# **FDUCATIONAL SOLUTIONS**

## www.langlois-france.com

# **EDUCATIONAL SOLUTIONS**

## MYHOME TECHNOLOGY - STUDY OF WIRING AND PROGRAMMING

## 3-PANEL SYSTEM - 3 SCREEN PRINTED FACES



Specially designed for study and training in the MyHome BUS/SCS LEGRAND®automation technology present in residential and tertiary premises as part of RT2012, these instructional solutions enable the acquisition and validation of the skills in a realistic eco-responsible environment.



The frame is delivered assembled. Building technical duct, roller shutter, convector, lighting, recessed boxes are always integrated in the frame before departure.

Dimensions fully unfolded: L 4400mm x D 400mm x H 1800mm Dimensions folded: L 1500mm x D 1800mm x H 1800mm

The aluminium structure of the frame allows ICTA ducts to run the whole height of the panel.

The surfaces (12mm thick) of a panel are separated by 120mm which is very convenient for

integrating the electrical components, partition pots 50mm and other embedded connection

boxes. The different panels are fixed using a 1/4 turn screw system for easy mounting/dis-

ref. DP3-MH-C	ref. DP3-MH	ref. DP3-MH Version not wired with components delivered as a kit			
DELIVERED WIRED AUTONOMOUS TABLET TEACHING RESSOURCES REAL	L ELECTRICAL	IOUS TABLET	TEACHING RESSOURCES	REAL ELECTRICAL	
AND SET WIFI NETWORK SUPPLIED STUDENTS / TEACHER CO	DMPONENTS AUTONOM	/ORK SUPPLIED	STUDENTS / TEACHER	COMPONENTS	

### EDUCATIONAL OBJECTIVES

- To learn about the HOME AUTOMATION environment of an electrical installation
- To learn about and study the functionalities of a MyHome BUS / SCS Legrand® home automation installation
- To understand the specifications of an electrical installation
- To produce electrical diagrams
- To create a parts list of components and analyse manufacturer technical data sheets
- To install electrical equipment, route conductor cables, electrical ducts, etc.
- To wire and physically connect different electrical components
- To configure the MyHome BUS / SCS Legrand® components
- To put the installation into service
- To perform electrical consumption measurements
- To perform electrical troubleshooting

## TEACHING FILE SUPPLIED

Teaching instructions in English on DVD as Instructor / Students, including:

- Technical instructions, manufacturer resources for MyHome components
- Extracts of electrical standards
- Layout diagram of the components
- Electric wiring diagram
- Different KNX installation programs
- 12 Educational activities to create scenarios in order to optimize the operation of the installation while preserving the comfort of the occupant.

CYBERSECURITY OPTION

**ROUTER - FIREWALL - VPN** 

## Panel 1 equipment

- Screenprinted image of indoor wall of dwelling entrance
- 1 light 230V
- 1 convector 500W
- 1 building technical duct

mounting of the teaching sequences.

- 1 flush-mounted box for making the interconnections of the devices.
- 3 pots for hollow partition

## Panel 2 equipment

- Screenprinted image of living room wall of a dwelling
- 1 flush-mounted box for making the interconnections of the devices.
- 5 boxes for hollow partition

#### Panel 3 equipment

- Screenprinted image of outer wall of dwelling with window
- 2 halogen type outdoor lights
- 1 electric roller shutter
- 1 flush-mounted box for making the interconnections of the devices.
- 1 surface-mounted weatherproof socket 230V 2P+E

### Router-Firewall can be integrated into Langlois communicating products.

It allows the application of skills in network administration and cybersecurity. This module is very easy to integrate and configures simply and quickly.

- The IP-FW option includes:
- 1 Router-Firewall ready to use with solution installed and configured.
- 1 set of ethernet cables
- 1 technical notice
- 1 set of network and cybersecurity oriented practical work:
- Reminder on network administration and cybersecurity
- Installation and connection of the module
- Configuration of the box (DHCP Server, LAN Interface, VLAN, traffic rule...etc...)
- Configuring a VPN tunnel
- Carrying out maintenance operations.











Disassembly of plates ICTA sheaths passing

info@langlois-france.com

## C€ PRODUCTS

## 2 YEARS GUARANTEE

## info@langlois-france.com

- 2 LED lights

ref. IP-FW

- Tablet Samsung® 9,6" supplied

## COMPOSITION OF THE SYSTEM DP3-MH

### 3-panel aluminium structure

Mobile structure on pivoting casters with brake and locking, composed of three screenprinted panels 1200 x1600mm. Hinges allow the assembly to be opened and closed like a screen. You can position the assembly to allow for your room constraints, each panel can be oriented separately from the others.

### A set of electrical protection devices

- 1 RC circuit-breaker 30mA
- 1 thermal-magnetic circuit-breaker Uni+ Neutral rated 2A.
- 3 thermal-magnetic circuit-breakers Uni+ Neutral rated 10A.
- 1 thermal-magnetic circuit-breaker Uni+ Neutral rated 16A.

## A set of MyHome BUS / SCS Legrand® components

- 1 touch screen 3.5" colour for managing shutter, lighting, etc.
- 1 power supply of BUS SCS 27V 600mA
- 1 actuator for roller shutter control
- 1 actuator for LED and halogen lighting control
- 1 actuator for variable lighting control
- 1 actuator for heater control
- 1 actuator to control power outlets 230V
- 1 module with 16 scenarios (integrated with the MyHome / IP Bus Gateway)
- 1 module, thermostat with screen for heater control
- 4 pushbuttons, 2 buttons
- 1 pushbutton, 1 button
- 1 data concentrator with Energy Data Logger with 3 current transformer to display consumption on your PC or on the touch screen.
- 1 set of jumpers for configuring the addresses of each component
- 1 MyHome / IP Bus Gateway

### A set of Wifi components

- 1 set of WIFI components to communicate with the delivered tablet
- 1 tablet Samsung®

#### A set of electric components

- 1 building technical duct with modular panel with 4 rows of modules and VDI unit with space for broadband box.
- 2 mains power outlets 2P+E modular
- 5 lights 230V including 2 with LEDs and 3 halogen.
- 1 convector 500W.
- 1 electric roller shutter 230V.
- 1 mains power outlet 2P+E for flush-mounting.
- 100m of ICTA duct D16mm
- 100m of ICTA duct D20mm
- 4 reels of 100m rigid wire 1.5mm<sup>2</sup> (Blue, Black, Red, G/Y)
- 4 reels of 100m rigid wire 2.5mm<sup>2</sup> (Blue, Black, Red, G/Y)
- 100m MyHome LEGRAND bus cable
- 5 junction boxes.
- 8 pots for hollow partitions.
- 3 flush mounting boxes, weatherproof.
- 1 set of WAGO terminal blocks

## A set of IT components

- 1 VDI unit mounted in the building technical duct with space for broadband box.
- 4 RJ45 connectors
- 10 RJ45 leads for VDI patching.
- 1 RJ45 socket cat 6
- 25m of 4-pair cable F/UTP Cat6 for RJ45
- 1 WIFI router configured for the use of a local WiFi system (no connection to the computer network or Wifi of your building). This router allows to connect a tablet or smartphone on the KNX network allowing the student to measure consumption and remote control the installation. The application is downloadable for free from '' Play Store '' or '' Apple Store "