

With the recent uptake in people growing indoors with indoor growing equipment, be it vegetables or cannabis, it has highlighted the fact that people are still stuck in the 'old school' way of doing things with timers and relays This has been a huge deterrent.

This coupled with the fact of not knowing what is going on in the grow tent while you not present and that you cannot keep a proper history to investigate a grow after the fact, has also kept new growers away.

SASH Controller



SASH Controller: Plug in up to 6 devices to control, temperature and humidity sensor and an auto focusing camera: **SASH**.

The SASH Controller is an IoT (Internet of Things) controller that connects to your home Wi-Fi hotspot and provides you with all the control you ever dreamed of in your grow tent.

Can control up to 6 devices from your mains power and has an integrated circuit breaker for safety.

Gone are the days of only being able to put a plug on and off based on a timer or relay. With SASH you can configure advanced profiles that react to changing conditions.

Set your fans to behave differently during the day and night and react to temperature and humidity changes differently during the night and day.

Profiles are downloaded to the controller and will continue to work even when the internet connection is lost.

What control do I get?

Previously when growing indoors, devices like lights, fans and heaters had to be plugged into timers and relays to make basic decisions based on a single condition. And when load shedding happens, everything is out of sync again. No data got recorded and you never knew what really happened when you were not there to observe it.

So what do you get with a SASH Controller to make those critical decision on?



Sensor: This Bosch temperature and humidity sensor is provided that will take accurate readings to be able to control the climate in the grow tent.



Camera: An auto focusing camera is provided that can be scheduled to take high quality images of your plants or you can request a fresh image on demand.



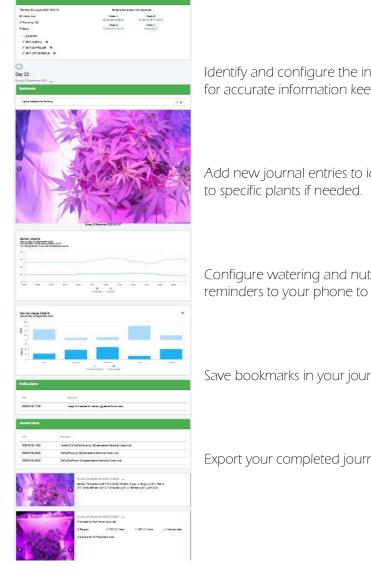
Hardware clock: Each SASH Controller comes with a hardware clock with a battery backup that will keep time during load shedding, so that when the power comes back on again, the correct time is restored on your controller.



Where does all my data go and where do I get it?

SASH is a journal based system where all your data is uploaded from the controller to your personal journal in the cloud. This information is then accessed anywhere you have internet availability.

To easily see the information of your journal, a dashboard is available where you can navigate between weeks and days of the journal and see in detail what happened.



Identify and configure the individual plants in your grow for reference in other places for accurate information keeping.

Add new journal entries to identify important stages in your plant's lifecycle. Link these to specific plants if needed.

Configure watering and nutrient feeding schedules on the journal and enable reminders to your phone to never miss a watering or feeding.

Save bookmarks in your journal for easy location of important events.

Export your completed journal's details if you want to keep it remotely.

All your historical journals that have completed will be kept in the SASH. It will be available at any time to investigate previous successes or failures to learn and improve.

Is there an app for my phone?

The SASH mobile Android application plays a very important part in SASH and is called the SASH Remote.



The remote is used to claim you newly bought controller, setup your home Wi-Fi credentials and to configure the controller during setup.

Using the Bluetooth dashboard helps you to position your camera and sensor in the correct place for the best readings.

This dashboard can also be used if you are within Bluetooth range of your grow tent and you want to see inside without opening the tent.



When no profile is running on the controller you can manually put the plugs off and on with the remote.

Your journal details can also be viewed through the remote while you are on the go and not close to a computer. Adding journal entries to your journal while you are away is also done through the remote.

How can SASH help me to remember?

As part of a SASH Journal, alerts and schedule reminders can be configured that will push a notification to your mobile application to inform you.

With a SASH Controller, exceeding certain conditions (E.g. Temperature above 30°C for more than 10 minutes) can result in an alert that is pushed to your mobile application to help you react in time.

Watering and Nutrient schedules create reminders that are also pushed to your mobile application to remind you in time with the correct details of what to do.

Can it save me money?

One of the unique features of the SASH Controller is where plugs can be put on at a percentage of the time to save on unneeded power usage.

E.g. The Controller can put the air extractor plug on 50% of each 30 minutes (15 minutes on followed by 15 minutes off) while the light plug is off.

Another big part in reducing costs is knowing your usage. With SASH you can configure each plug with the Watt rating of the device you have plugged into it. Using this and the time the plug was on, SASH can show you your power usage to assist you in reducing usage.

CONTROLUP TO 6 DEVICES WITH THE REACTIVE SASH IOT

M. sosh

CONNECTS TO YOUR HOME WIFI Network for internet access

CONTROLLER

KEEPS CORRECT TIME AFTER LOAD Shedding

= SUPPLIED TEMPERATURE AND Humidity sensor with auto Focusing camera

MOBILE APP FOR DIRECT
BLUETOOTH TO CONTROLLER

HIGHLY CONFIGURABLE PROFILES ALLOW CONTROLLER TO REACT IN REAL TIME TO CHANGING CONDITIONS

CONFIGURABLE THRESHOLD
ALERTS PUSHED TO YOUR MOBILE APP

Visit the <u>SASH</u> Website for more information.

Email us at sash@appframeworks.com