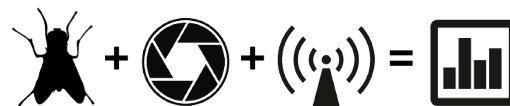




VECTOTHOR™
FLYING INSECT CONTROL

OMNIVEO^{2SC}

OMNIVEO^{3SC}



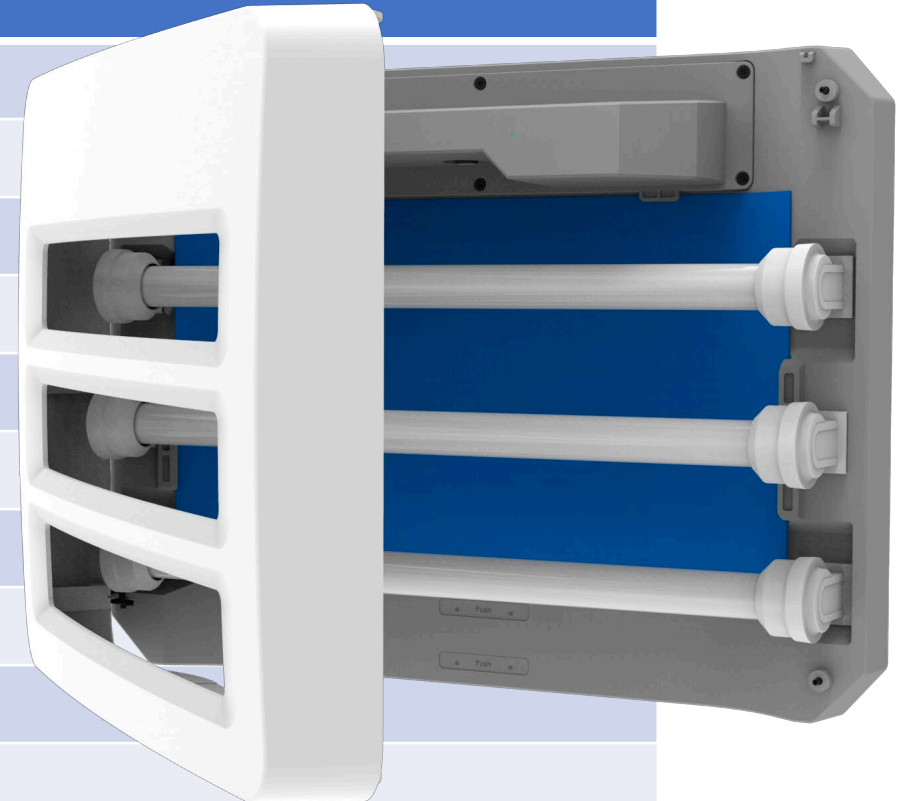
The new insect light trap generation

Note: Specifications and Design details are subject to change, without any notification



Content

No	Item
1	Introduction smart control
2	Main specifications
3	Schematic drawing chassis
4	Detailed specifications
5	Camera module
6	Communication module & Software
7	Selling features
8	Markets
9	Omniveo range
10	Service & Maintenance

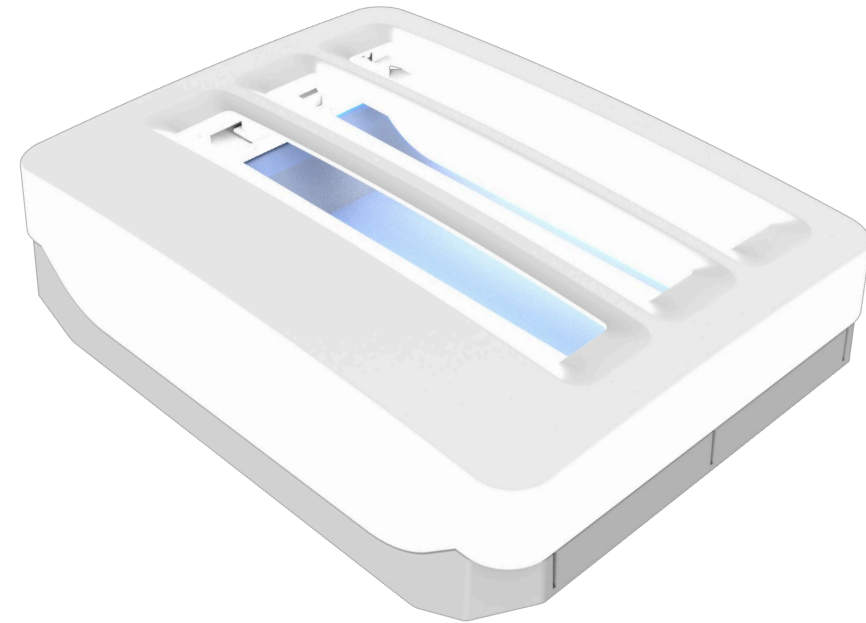




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1. Introduction - OMNIVEO Smart control

