

4G Hub



**Model No:
CSH - 0401**

**CoolR iot
Global Hub**

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Disclaimer of Warranties

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help. Specific Absorption Rate (SAR)

information:

This Mobile Phone meets the government's requirements for exposure to radio waves. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons regardless of age or health.

For FCC SAR Description

FCC RF Exposure Information and Statement

The SAR limit of USA (FCC) is 1.6 W/kg averaged over one gram of tissue. Device types: CSH-0401 (2ARWCCSH-0401) has also been tested against this SAR limit. The highest SAR value reported under this standard during product certification for use in the hotspot and properly worn on the body. This device was tested for typical body-worn operations with the back of the handset kept 10 mm from the body. To maintain compliance with FCC RF exposure requirements, use accessories that maintain a 10mm separation distance between the user's body and the back of the handset. The use of belt clips, holsters and similar accessories should not contain metallic components in its assembly. The use of accessories that do not satisfy these requirements may not comply with FCC RF exposure requirements, and should be avoided.

Body-worn Operation

This device was tested for typical body-worn operations. To comply with RF exposure requirements, a minimum separation distance of 10mm must be maintained between the user's body and the handset, including the antenna. Third-party belt-clips, holsters, and similar accessories used by this device should not contain any metallic components.

Body-worn accessories that do not meet these requirements may not comply with RF exposure requirements and should be avoided. Use only the supplied or an approved antenna.

A. Overview

The iOT Global Hub is a device designed to track assets based on WiFi + Cell ID + GPS technology. It is also the perfect platform for collecting and managing data from wireless and wired sensors through its Bluetooth 4.0 (le) feature. Its connectivity features enable the device to roam globally using 2bands UMTS and 2 bands 2G as fallback technology. It has a dedicated power management chipset and it is optimized to work as a battery powered device with a 1500 mAh capacity.

B. Specification

1.1 Technical Specification

- | | | |
|-------------------|---|--------------------------|
| 1. Power Capacity | : | 1500 mAh Lithium Polymer |
| 2. Battery Cell | : | Lithium Polymer |
| 3. Accelerometer | : | 3 Axis |
| 4. Rated Input | : | DC 5V 500mA |
| 5. Dimensions | : | 4.9 x 2.9 x 0.39 inch |
| 6. Weight | : | ~40 grams/ ~1.4 oz |

1.2 Operational Specifications

All transmitter characteristics are listed in this section. Typical specifications are for mid-band channel frequency and under typical operating conditions. Min/Max specifications are for extreme operating voltage and temperature conditions.

- | | | |
|--------|---|-------------------------|
| 1. TXO | : | BAND Supported |
| 2. 4G | : | (B2/4/5/12/17, FDD-LTE) |
| 3. 3G | : | 2,4,5 (WCDMA) |
| 4. 2G | : | 2,3,5,8 (GSM) |

1. TXO	:	Min Frequency(MHz)	Min Frequency(MHz)
2. 4G	:	694	2155
3. 3G	:	824	2155
4. 2G	:	824	1990

Direct conversion transmitter (TLE/3G/8PSK) and DFM for GMSK

- ❖ Dedicated power detection circuits for power control over specific power range
- ❖ 2LB/2MB/1HB TX output port
- ❖ Hybrid Direct Conversion (4G/3G)/ LowIF (GGE, DCHSDPA) receive

RF section also includes Bluetooth /WiFi/FM chips MT6625LN

Device features:

Bluetooth Features

- ❖ Compliant with Bluetooth 4.0 specification
- ❖ Bluetooth Piconet and Scatternet support
- ❖ Support class1 operation with integrated power amplifier
- ❖ Receiver sensitivity: GFSK -92.5dBm ; DQPSK -91.5dBm ; 8-DPSK -86dBm

C. Getting Started

2.1 Label

2.1.1 Serial# - It is Dynamic and it can be set or changed by Admin from Admin Portal
IMEI - Get with Smart Device

2.2 Powering On

Press power button and hold it for 2secs until Green lights ON.

2.3 Restart

Can do with the help of using Reboot Remote Command.

