

 **signify**

**NatureConnect**



# **VitaUp design guide**

How to create a project with Signify VitaUp to support natural production of vitamin D in indoor spaces.

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## Bring the daylight effect indoor

VitaUp is designed to support your body's natural vitamin D production, providing a low dose of UVB that is both safe and proven effective.

Sufficient vitamin D levels are key to support strong bones and teeth, support immune function, and even mood and cognitive function.

There are two kits available:

the VitaUp Base kit, with two modules, one 24 V driver and four holders (two for recessed installations and two for surface mounted installations).

the VitaUp Extension kit is for additional VitaUp modules and the holders, to cover larger areas.



# ⊘ VitaUp possible configurations

## Different ways to control

According to the needs and to the control system available, there are different ways to design your project with VitaUp.

Control type	office hours	24/7 scheduling
Signify Interact	Scenario A	Scenario D
DALI	Scenario B	Scenario E
NatureConnect scene set	Scenario C	/

## Kits

VitaUp base kit 910505106682

VitaUp extension kit 910505106683

The driver in the VitaUp base kit supports up to 20 modules. You can add up to 9 extension kits to the base kit.

The below schemes give a view on how to connect the components per scenario.

## Office hours

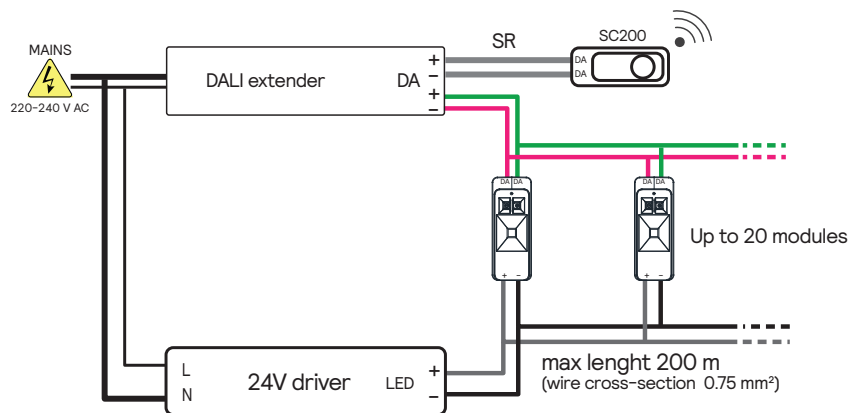
The VitaUp module turns on when light goes on, based on presence and/or a user interface, VitaUp module limits itself to 8 hours per day.

### Scenario A – Signify Interact

One or more VitaUp modules can be connected to the one DALI extender.

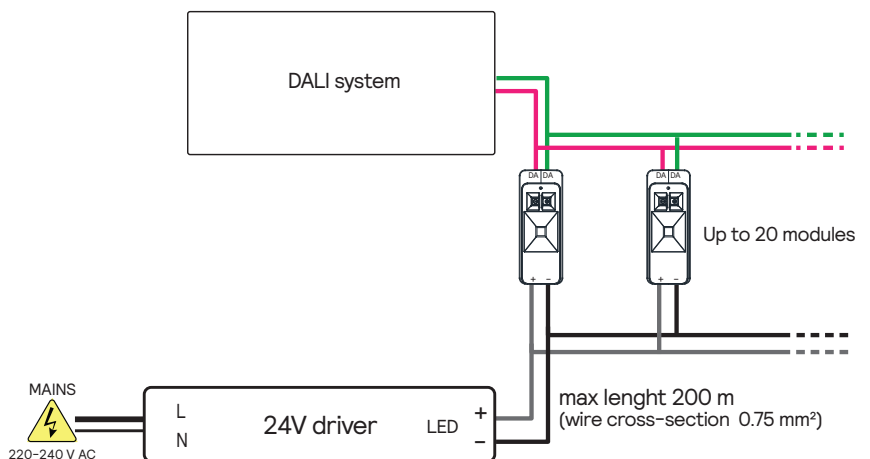
The DALI extender will be shown as one single light in the Signify Interact Builder app, named 'Light with SC200 sensor - xxxx'.

If the room already has Signify Interact luminaires, assign the VitaUp modules (light) to the same room.