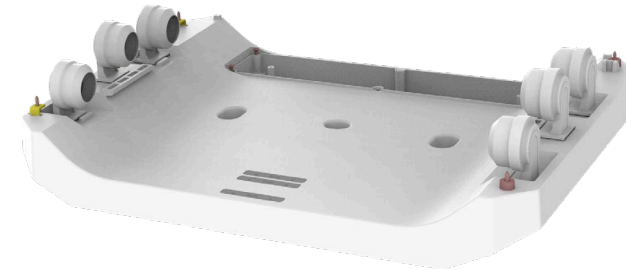
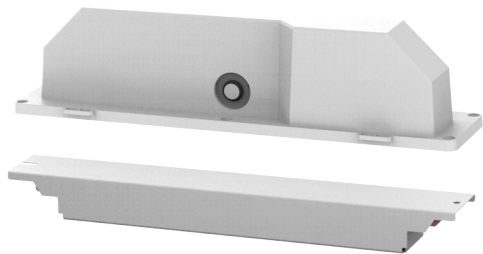
A new generation of insect control units suitable for real time monitoring of flying insects





1. Introduction - OMNIVEO Smart control

Item	Current technology	New smart control technology
Monitoring	Typically, 4 times per year	Continuous
Awareness insect infestation problem	In 0 to 3 months, then action can be taken	In real time, immediate action
Data collection	On site	From anywhere, anytime
Data processing	Manually	Automated
HACCP compliant	Critical control point	Critical control point in real time



