

A iiotsys™ IoT Switch is part of the home automation (internet of things) devices that allows you to control electronic and electrical devices that are connected to it by turning them either on and off or opening and closing them.

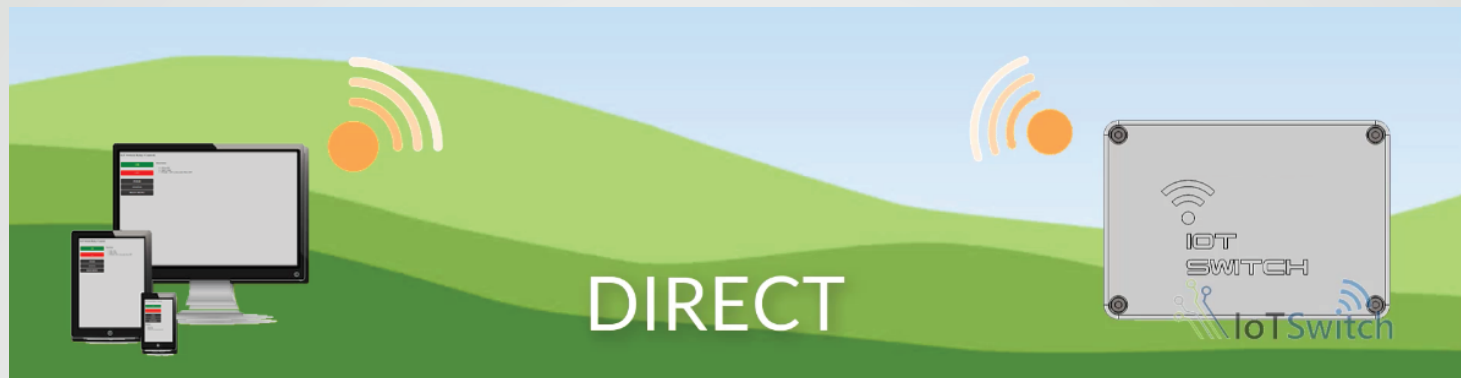


Control your home or office from anywhere!



The iiotsys™ IoT Switch works in four different ways depending on your needs:

Stand-alone mode



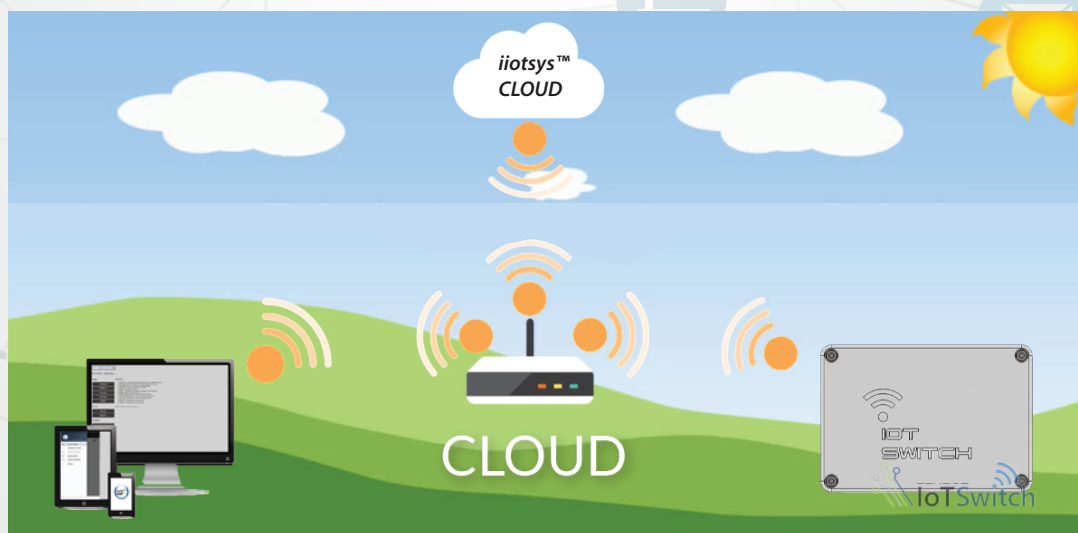
Where there is no home or office Wi-Fi network the iiotsys™ IoT Switch acts as an access point and can be controlled directly by connecting to it and using its local built in **Web interface**, this allows control of connected appliances and electronic devices where there is no existing network.

