

RF2 – OLC MIRA / SC3 RF SEGMENT CONTROLLER

- Suitable for all luminaire types
- Very fast response time
- Nodes built into the luminaires
- No external antenna required
- 868 MHz network



The RF2 system

The RF2 system consists of the OLC MIRA outdoor lamp controller (OLC) and the Segment Controller SC3. The numbers in the luminaires of the RF2 network are wirelessly connected via Radio Frequency signals at 868 MHz. An RF2 network consists of a maximum of 200 nodes per Segment Controller.

This system is very suitable for emergency lighting and when using motion detectors where the light level must be adjusted quickly after detection. The OLC MIRA is able to control up to 4 channels individually, allowing colors to be varied and changed, for example for lighting that matches the objectives for nature management.

OLC MIRA

The OLC MIRA is a lamp controller for remote control, dimming, monitoring and management of public lighting. This OLC is suitable for all types of aluminum and plastic luminaires and can control drivers based on DALI or 1-10 Volt. The digital input makes it possible to easily connect a radar detector or push button. The OLC MIRA is built into the luminaire without drilling, along with the antenna.

Each OLC MIRA is able to function autonomously; the absence of the segment controller or connection does not affect the operation of the luminaire itself. They are equipped with an internal clock and calendar, which are synchronized with the Segment Controller SC3. The OLC MIRAs themselves manage the dimming schedules per lamp.

The OLC MIRA sends the following information to the Luminizer platform:

- Operating hours
- The set and actually followed dimming schedule
- The current measurement
- DALI status information of lamp and driver

Segment Controller SC3

The Segment Controller SC3 comes in a plastic box that also houses the GPRS / UMTS router and the power supply. The SC3 is easy to mount in the cabinet or with a stainless steel bracket on one of the lampposts. The SC3 has no external antenna when mounted on the lamppost.

The network topology and configuration must be determined in the field by an external tool, after which this configuration is commissioned from Luminizer. This is necessary because a node is not automatically included in the network.

OLC MIRA RF OUTDOOR LAMP CONTROLLER

Model	E2110 - Mira (Dali) OLC-RF	A2110 - Mira (1-10V) OLC-RF
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ELECTRICAL DATA

Mains Supply	230Vac (+/-10%) 50Hz
Max Lamp Power	250W
Power Consumption	1W
Safety	Class II (Double insulated), Surge protection 10kV (L/N)

HOUSING

Material	PC/ABS
Protection	IP20
Wiring	Max 2.5mm ²
Dimensions	190 x 48.7 x 36.5 (l x w x h)
Weight	148 grams

ENVIRONMENT

Temperature	-25°C to +50°C
Relative Humidity	10% to 90%

FEATURES

Dimming Interface	DALI, IEC 62386, supports max 4 drivers.	Analog 1-10V linear
Digital Input	Voltage free contact	
Relay	Switched 230Vac outlet, Max switching current 2.1A	
Measurements	Integrated energy measurement accuracy 0.5%	

COMMUNICATON

RF Communication	Mesh 868MHz ISM band 869.525MHz, Output power 16dBm, Sensitivity -110dBm
RF Protocol Software	RF2
Antenna	Optional external antenna upon request
Security	AES128 encryption
Related Products	The Mira must be used with a Segment Controller SC3. Per 200 OLC's one Segment controller is required.

STANDARDS

Approval	RED Directive 2014/54/EU, RoHS Directive 2011/65/EU, WEEE Directive 2012/19/EU
Radio	EN 300 220-2
EMC	EN 301489-1/3
Safety	EN 61010-1

ORDER INFORMATION

Product number	10.40.E2110 - Mira (Dali) OLC-RF	10.40.A2110 - Mira (1-10V) OLC-RF
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The EU-Declaration of Conformity is available on www.luminext.eu

SC3 RF SEGMENT CONTROLLER

Model	SC3 RF Segment Controller
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ELECTRICAL DATA

Mains Supply	230Vac (+/-10%) 50Hz
Power Consumption	4W
Safety	Class II (Double insulation)

HOUSING

Material	PC/ABS
Protection	IP65
Wiring	1.5mm ²
Dimensions	122 x 122 x 55 (l x w x h)
Weight	110 grams

ENVIRONMENT

Temperature	-40°C to +75°C
Relative Humidity	10% to 90%

FEATURES

Modem / router	2G / 3G GSM/GPRS/EDGE: Dual band GSM 900/1800Mhz UMTS/HSPA+: Dual band UMTS 900/2100Mhz
Antenna	Internal antenna, optional external antenna (when placed in cabinet)
Input	Voltage free input

COMMUNICATON

RF Communication	Mesh 868MHz ISM band 869.525MHz, Output power 16dBm, Sensitivity -110dBm
RF Protocol Software	RF2
Antenna	Optional external antenna upon request
Security	AES128 Encryption
Related Products	The SC3 RF Segment Controller must be used with Mira OLC's. Per 200 OLC's one Segment Controller is required.

STANDARDS

Approval	RED Directive 2014/54/EU, RoHS Directive 2011/65/EU, WEEE Directive 2012/19/EU
Radio	EN 300 220-2
EMC	EN 301489-1/3
Safety	EN 61010-1

ORDER INFORMATION

Product number	20.20.200 - SC3 RF Segment Controller
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INFORMATION

ORDER INFORMATION

Product	Product number
OLC RF DALI	10.40.E2110
OLC RF MIRA 1 – 10V	10.40.A2110
SC3 Segment controller	20.20.200

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