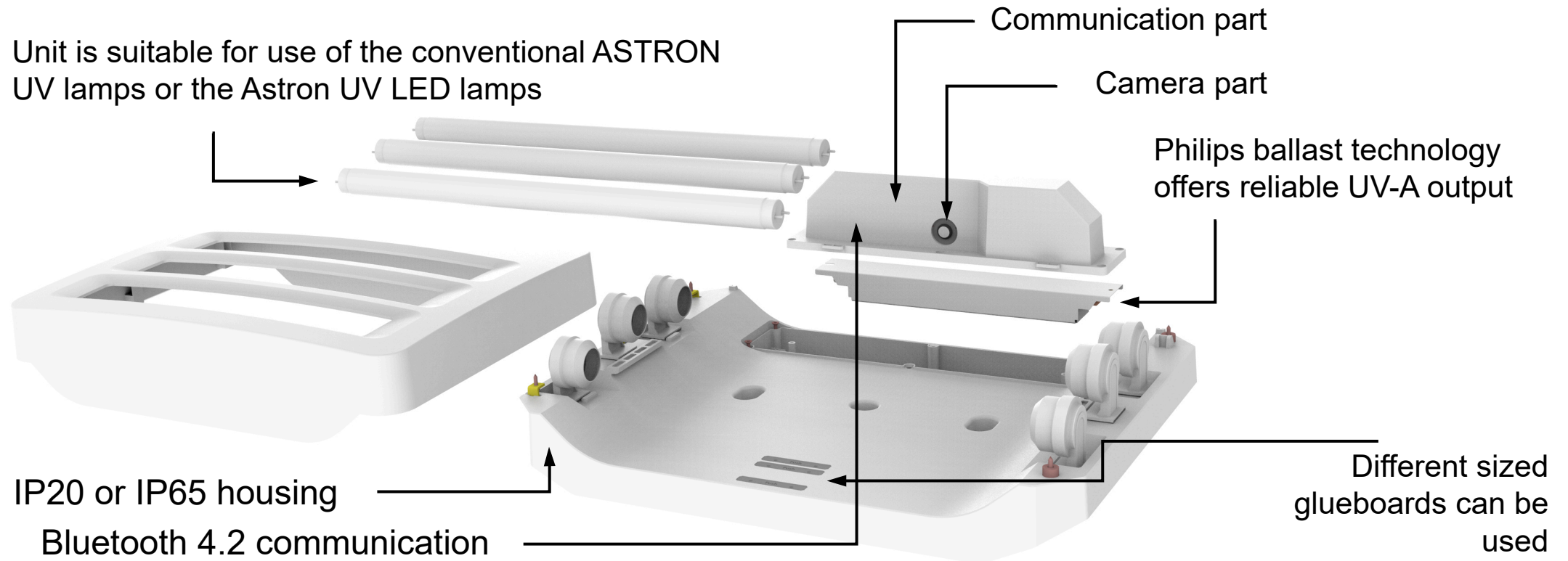


2. Main specifications current models

No	Item	Spec
1	Effective area	50 – 140 m ²
2	Monitoring	In real time, by means of a camera on the module
3	Communication	In real time, by means of 2G/LTE-M on the module
4	Flexible	Camera & Communication module can also be mounted retrofit
5	Models	2x 15 W or 3x 15 W wall mounting models
6	Glue board	Scannable blue board technology, multiple size board placement
7	Lamp technology	ASTRON 15 W lamps or Astron LED lamps suitable
8	Approvals	CE / EMC / LVD / RoHS / REACH / ISO 9001 compliant
9	IP rating	IP 20 or IP 65 (Suited for use in dry or wet areas)
10	Guarantee	2 years on mechanical & electrical performance



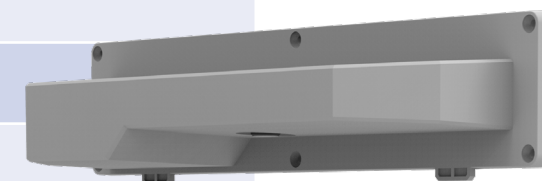
3. Schematic drawing chassis





4. Detailed specifications

No	Item	Spec
1	Electrical supply	220-240V / 50-60Hz (Other supply upon request)
2	Philips ballast	Electronic, Philips 40.000 hrs lifetime
3	Back-up	Back-up battery can store data up to over 1 year
4	Housing	Plastic UV-A stable ABS
5	Communication module	2G LTE-M sim-chip with built in antenna
6	Camera module	Monitors over 80% of landing area
7	System communication	Via Bluetooth connection (time, catch , parameters)
8	Status unit	Via built in multi color LED indicator
9	Data storage	Protected area, access via cloud software
10	Communication module	Comes with 2-year subscription fee



BLUE = Optional available



4. Detailed specifications c'td

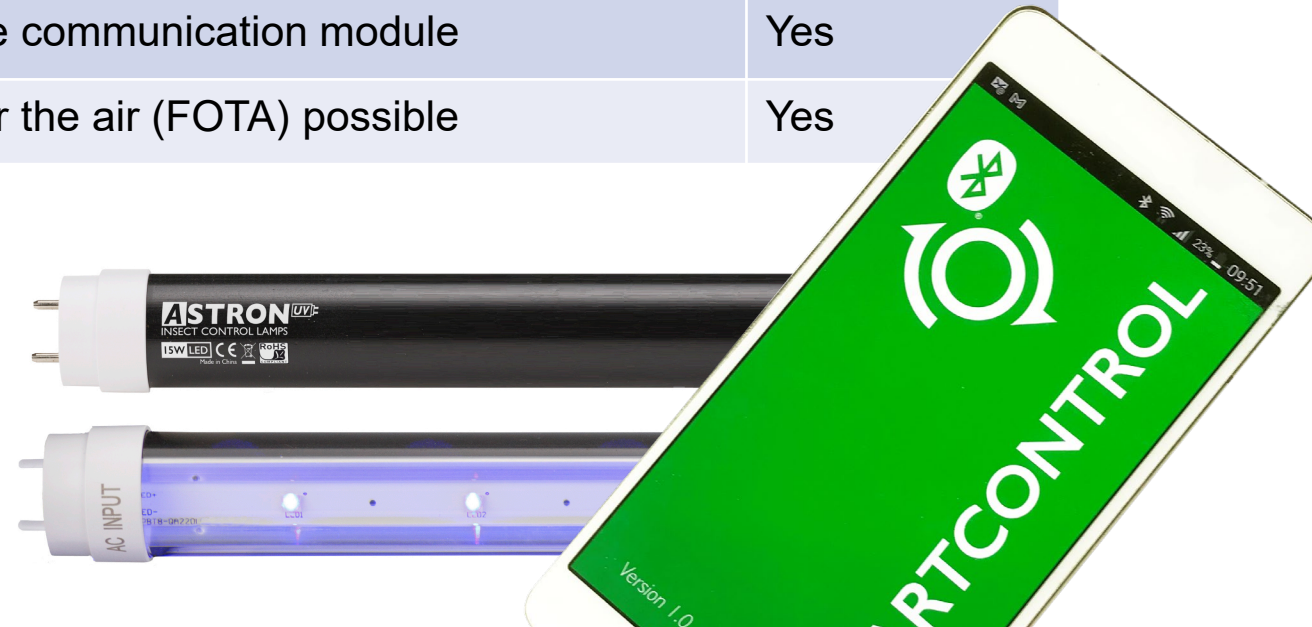
No	Item	Spec
11	Consumables	Glue board and Astron 15 W or 15 W LED UV-A lamp
12	Replacement interval	Annually: (min) 4 x Glue board & 2 x UV-A lamp
13	Appliance cable	Grounded cable of 1,7 m with tailored country plug
14	Mounting position	For wall mounting
15	Glue rail	Can hold a selection of different sized boards
16	Environmental aspects	Non applicable
17	UV-A lamp	Shatterproof protected UV-A transparent
18	Approval body	Handled by our accreditation partner TUV Rheinland
19	Marketing tools	Leaflet / photo's / banner / presentation / website / video
20	SDS	Available for UV lamp and glueboard