Local Wi-Fi mode



Where there is a secure home or office Wi-Fi network but no internet connection the iiotsys™ IoT Switch connects to your home or office Wi-Fi network and can be setup and controlled using the **Mobile App** or the **Web interface** built into the iiotsys™ IoT Switch, this allows control of connected appliances and electronic devices where there is a local Wi-Fi network with no internet connection.

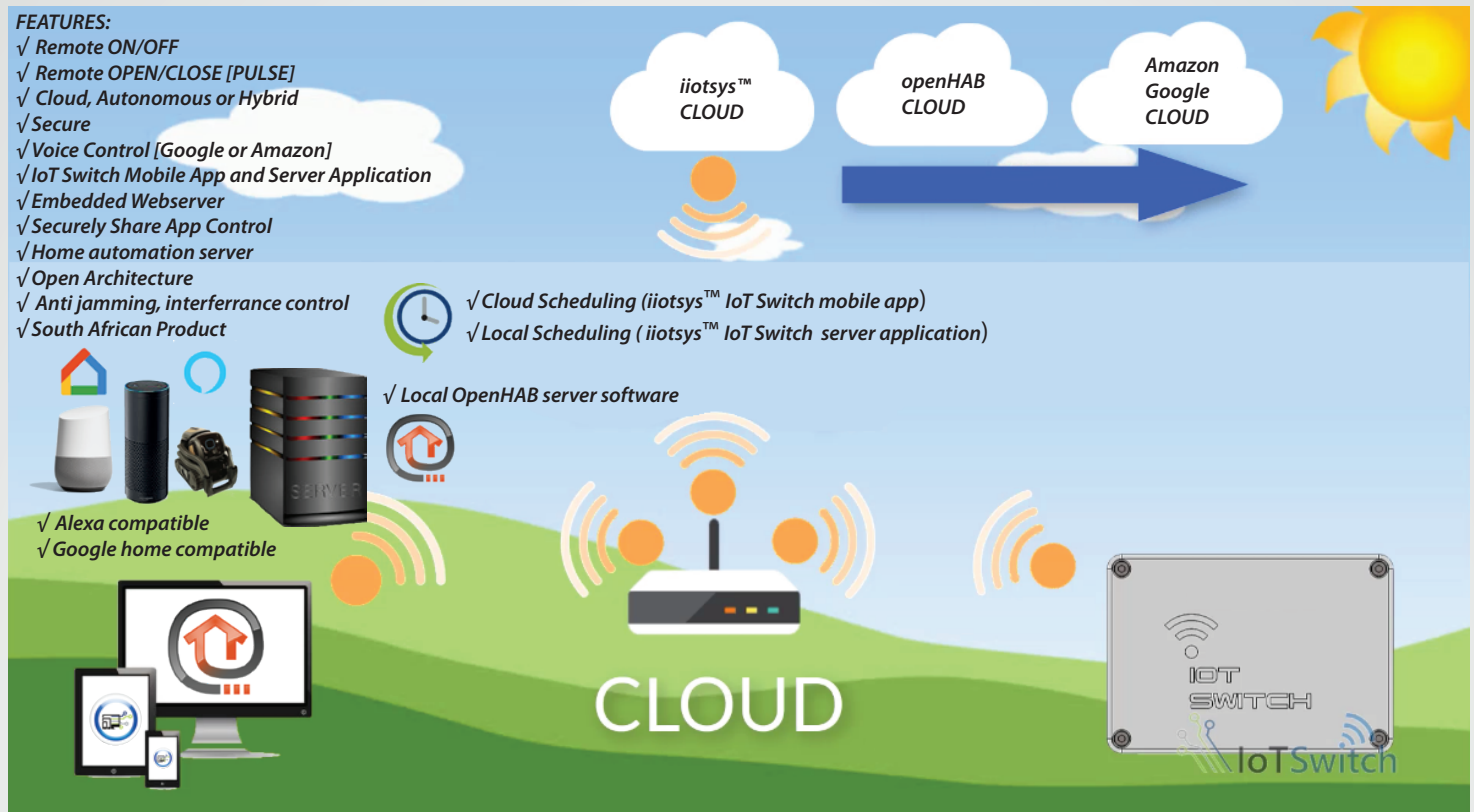
Cloud mode



The iiotsys™ IoT Switch connects to a secure cloud platform using your Home or Office Wi-Fi router and waits for messages that control it. The **Mobile App** loaded on your phone securely connects to the **Cloud platform** using either your home, office or 3G/4G/LTE internet connection and passes control messages to your iiotsys™ IoT Switch. This allows control of connected appliances and electronic devices from your home or office and from the internet.



Home Automation mode



The iiotsys™ IoT Switch integrates seamlessly into openHAB home automation server, this allows for creation of control panels throughout your home or office and can be extended to enable voice control with Amazon Alexa or Google Home. This allows control of connected appliances and electronic devices, as in the cloud mode, but now extends control to include all the benefits of home automation server controls and rules.



How does the switch control devices?

The IN-LINE model powers appliances connected to it and the ISOLATED model provides a pair of contacts that can be open (off), closed (on), pulsed (on for one second then automatically turns off).

What is the difference between the models?

The IN-LINE model can be used for lights, geysers, pool motors and generally any electrical appliance. The ISOLATED model can be used for garage doors, driveway gates, alarm systems and generally any electronic device that needs a simple open, close or pulse signal.

