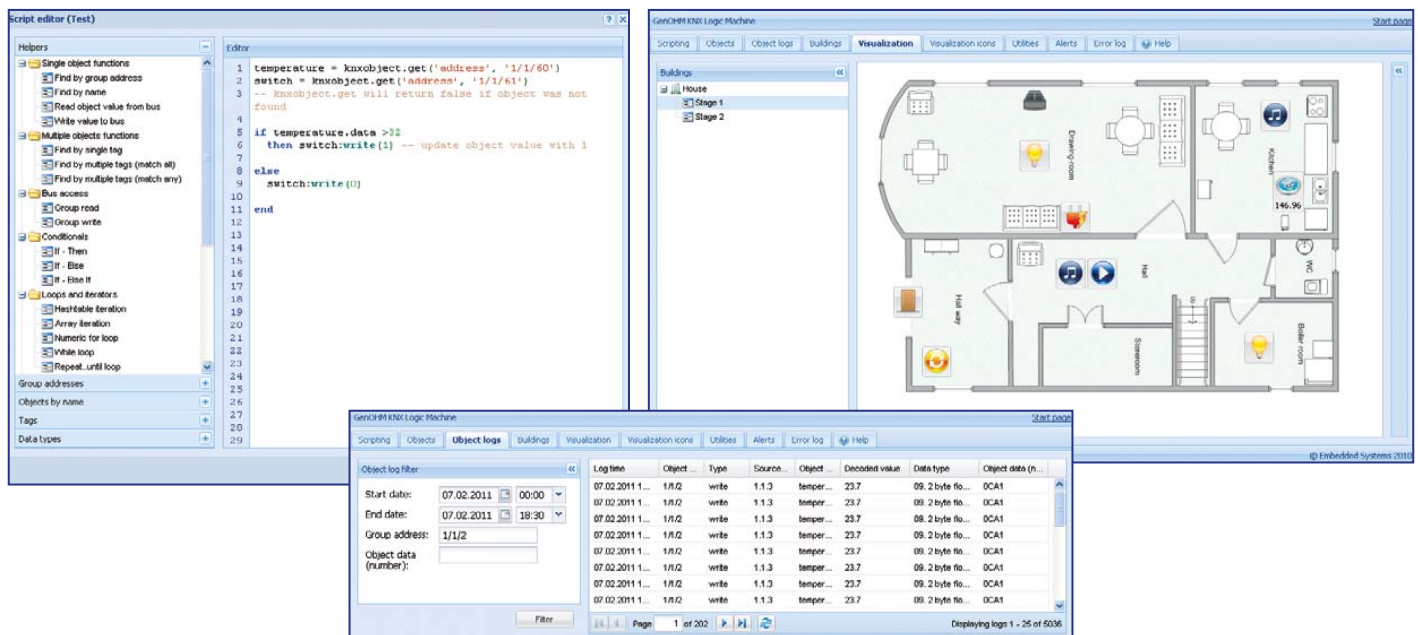
Standard compatible:

- KNX/EIB
- Modbus
- EnOcean
- DALI
- DMX
- TCP/IP
- RS485
- BACnet

IP Router functionality

- Interactive telegram filtering by source and/or group addresses
- Object logger
- Secure tunnel protocol for SCADA applications and KNXnet/IP connection
- Fast multi-level visualization creation and processing
- PC, Android/iOS touch visualization

- Event-based, scheduled and resident scripts
- Automatic detection of KNX/EIB objects
- 2 USB ports on board for WiFi, GSM and other peripheral connection

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KNX/EIB Logic Machine II user interface and visualization

Technical specification

Logic Machine II

Platform	2 x CPU on-board: — ARM9 400MHz — Atmel AVR
SDRAM	64 MB
Flash	256 MB
Connectivity	1 x 100BaseTX ethernet port, 2 x USB ports, 1 x RS485
IO on-board	4 x open collector outputs for controlling external relay modules; 4 x 0-30 V analogue-binary inputs
KNX interface	Integrated KNX FT1.2
Power input	7-36 VDC from external power supply.
Real Time Clock	yes
Hardware watchdog	yes

Physical and Warranty

Case	52 x 90 x 51 mm (W x H x D), DIN-rail plastic
Operating temperature	-30°C to 85°C
Warranty	2 years

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Features

Fast multi-level visualization creation and processing
Create your visualization map just in few steps by freely uploading background image file and adding objects. Built-in 400MHz CPU guarantees very fast visualization processing even with huge count of objects.

PC, Android/iOS touch visualization
A specific touch visualization is included in Logic Machine for Android and iOS system based touch devices.

IP Router functionality
Logic Machine acts like IP router with functionality like KNX telegram filter by source and group addresses, firewalling and quality of service. It can be used as KNX Line coupler or Area coupler.

Object logger
There is a possibility to enable logging for each of the KNX objects to trace its historical activity afterwards.

Secure tunnel protocol for SCADA applications
To unite two or more offices over Internet secure tunneling should be used making one common KNX network over TCP/IP network.

Event-based, Scheduled functions and Resident scripts
There are three types of scripts implemented in the Logic Machine:

- *Event-based* - scripts that are executed when a group event occurs on the bus. Usually used when nearly real-time response is required.

- *Scheduled* - scripts that run at the required time and day. Can be used for various security systems and presence simulations.

- *Resident function* - scripts that use polling to check for object state changes. Usually used for heating and ventilation when data is gathered from more than one group address.