4. Future proof specifications

No	Item	Spec
1	Works with UV-A LED lamps?	Yes
2	Retrofit placement of the camera module	Yes
3	Retrofit placement of the communication module	Yes
4	Software: Firmware over the air (FOTA) possible	Yes

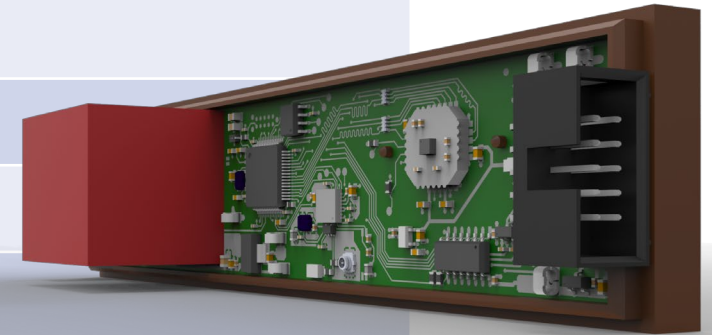
**future
proof**





5. Camera module

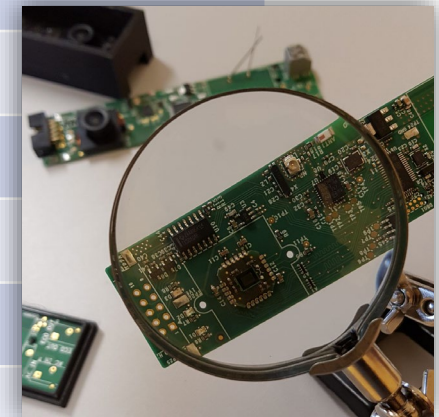
No	Item	Spec
1	Camera	High speed HR camera with capture technology
2	Processor	Fast & energy saving micro-processor on PCB
3	Image capturing	In real time, up to 77 times per second
4	Board % surveillance	Over 80% of the board surface is monitored
5	Communication	Bluetooth 4.2 to App (Android and iOS)
6	Connectors	Fast connector system (easy retrofit)
7	Placement in unit	Module installed in separate chamber in chassis
8	Traceability	Unique identifier (serial number) on module
9	Lifetime	Lifetime expectancy is 40.000 hrs (minimum of 5 years)





