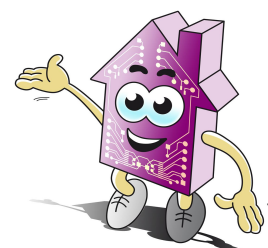




eHouse by iSys - Intelligent Systems Development since 2000



iSys - Intelligent Systems is R&D company from POLAND/EU and develop & manufacture eHouse Building Automation System & IoT since 2000.

eHouse - functionality and gains

- Energy saving and optimization (electricity, heating, cooling, irrigation, ventilation)
- Rural Development: optimization of production, breeding, storing
- Improvement quality and conditions of living in urban & non-urban regions
- No power grid installations - automation and optimization (Very Low Voltage system - photovoltaic, wind energy)
- Autonomous work, monitoring, measuring, regulating, signaling
- Security, safety, an Anti-theft system (for property, things, and animals) with SMS notification + GPS
- A long life cycle of the system (more than 15 years)
- Wired and Wireless automation systems (RF, GSM)
- Remote control from any place in the world (Internet, SMS, Email, WWW, Cloud, Infrared, WiFi)
- Systems integration, cell/segmented installations
- IoT systems, smart city/village, smart lighting/metering

Our R&D is focused on:

- Designing electronics (mostly for building automation and derivatives BAS, BMS, BIM, IoT)
- Designing microcontroller circuits & PCBs



- Developing firmware for microcontrollers
- Developing software for various SW/HW platforms
- Developing communication protocols
- Integrating to third-party products for more advanced BMS/BIM solutions

We have several (integrated together) eHouse system variants depending on communication media, various budgetary levels: from OEM/DIY to professional switchboards based on industrial relays and components.

eHouse is also sold as OEM/DIY modules for amateurs & hobbyist (so it is well documented and tested by "mass of not well-qualified end-users")

Currently, eHouse has 6 communication variants integrated each other, by server software based on Linux (x86, x64, RPI 1/2/3, Banana PI/PRO, Orange PI):

- eHouse Ethernet - very big controllers more than 50 smart points of different types (RoomManagers, DrivesController, LevelManager, SwimmingPool Controller) (for Mini-Switchboard installation)
- eHouse RS-422/485 - similar size (RoomManager, HeatManager) (for Mini-Switchboard installation)
- eHouse PRO (central switchboard installation ~128 Inputs / ~128 Outputs) works on RPI with I/O modules connected
- WiFi (all-in-one) - (PCB/OEM/Socket Cans) DIY (may implement 100-230VAC power supply and relays on board)
- eHouse CAN (Controller Area Network) ~16 smart points - (PCB/OEM/ electric socket cans) DIY.
- eHouse RF 863/902/915 - CAN variant with pluggable RF module (OEM)
- eHouse RFID (Access Control)
- eHouse Thermo (RF digital thermometers with presets)

Any hybrid of the system can be realized:

- Wired vs. wireless
- Small system/low budget (OEMs) vs. unlimited/professional (Switchboards)
- BAS/BMS/BIM systems
- External Security system integration
- eHouse Cloud or Private Cloud support

Full description of controllers is located at: http://building-automation.isys.pl/ehouse,automatyka_budynkowa.htm

Main Features our controllers:

- Big amount of "intelligent points" (10-256):
- Binary Inputs (on/off)
- Binary outputs (with relay drives)
- Measurement inputs (ADCs)
- Infrared Reception (input) control system via IR controller
- Infrared Transmission (output) control Audio/Video systems from controller
- PWM VDC LED dimmers
- Very save (Low Voltage 5-16VDC) construction - no relays on controller's PCB (no interference & electrical breakdown possibility) - except (all-in-one WiFi)
- Cheapest system when optimized to big amount of intelligent points



- Encrypted bootloader (for firmware upgrade from PC without direct connection to the controller)

Main Features of our switchboard products (professional):

- Usage of external industrial relays with sockets for DIN/TH rail (230V/16A)
- 45mm isolation between electronic and mains (100-230V)
- Non-aging technology: 15+ years of life cycle
- Non-overheating during continuous work
- Equation editor (advanced algorithms to perform)
- Several times shorten installation of cabling (comparing to central installations)
- Individually designed switchboards for our system (metal + lock)

eHouse Building Automation applications:

- unlimited: hotels, condos, offices, building (based unlimited numbers of EthernetRoomManagers - Switchboard)
- yachts, houseboats, campers, mobile houses (based on OEM RoomManagers)
- low voltage systems (electronic houses)
- for third-party product housing: lights, switches, sockets (any OEM controllers)
- DIY, Startups, etc
- BMS integrations to eHouse PRO/BMS via Modbus TCPIP, BACNet IP, TCP/IP Client/Server, Html Request, Filesystem

Software:

- Language version stored externally in text files, so it can be translated to any language
- Can connect directly to the installation (internet, Ethernet, WiFi – TCP/IP) or via our Cloud (MySQL database)
- We can implement additional algorithms to our software or firmware (on request)
- We supply communication libraries and open source code for integration of our system
- We can create individual protocols of communication to integration

Our eCatalogue which contains our products and initial (official WWW) prices:

<http://www.isys.pl/shoplins/price/>

Individual discounts are given based on cooperation history and ordered amounts of products.

We also have product configurator (for options selection during the production stage).

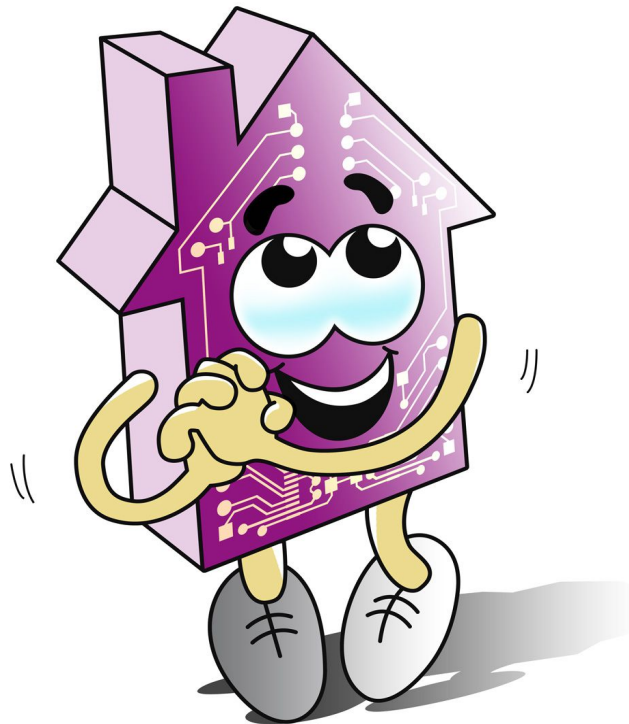
We also clear our warehouse once 0.5..1 year and there are also special prices for available quantities.

Links:

Shop: <http://ehouse.biz/>

WWW: <http://en.isys.pl/>

DIY Blog: <http://smart.ehouse.pro/>



iSys – Intelligent Systems
Wygoda 14
05-480 Karczew
Poland, EU
is@isys.pl
+48504057165