Object names and tagging
You can use unique names or several tags to mark your objects. This way group addresses can be easily changed without the risk of breaking scripts. Tagging system allows working with several similar objects at once.

Scripting repository and built-in helpers
Scripting editor features built-in code snippets which make creating scripts significantly easier for the end-user. All customers gain access to the scripting repository with examples and tutorials for all common scenarios.

Automatic detection of all objects
Logic Machine automatically adds new objects to the database when group events occur, so there is no need of doing it manually. Just set the correct data type and your new object is ready for scripting.

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Standard and protocol Compatibility

Wi-Fi™
Through USB

Modbus
RS485 or Ethernet

GSM
Through USB

DALI
Through KNX-DALI gateway
(7mm width)

KNX
On-board

enocean alliance
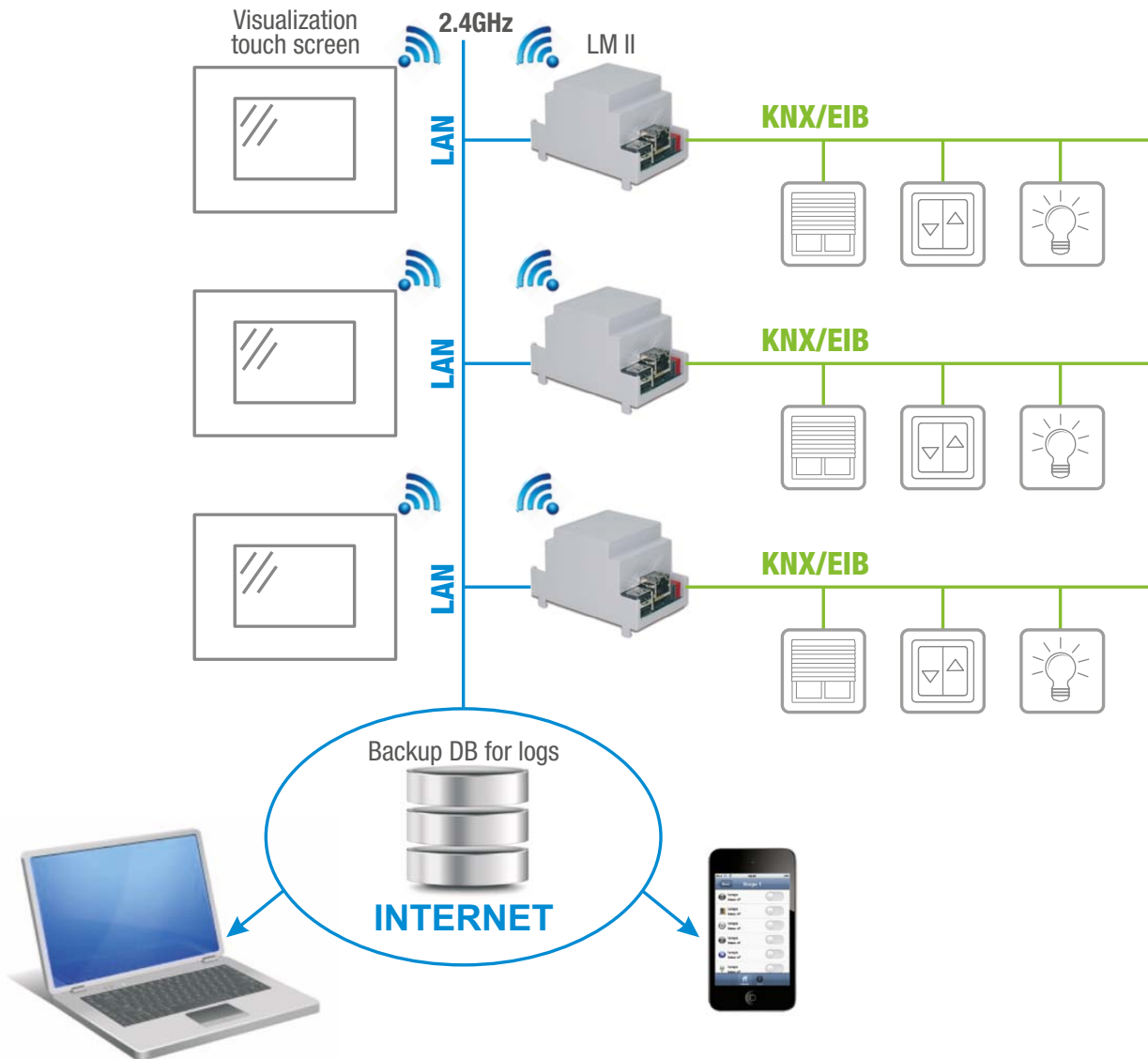No Wires. No Batteries. No Limits.
Through USB

ekey
Through RS485

DMX
Through RS485

BACnet
BACnet

Other devices through USB

LogicMachine2
The easiest way to create
complex logic
openrb.com

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Application example

Installation is done in trade center consisting of 16 floors.
For transparency purposes only three are showed in this application example.

Visualization touch screen — 2.4GHz — LM II — LAN — KNX/EIB

Backup DB for logs

INTERNET

Used functionality:

- IP Router with telegram blocking from one line to another
- Each LM acts also like visualization server for separate touch screens on each floor
- Object status logging for each line on respective LM
- Blinds, lighting and temperature control with specific scheduled and even-based scripts
- Each separate LM is accessible from internet.