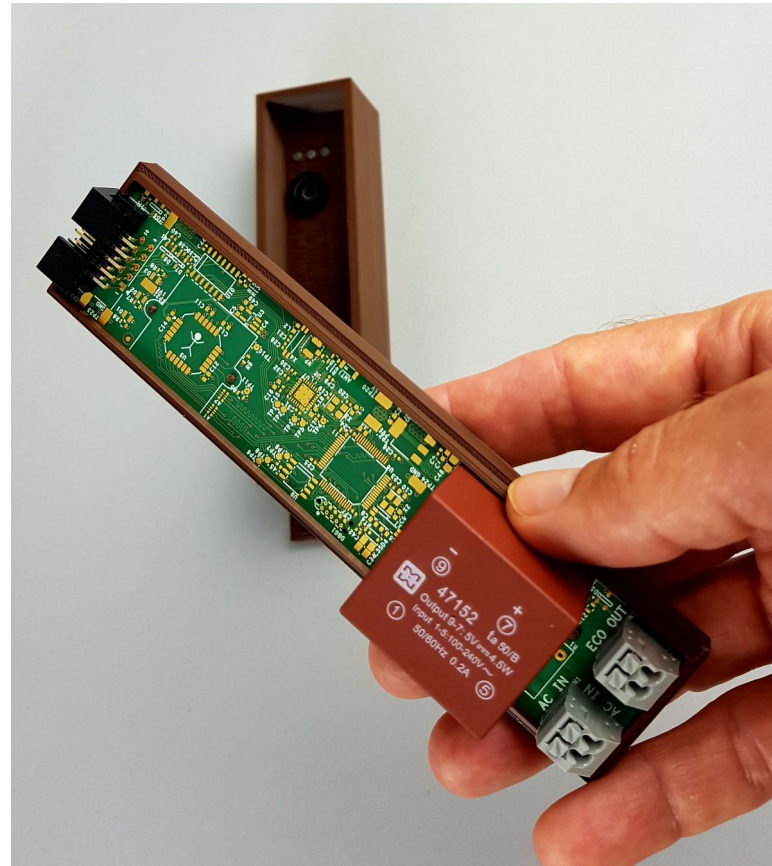
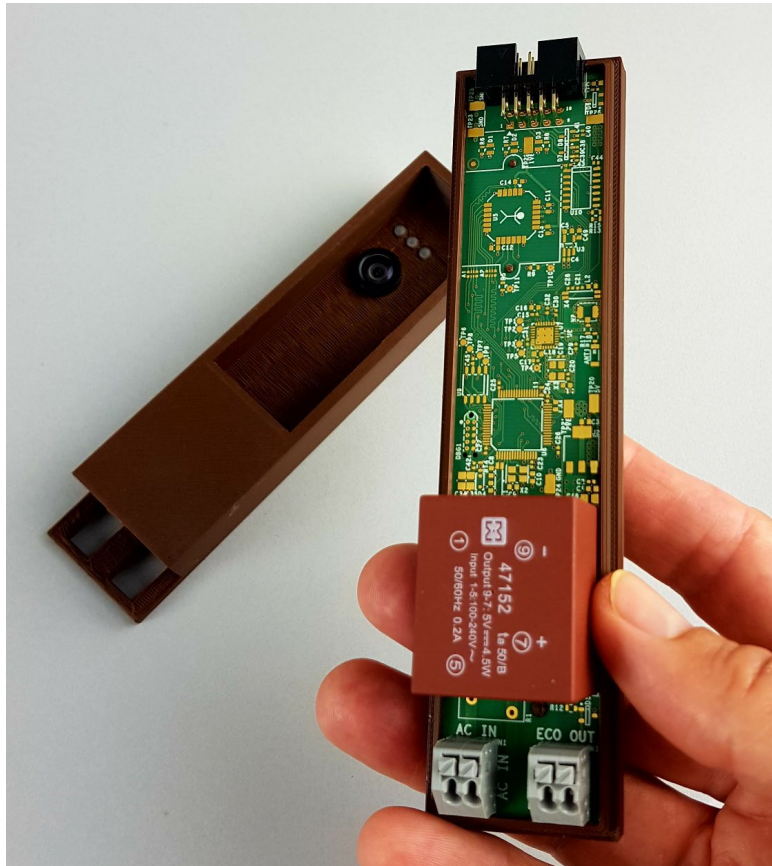
5. Camera module ct'd

No	Item	Spec
1	Reliability	Very Good
2	Robustness	Good
3	Size	Compact
4	Price	Low cost of ownership
5	Hot swappable in case of failure in the field	Yes
6	Retrofit placement in the field	Yes
7	Safety aspects	Meets all relevant standards
8	Energy savings (typical 30 to 50%)	Processor controls the light output
9	Firmware update over the air (FOTA)	Yes