What more can we offer?

We provide a free secure cloud platform, Mobile App's and home automation server software that can also be voice control enabled. We provide you the ability with just an investment in the iiotsys™ IoT Switch to grow your solution from an app into a full-blown home automation solution that still seamlessly integrate with the original Mobile App's. As we develop and add more features these are passed onto you at little or no cost.

What technologies are used to control the iiotsys™ IoT Switch?

The iiotsys™ IoT Switch can communicate using MQTT (Message Queuing Telemetry Transport) publish-subscribe-based messaging protocol to the cloud messaging server. The iiotsys™ IoT Switch can also be controlled using conventional request-response-based HTTP protocol.

What makes the iiotsys™ IoT Switch unique?

The iiotsys™ IoT Switch is one of the highest rated amperage IoT Switches in the Market. Apart from the complete solution offering iiotsys™ IoT Switch supports an open platform connectivity allowing you to connect to any MQTT or http cloud provider. The iiotsys™ IoT Switch is a South African product making support and spares locally available to maintain your investment.

How many iiotsys™ IoT Switches or Mobile App users can I add?

Unlimited number of iiotsys™ IoT Switches and secure Mobile App authorised users can be added.

How stable is the iiotsys™ IoT Switch?

The iiotsys™ IoT Switch is designed to self-heal whenever there is a power failure, home or office Wi-Fi failure or internet failure. Validated details are stored to the memory on the device ensuring that it won't forget its settings in any failure situation. The iiotsys™ IoT Switch will not accidentally activate when power is restored to it. The IoT Firmware has been tested to ensure the device never freezes in any operation. The iiotsys™ IoT Switch has anti-jamming and interference management.

How secure is the iiotsys™ IoT Switch?

