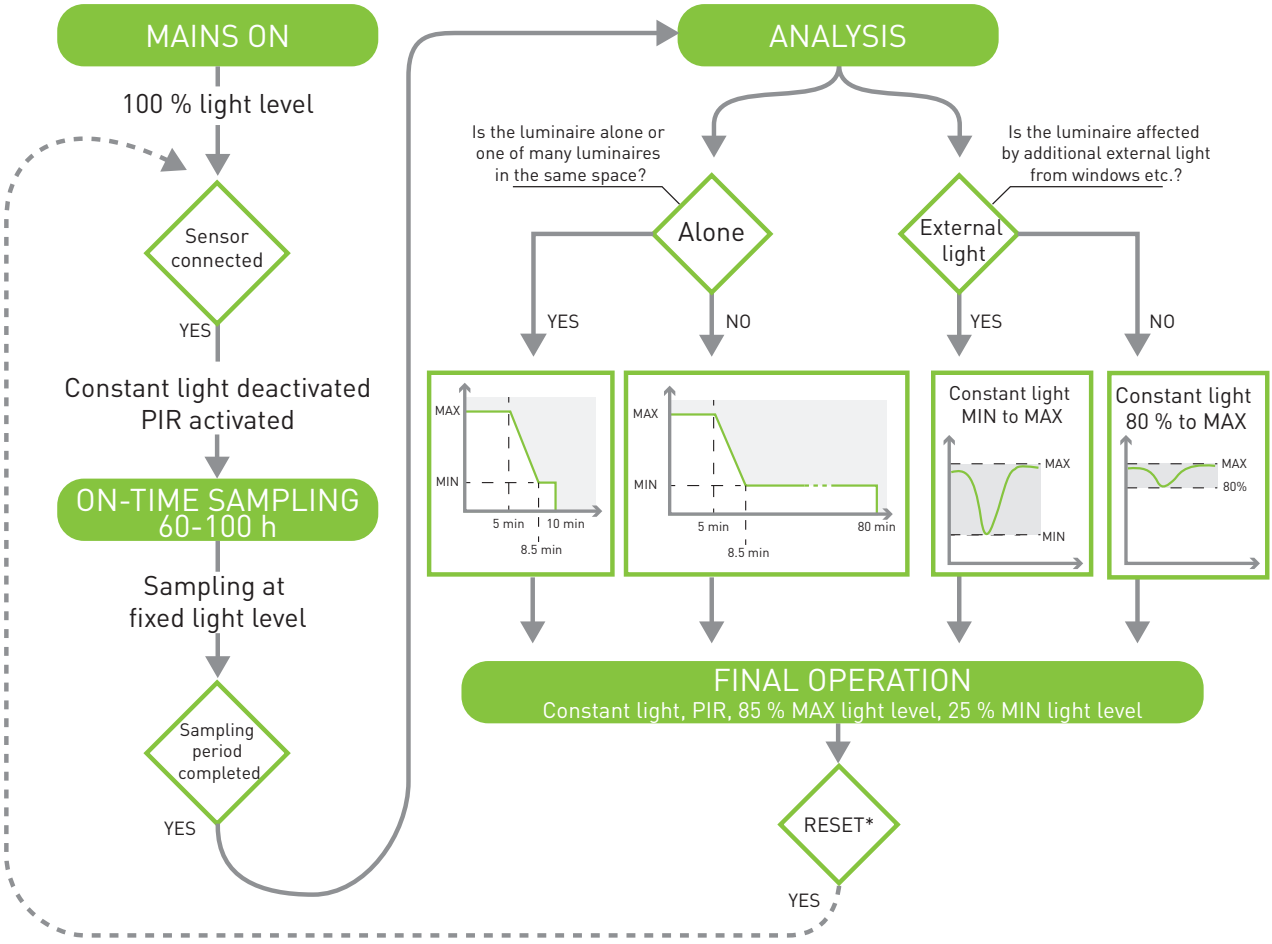
Active concept

Active solution for LED & fluorescent luminaires

- Stand-alone, inbuilt solution for luminaires with LED & fluorescent lamps
- Fully automatic setup through smart learning function
- Optimized absence detection for different situations
- Light level compensation over the entire life cycle
- Automatic daylight harvesting
- No programming, configuration or external control wiring

AUTOMATIC SETUP DESCRIPTION

The final operational parameters are defined fully automatically during the learning period (60 -100 h) according to the process shown below.