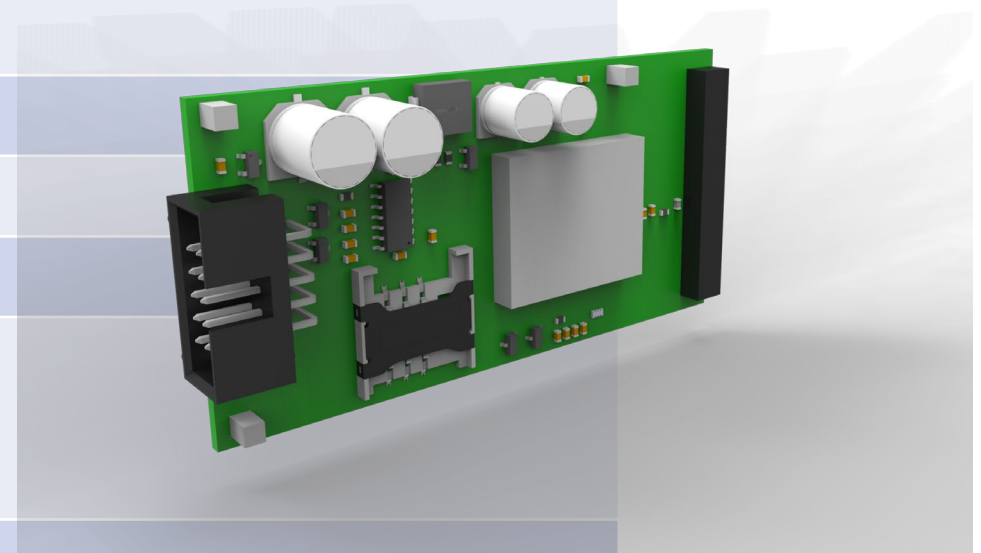
5. Camera module c'td





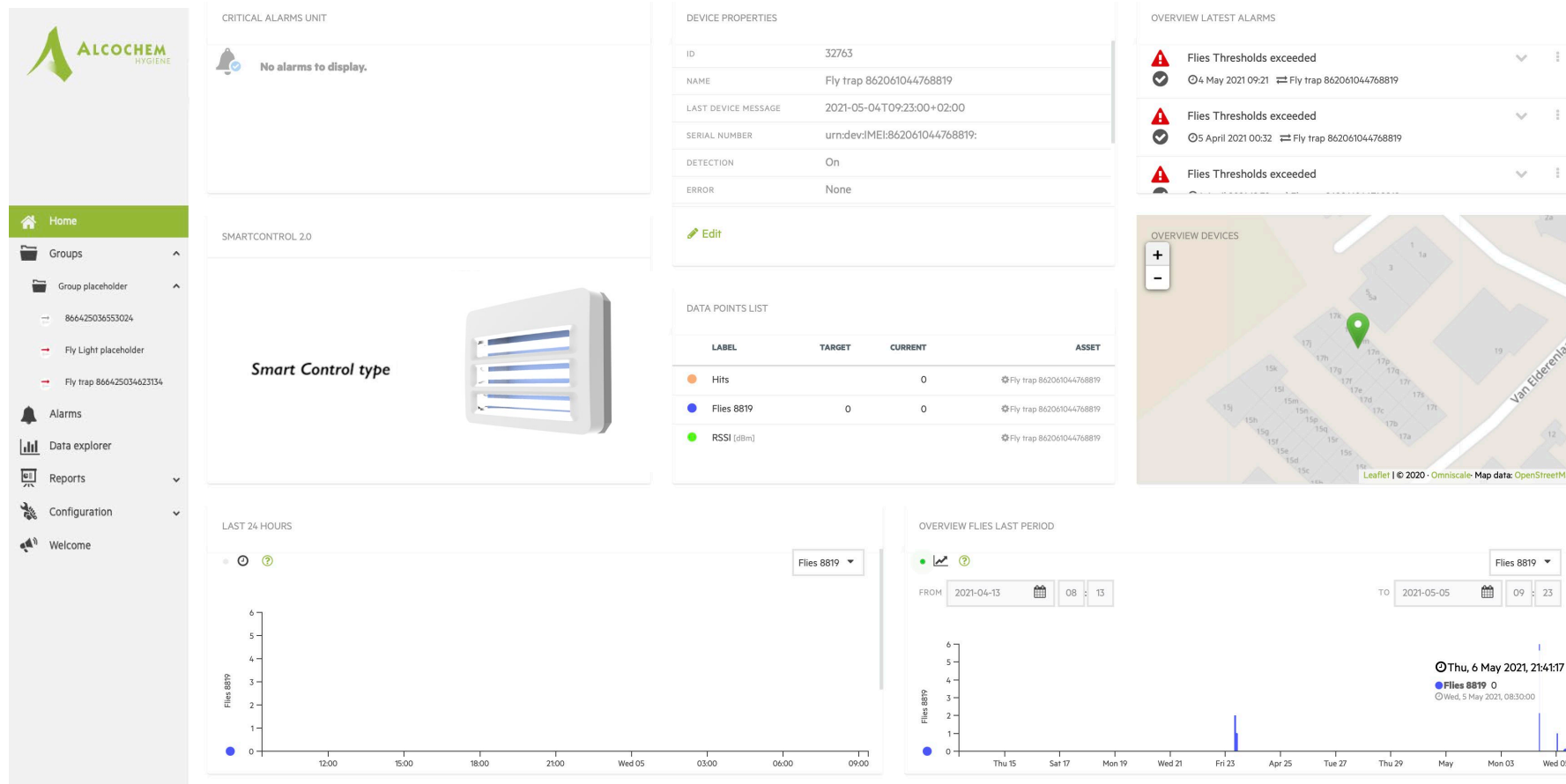
6. Communication module: Hardware

No	Item	Spec
1	Transmittance	Over the XG network (via sim card)
2	Antenna	Internal
3	Installment	Factory placed or retrofit (in the field)
4	Connectors	Fast terminal clamp on connectors
5	Data collection	Via Cloud software, API or Bluetooth
6	Data send	<ul style="list-style-type: none">* Number of insects caught per time annum* Alarm level (soft & hard)* Lamp replacement status* Failure mode unit
7	Traceability	Unique identifier (serial number) on module
8	Safety aspect	Data encrypted and protected



