

Controls Systems

Control units, devices and software



Building automation control Unit

Enables domotic control of all SD devices with radio module: scenarios can be programmed according to specific timings within the astronomical calendar year, both locally via WiFi or remotely using a PC, via the Software SD Manager, included



Building automation radio transmitter interface

Radio module for activating scenarios on SD devices equipped with radio modules. Switching ED devices equipped with domotic radio receiver interface on and off



Building automation radio receiver interface

Receiver module for switching ED devices on and off via radio, using the domotic radio transmitter interface or control unit



Building automation radio module

When inserted into the SmartDriver, it activates the radio connection with the control unit or domotic radio receiver interface. Control and programming via PC with SD Manager



DALI Module

Module for communicating with the DALI communication protocol



1/10V Module

Module for interfacing for direct command analogue dimming



OPTICOM PHOTOSENSOR

The intelligent eye of the SD system. Enables the Autodimmer with natural light compensation (Natural Light) and Autodimmer with movement detector (Dynamic Light). Opticom also receives commands from the flash on a smartphone.



SD MANAGER software

Software used to monitor and manage lighting and emergency lighting. It works with central unit codes 20102 and 20124.



Building automation control unit

Lighting and Emergency lighting integration and automation

Control unit for light fixtures and emergency lighting with radio control equipped with the Beghelli Spread Spectrum transceiver integrated in the Electronic Driver with intelligent dimming.

The control unit sends the light fixtures the necessary commands to regulate their operation and receives information from the fixtures on their status, diagnostics and energy consumption data.

The control unit is able to control each different light fixture in the system individually.

The control unit coordinates operation of the network of communication that allows the control of the light fixtures even in large buildings, by the automatic routing of information packages through the network consisting of the lighting and emergency fixtures.

The control unit also includes a GSM communicator that allows remote control of the system.



GENERAL CHARACTERISTICS

Protection grade IP20

Working temp. -20 ÷ +40 °C

Mounting on 9 module DIN bar

Fixtures managed Beghelli recommended limit:
400 devices

Local transmission Spread Spectrum radio system SFH
DSSS in 16 channels

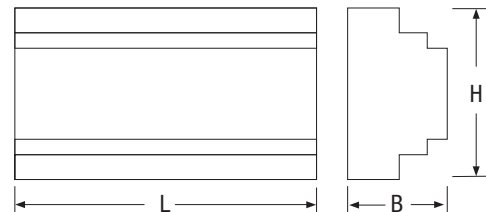
Remote transmission GSM, can be connected to a Beghelli Services databases, Interfaceable with BMS (Building Management Systems) by RS-485 interface, MODBUS protocol

Functions Complete control of operation of the lighting system, in particular:

- Switching up to 256 groups on and off
- setting the dimmer level
- Defining the operating mode (fixed luminosity at the set value or automatic adjustment of luminosity)
- Diagnostics
- Measurement of the energy consumed and saved
- Creation of lighting scenarios
- Timed switching on/off of groups of lamps
- Configuration of the lighting system
- Management of all the functions of the emergency system
- Synchronization and timing of the test functions
- Inhibition/enabling of the emergency
- Detailed management of errors
- Alternate tests on 50% of the system



• Dimensions (mm) •			Protection grade	Weight kg
L	B	H		
160	75	90	IP20	0.6



Building automation  supplied

Order code	Description
20109	SD MANAGER SOFTWARE
-	CABLE RS485/USB (WITH CODE 20102)
-	CONVERTER RS485/WIFI – ETHERNET (WITH CODE 20124)

Building automation control unit

Order code	Description	Packaging
20102	BUILDING AUTOMATION CENTRAL UNIT USB	1
20124	BUILDING AUTOMATION CENTRAL UNIT + WIFI	1

Building automation radio transmitter interface

Building automation lighting

The transmitter is a radio interface device, supplied at 230 V_{AC}, with two inputs at 230 V able to send radio commands to the light fixtures or to appropriate receivers with relay actuators.

The device, with approximate dimensions 30 × 64 × 20 mm, has 4 screw terminals, two for the power supply (N and P) and two inputs (I) which reads the voltage present shared with the neutral terminal (N).

The device has a built-in antenna and can be fitted in any type of unshielded container; if used in a 503 box it occupies the internal space of a single socket.

The functions that can be associated with the transmitter are the following:

- Transmission of a timed command (button or movement sensor);
- Status transmission (switch on/off)

The commands sent by the transmitter are associated with a single light fixture or with groups of fixtures.