FINAL OPERATION

The initial light level is set at approximately 85-90 % light level to avoid over-illumination of new luminaires. This is close to the actual designed light level of the luminaire and this light level will be maintained over the entire life cycle generating further energy saving. Constant light and presence detection are activated. The sensor fade down time is made slower (3.5 min) to make it invisible.

- If the luminaire is alone, such as a storage room, cupboard, copy room et.c. then the luminaire goes to minimum level and OFF in 10 minutes.
- If the luminaire is one of many luminaires, such as an open plan office or a retail store then the light stays on minimum level for more than an hour before going OFF. This is done not to disturb other people in the working area and to create a safe lighting scene.
- When the luminaire is affected by additional external light energy saving is utilized over the entire dynamic dimming area: 25-100 %
- When there is no additional external light affecting the luminaire additional energy saving can hardly be utilized by daylight harvesting. The minimum light level is now clamped to 80 %, which ensures stable and reliable functioning of several luminaire sensor acting close to each other, "waving" of sensors is prevented.

*RESET (PERFORMED RESET IS INDICATED BY LIGHT FLASHING)

1) Single luminaire:
Cover the light sensor preventing light from entering the sensor for a period of 60 sec or more

- Minisensor3 must be connected
- Lamp must be switched ON

2) Entire electrical circuitry with multiple luminaires:
Perform following switching sequence

- 6 successive ON/OFF periods
- Length of ON period must be 5-10 sec.
- OFF period in between can be of any length

Active concept

Products

ACTIVE LED DRIVERS & BALLASTS

- High efficiency
- Low stand-by power
- Smooth dimming

MINISENSOR3 [3]

- Inbuilt luminaire sensor
- PIR
- Constant light
- Quick release terminal (RJ-type)

IDIM SOLO [3]

- Interface module for sensor
- Quick release connector

AVAILABLE DRIVERS AND BALLASTS [1] [2]

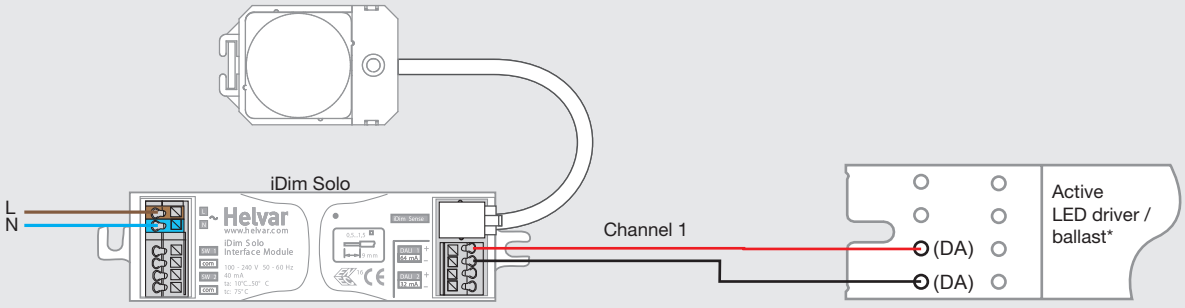
LED Drivers	LC1x30-E-DA Active
	LL1x40-E-DA-350-700 Active
	LL1x40-E-DA-700-1050 Active
	LL1x70-E-DA Active
EL for FL	EL2x14-35iDim Active
	EL2x49iDim Active
	EL4x14iDim Active

1) Technical and operational specifications as in datasheets of corresponding DALI LED driver / electronic ballast, except for DALI and Switch-Control being disabled.

2) Active concept can also be implemented on any Helvar DALI LED driver / ballast on request.

3) For installation and mechanical information, please see Minisensor3 and iDim Solo documentation

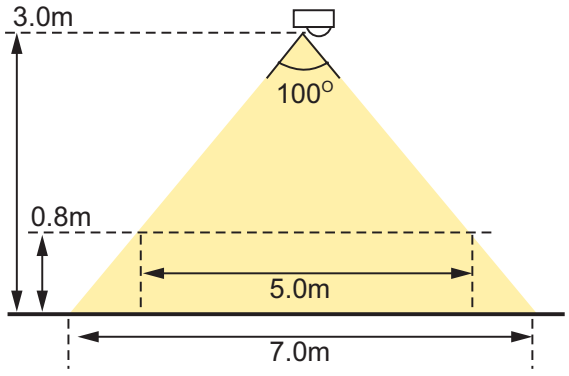
Concept schematics



Note : Use only channel 1 as an output from the iDim Solo unit.

Sensor reception areas (Minisensor3)

A) Constant light coverage



B) PIR reception area