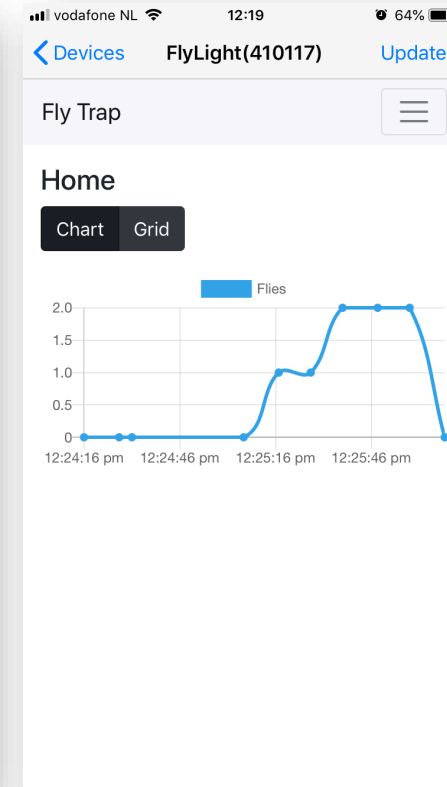
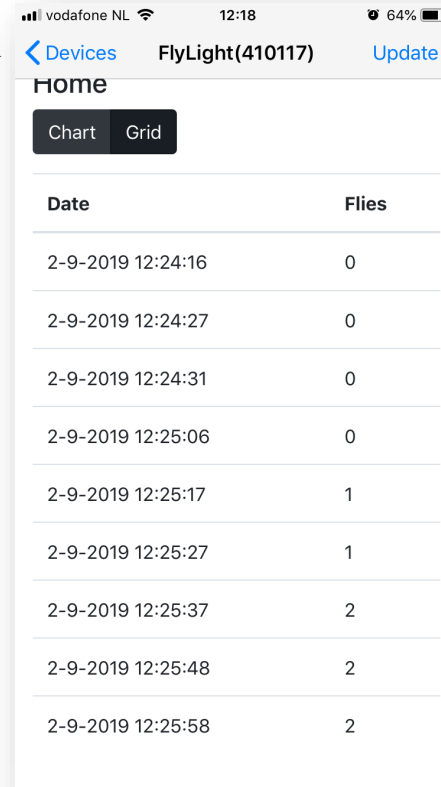


6a. Communication module: Cockpit (cloud)





6b. Bluetooth App for smart control



No	Item
1	App for Omniveo developed
2	Available from Apple & Android store
3	Tested: over 2 years



7. Selling features

No	Item
1	Quantitative monitoring in real time of all flying insects
2	Camera module can be installed retrofit (future proof design)
3	Communication module can be installed retrofit (future proof design)
4	First range which fully meets the HACCP principles
5	Easy handling and processing of unit and the collected data
6	Unit meets all relevant standards and regulations
7	Unique range, upgradeable
8	The choice is yours: The reliable Astron UV lamp & Philips electronic ballast offer 40.000 hrs. of lifetime or The Astron UV LED lamp, that offers high energy savings.
9	Various executions available in the Oniveo range
10	Easy to clean, easy & fast to service

8. Markets

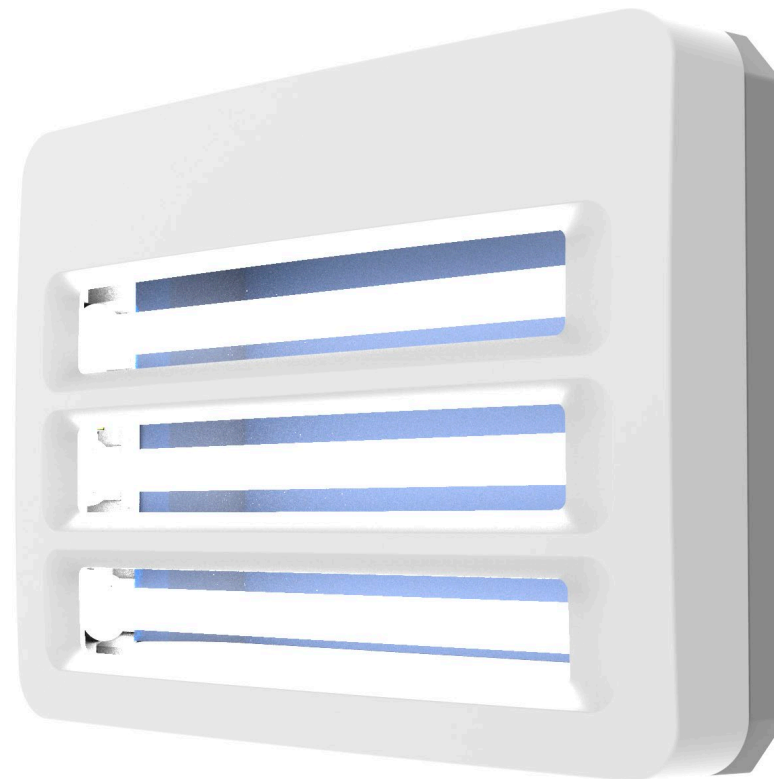
No	Item	
1	Food & Beverage	
2	Pharma	
3	Dairy	
4	Medical	
5	Cosmetic	
6	Storage & Warehousing	
7	Tobacco	
8	Restaurants	
9	Stores	
10	And many more...	