2.4 Power Off

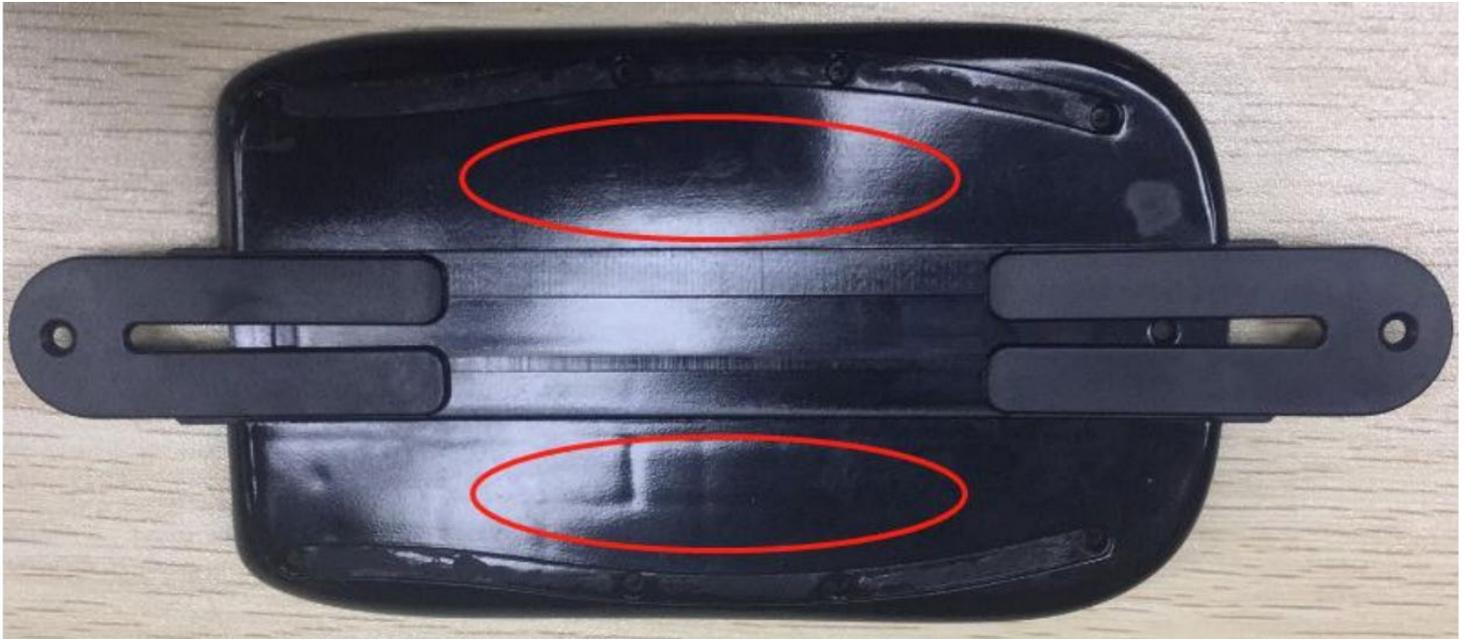
Press power button and hold it for 2secs until Red lights ON.

2.5 LED Indicator

1. Green Light: - Indicates Power ON
2. Red Light: - Indicates Power OFF

2.6 Installation

2.6.1 Using **Tape**: - It can be pasted on Glass or Wood by using Double tape which already provided on Device from Manufacturing side.



2.6.2 Using **Screws**: - It has screw option too for holding it on one place.



D. Validating Data

3.1 Web

3.1.1 Log In: - User can login with the credentials provided by Admin.

3.1.2 Finding Your Device: - - We can see our Device with the help of Serial# No./ MAC Address / IMEI on CoolR Dashboard. Just apply a filter on Serial Number, IMEI or Mac Address on Gateway Screen. Dashboard URL: dashboard2dev.coolrgroup.com

The screenshot displays the CoolR Group dashboard interface. The top navigation bar includes a search bar for 'Mac address, Asset, Location' and a sidebar menu with options like Home, Outlets, Assets, Smart Device, Gateways, Products, Planograms, Back Office, Logs, Consumer Records, Dashboard, Master Setup, System Setup, and IOT Charts. The main content area is titled 'Gateways' and features a table with columns: Device Type, Mac Address, Serial Number, Status, IMEI, Sim#, Last Ping, Battery Level, Build Version, and Firmware Version. Several filter boxes are visible above the table, and the first few rows of data are shown. Below the main table, there is a 'Movements' section with a sub-table showing columns: Outlet Code, Outlet, Asset Serial #, Smart Device#, Smart Device Mac, Smart Device Type, Movement Type, Start Time, End Time, Duration, and Latitude. This sub-table contains multiple rows of ping data for a specific device.