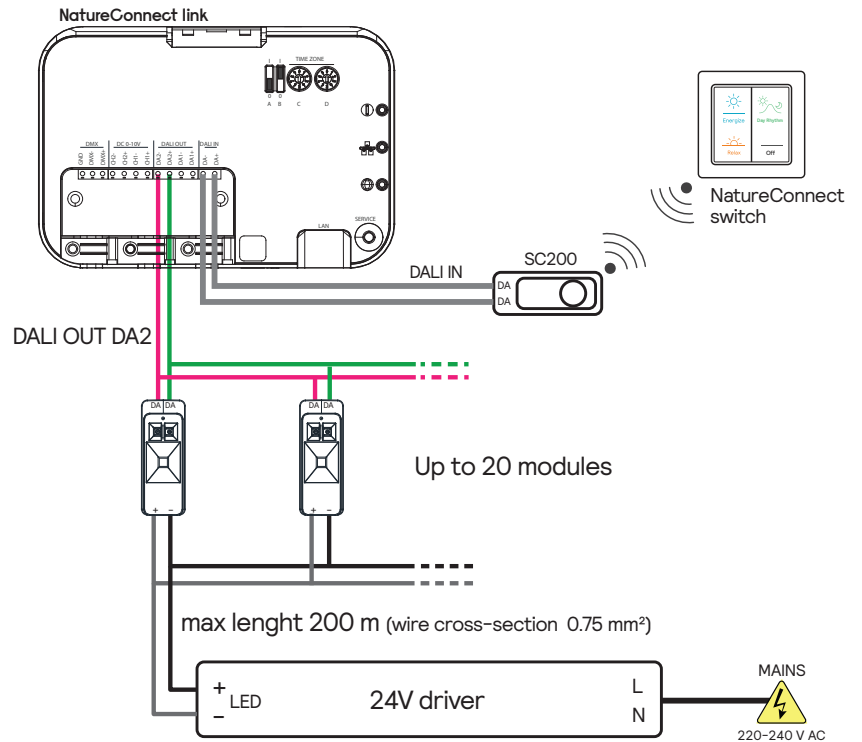
### Scenario B – DALI

This scenario applies when your project uses any DALI control system, the VitaUp modules should turn on/off together with the lights.



## Scenario C - NatureConnect

The VitaUp modules do not require any additional commissioning, simply connect the modules to the DA2 DALI output on the NatureConnect link.



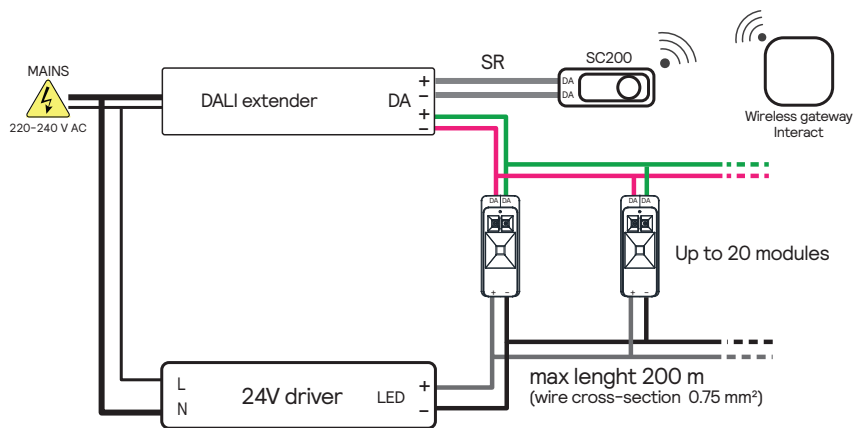
## 24/7 scheduling

When a room is occupied 24/7, it's important to prevent the VitaUp module from turning on during nighttime. The goal is to provide UVB radiation only during daytime to simulate the benefits of daylight.

The VitaUp modules should be controlled independently from the lighting. It's recommended to use a schedule to limit the operating hours of the module (max. between 7am and 7pm). The VitaUp module limits itself to 8 hours per day.

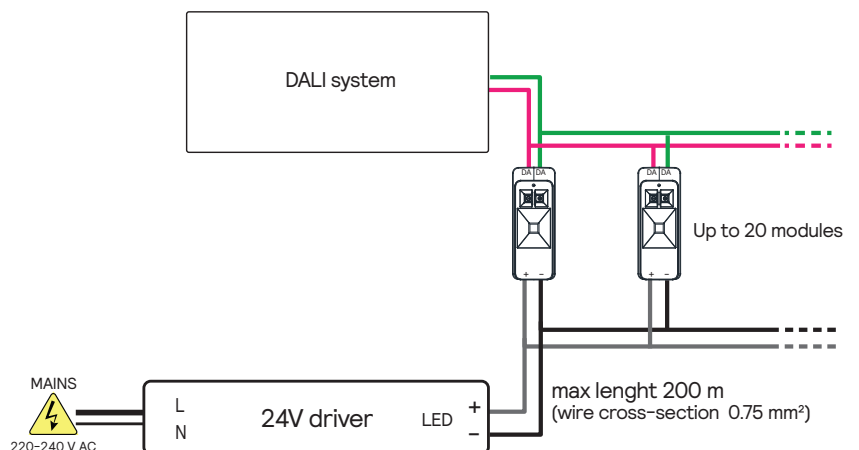
## Scenario D - Signify Interact

A wireless Signify Interact gateway is required to schedule the VitaUp modules.



## Scenario E - DALI

The DALI control system needs to be capable of scheduling the VitaUp modules.



# 02 Layout design

## Design guidelines

Use Signify VitaUp Gen 1.ies photometric file for simulations.

(available on NatureConnect download page)

Standard Erythemal Dose (SED) is the is a unit of measurement used to quantify UV exposure. VitaUp provides up to 0.14 SED/day.

For simulations: the target is to achieve 2 to 4 mW/m<sup>2</sup> on horizontal surface at 0.8 m height. This corresponds to a daily dose of 0.14 SED.