9. Omniveo range

Item	Specification
Behuizing	Durable plastic
IP protection level	IP20 and IP65
Amount of lamps	2 and 3 lamps
Lamp types useable	TL or UV LED
Approvals	CE / CB / RoHS

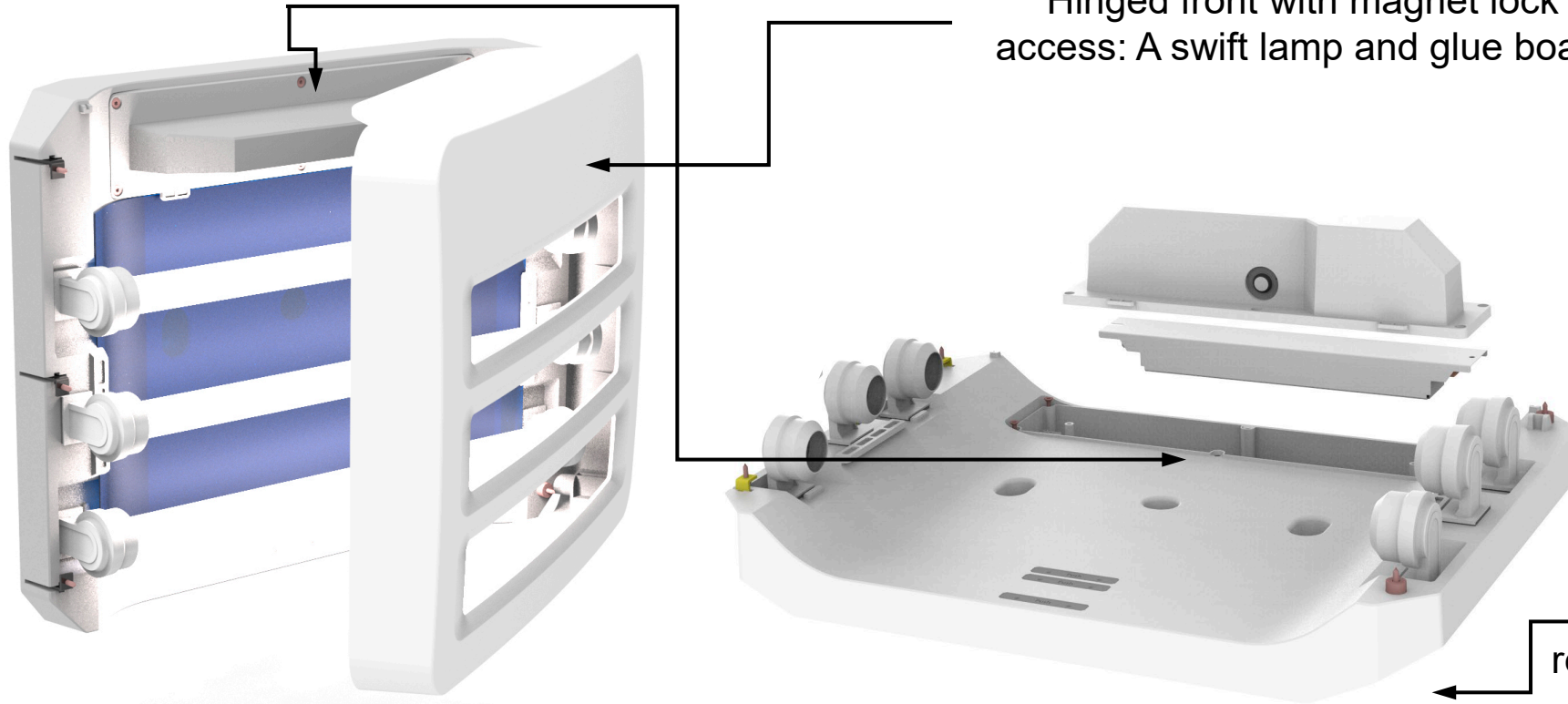




10. Service & Onderhoud

Easy accesible service compartment

Hinged front with magnet lock ensures for fast access: A swift lamp and glue board replacement



Detachable power cord allows for reallocation of the unit



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