The iiotsys™ IoT Switch conforms to WPA and WPA2 data encryption standards. Each iiotsys™ IoT Switch gets assigned a 24-character unique alpha numeric encrypted control subject. The control functions each have a 7-character unique alpha numeric encrypted control key. The iiotsys™ IoT Switch SSID can be hidden for added security. The iiotsys™ IoT Switch can be locked against unauthorised access on the local network.

How secure is the data exchanged between my mobile device and the cloud platform?

Connections between your Mobile App and the cloud messaging platforms is fully encrypted.

- TLS v1.2 connection.
- AES 128Bit GCM authenticated.
- ECDHE_RSA key exchange

How secure is the cloud platform?

Each user is segmented by virtual host from other users. Each user on the cloud platform is unique. Connections between cloud platform and your Mobile App is fully encrypted.

How secure is the overall solution?

Critical information stored in the iiotsys™ IoT Switch memory cannot be retrieved that would link any Mobile App (owner) to the iiotsys™ IoT Switch being controlled. The iiotsys™ IoT Switch conforms to WPA and WPA2 data encryption standards. Connections between your Mobile App and the cloud messaging platforms is fully encrypted.





Categories	Items	Values	
Wi-Fi Parameters	Wi-Fi Protocols	802.11 b/g/n	
	Frequency Bands	2.4Ghz-2.5Ghz (2400M-2483.5M)	
	Maximum Radiated Power	90mW	
Software Parameters	Wi-Fi mode	Station/SoftAP/SoftAP+Station	
	Security	WPA/WPA2	
	Encryption	WEP/TKIP/AES	
	Network Protocols	IPv4, TCP/UDP/HTTP	
	Software Development	SDK for custom firmware development	
	Firmware Upgrade	UART Download /Write firmware via host	
Hardware Parameters	User Configuration	Web Server, Cloud Server, Android/IOS App	
	Power supply	220V AC to 5V DC, 600mA	
	All Voltage Input Range	90-264Vac 50-60Hz	
	Operating Temperature Range	-40 DegC - 125 DegC	
	Ambient Temperature Range	Normal Temperature	
	Package Size	68mm(L)*46mm(W)*25mm(H)	
	Fasteners	M2 Stainless Steel Cap Screws (4)*12mm	
	Grommet	SHA70 Silicone Rubber	
	Top Seal	SHA70 Silicone Rubber	
	Case Wall Thickness	3mm	
	Lid Thickness	3mm	
	Case Material	ABS Injection Moulded Plastic	
	External Interface	4 Pole Terminal Block	
	Switched Voltage and Amperage	(IN-LINE Model)	100-240Vac 50-60Hz 15A
		(ISOLATED Model)	0-100Vac/Vdc 15A 100-220Vac 15A
Compliance and Standards	Seals	GB/T531/T528	
	Casing	ABS(UL 94 V0), IP54	
	Components		UL1012, EN60950, EN61810, EN60998, UL60950, IEC61810
			ISO 9001:2008, UL Certification UL, CE, RoHS
Compliance and Standards Summary	Product	UL EN IEC RoHS ISO GB CE	
Legislation		ELECTRONIC COMMUNICATIONS ACT, 2005 (ACT NO 36 OF 2005): REGULATIONS REGULATIONS IN RESPECT OF LICENCE EXEMPTIONS IN TERMS OF SECTION 6 OF THE ELECTRONIC COMMUNICATIONS ACT READ WITH SECTION 31(6) IN RESPECT OF RADIO FREQUENCY SPECTRUM, ECS AND/OR ECNS	

GET THE APP!



Can be controlled in many ways.

- iiotsy™ IoT Switch App
- Google Home
- Google Assistant
- Amazon echo
- OpenHAB App
- Local or Cloud
- Standalone or WiFi



Alexa compatible
Google Home compatible



- iiotsys™ IoT Switches integrate with openHAB home automation server.*
- Add other smart home devices
 - Add touch control panels
 - Securely publish your server
 - Add voice control

www.iiotsys.co.za

www.kldtechnologies.co.za