Mounting height from 2.4 to 2.8 m.

Area [m <sup>2</sup> ]	Quantity [VitaUp modules]	Spacing [m]	Kits quantity	
			Base kit	Ext
< 6	min. 2	0.8	1	/
6 - 16	min. 4	1	1	1
> 16	1 per 4 m <sup>2</sup>	1.8	1	tbd

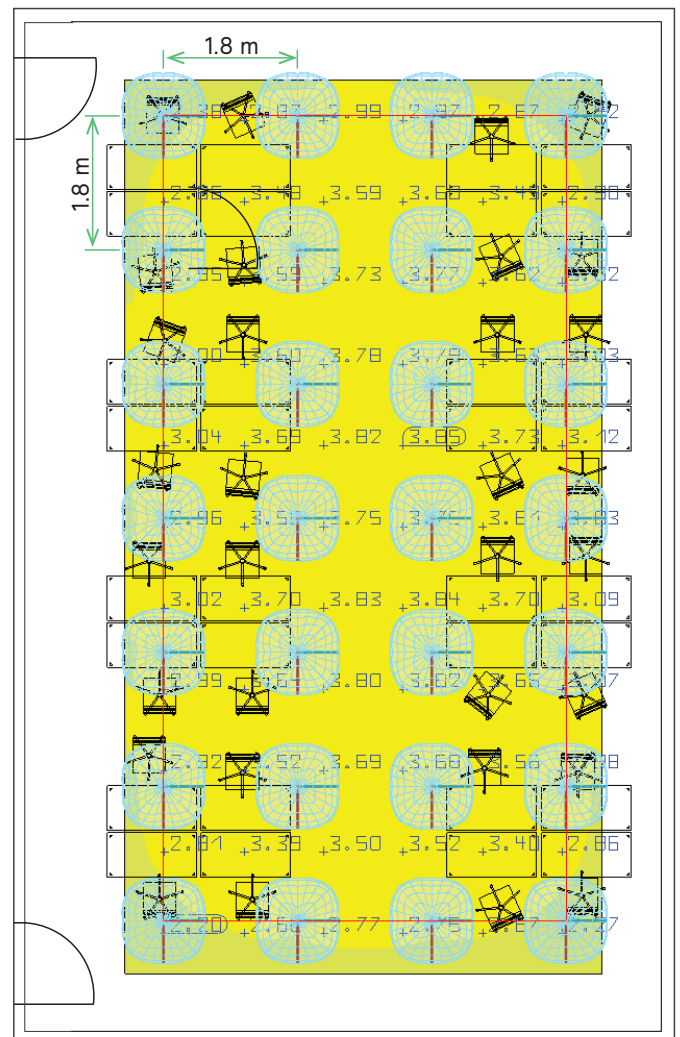
# 03 Examples

## Open office (scenario A or B)

105 m<sup>2</sup>, ceiling height 2.8 m

In this case, presence sensors will control the switching on and off of the modules.

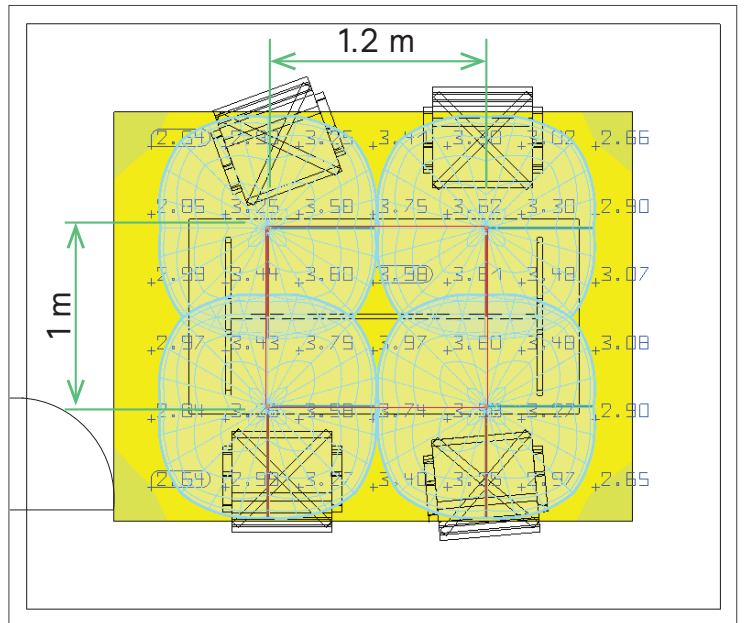
Item	12nc	Quantity
VitaUp Base kit	910505106682	2
VitaUp Extension kit	910505106683	12
DALI extender KT200	913701077603	2
Additional sensors	e.g 913701067003	4



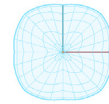
## Small meeting room/office (scenario C)

12 m<sup>2</sup>, ceiling height 2.8 m

In this case, VitaUp installation is integrated with NatureConnect scene set.



Item	12nc	Quantity
VitaUp Base kit	910505106682	1
VitaUp Extension kit	910505106683	1
NatureConnect Scene set	Not to order if included in the BoM of the luminaires	



Signify VitaUp module