Working temp. -20 °C ÷ +50 °C



Order code	Description	Packaging
20104	2 INPUT INTERFACE – RADIO TRANSMITTER	1

Building automation radio receiver interface

Building automation lighting

The Receiver is a radio interface device, supplied at 230 V_{AC}, which integrates a relay able to control light fixtures and other electric loads. With approximate dimensions 30 × 64 × 20 mm, has 4 screw terminals, two for the power supply (N and P) and two for the 230 V output (N and P_{out}).

The antenna is built-in and can be fitted in any type of unshielded container; if used in a 503 box it occupies the internal space of a single socket.

The relay is able to switch a maximum load of 260 W.

The receiver also has a built-in power meter and a counter for the electric energy distributed at the output.

The device is associated with one or more radio transmitters and activates the corresponding commands.

Working temp. -20 °C ÷ +50 °C



Order code	Description	Packaging
20108	1 OUTPUT INTERFACE – RADIO RECEIVER	1

Building automation radio module

Building automation lighting

Spread Spectrum radio transceiver operating in the band 2.400–2.483 GHz according to Beghelli FH-DSSS protocol. The device enables the LED Control gear (SmartDriver) of the light fixture in which it is inserted for remote control and wireless control. The building automation radio module is fed by the SmartDriver and allows the following functions:

- Receiving and actuating radio commands
- Possibility of performing automatic functions of regulating luminosity by radio messages
- Calculation of the energy consumed by the light fixture, and for this it is enabled in the "Grande ESCo Italia" project
- Tele-diagnostics of the light fixture

Working temp. -20 °C ÷ +50 °C



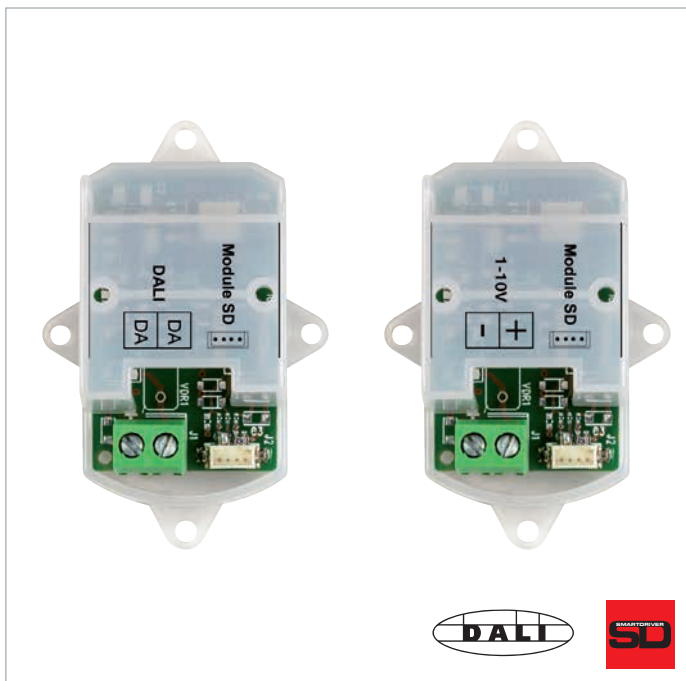
Order code	Description	Packaging
15022	BUILDING AUTOMATION RADIO MODULE	1

DALI/1-10V module

Building automation lighting

The device enables the LED Control gear (SmartDriver) to control the light fixture by the DALI interface or 1-10V analogue interface.

Working temp. -20 °C ÷ +50 °C



Order code	Description	Packaging
15024	DALI MODULE	1
15034	1-10V MODULE	1



Intelligent Opticom Photosensor

Building automation lighting

Sensor consisting of a SMD phototransistor that can be connected to the SmartDriver electronic Driver, to which it communicates the instantaneous reading of the contribution of natural light to the environmental lighting. This information allows the SmartDriver to calibrate the LED supply power correctly in order to keep the lighting constant and uniform on the work surfaces.

The Autodimmer sensor allows an average consumption saving of 30% for the fixtures on which it is installed.

Each SD device equipped with the new OPTICOM INTELLIGENT PHOTONSENSOR Technology acquires innovative Autodimmer Dynamic Light and Opticom Technology functions, in addition to Autodimmer Natural Light functions.

Working temp. -20 °C ÷ +50 °C



Order code	Description	Packaging
15039	OPTICOM PHOTONSENSOR	1
15040	OPTICOM PHOTONSENSOR ACCIAIO	1



SD MANAGER software

SD manager is a software designed to work with automation central unit code 20102.

SD manager is able to control lighting and monitor emergency lighting.

It's possible to place luminaires on a DWG map.

Software is used to setup a new installation, to create groups, to control lighting, to schedule test and check results and moreover.

Order code	Description	Packaging
20109	SD MANAGER SOFTWARE	1