Device Type	Mac Address	Serial Number	Status	IMEI	Sim#	Last Ping	Battery Level	Build Version	Firmware Version
Smart Hub v3	24-DA-9B-7F-3D-17	8863610870951	Disconnected		894608002440...	09/14/2018 04:48:47 AM	100		0.0.20
Smart Hub v3	24-92-0E-8E-37-70	8552008627968	Disconnected			09/28/2018 08:19:13 PM IST	61	NMF26XT3500...	0.0.31
Smart Hub v3	38-A4-ED-E8-28-32	30623297800130			899186804000...	08/09/2018 05:22:59 PM	17		0.0.19
Smart Hub v3	40-4E-36-88-CD-29	39046947155129	Disconnected	357537084108...	899110180518...	10/03/2018 09:18:12 PM	54	PPR2.181005.0...	0.0.31
Smart Hub v3	7E-CF-46-00-00-9D	13942869735325							
Smart Hub v3	7E-91-46-00-00-60	Realwave Hub	Provisioned			08/07/2018 02:38:42 PM ET	75		0.0.17
Smart Hub v3	00-08-82-18-77-44	-31621177036660	Off		899110180618...	09/19/2018 11:38:43 AM IST	94		0.0.30
Smart Hub v3	F2-96-46-00-00-88	266727233421448							Conne
Smart Hub v3	FA-42-46-00-00-DF	275162549190879			899110180516...	08/22/2018 04:47:04 PM	29		0.0.17
Smart Hub v3	F2-56-46-00-00-DF	DJ Miami Hub 2	New			08/10/2018 02:46:23 AM ET	56		0.0.14
Smart Hub v3	CA-89-46-00-00-2F	222690933735471			899110180618...				
Smart Hub v3	B6-FD-46-00-00-91	201198917386385			890126065176...				

Outlet Code	Outlet	Asset Serial #	Smart Device#	Smart Device Mac	Smart Device Type	Movement Type	Start Time	End Time	Duration	Latitude
			VH in without display ...	00:08:53:D2:AF:4D		GPS	11/10/2018 07:38:10 PM	11/10/2018 07:38:10 PM	0	28.644001
			VH in without display ...	00:08:53:D2:AF:4D		GPS	11/10/2018 07:36:13 PM	11/10/2018 07:36:13 PM	0	28.644001
			VH in without display ...	00:08:53:D2:AF:4D		GPS	11/10/2018 07:35:03 PM	11/10/2018 07:35:03 PM	0	28.644001
			VH in without display ...	00:08:53:D2:AF:4D		GPS	11/10/2018 07:35:00 PM	11/10/2018 07:35:00 PM	0	28.644001
			VH in without display ...	00:08:53:D2:AF:4D		GPS	11/04/2018 02:00:25 AM	11/04/2018 02:00:25 AM	0	28.643991
			VH in without display ...	00:08:53:D2:AF:4D		GPS	11/04/2018 01:30:25 AM	11/04/2018 01:30:25 AM	0	28.644021
			VH in without display ...	00:08:53:D2:AF:4D		GPS	11/04/2018 01:00:25 AM	11/04/2018 01:00:25 AM	0	28.643977
			VH in without display ...	00:08:53:D2:AF:4D		GPS	11/04/2018 12:30:25 AM	11/04/2018 12:30:25 AM	0	28.643951
			VH in without display ...	00:08:53:D2:AF:4D		GPS	11/04/2018 12:00:25 AM	11/04/2018 12:00:25 AM	0	28.643981

3.1.3 Verifying Pings: - After selecting our device, we can see the data on Child Table on Gateway Screen.

The screenshot displays the CoolR Group web dashboard. The top navigation bar includes a search field for 'Mac address, Asset, Location'. The left sidebar contains a menu with items like Home, Outlets, Assets, Smart Device, Gateways, Products, Planograms, Back Office, Logs, Consumer Records, Dashboard, Master Setup, System Setup, and IOT Charts. The main content area is divided into two sections: 'Gateways' and 'Smart Device'.

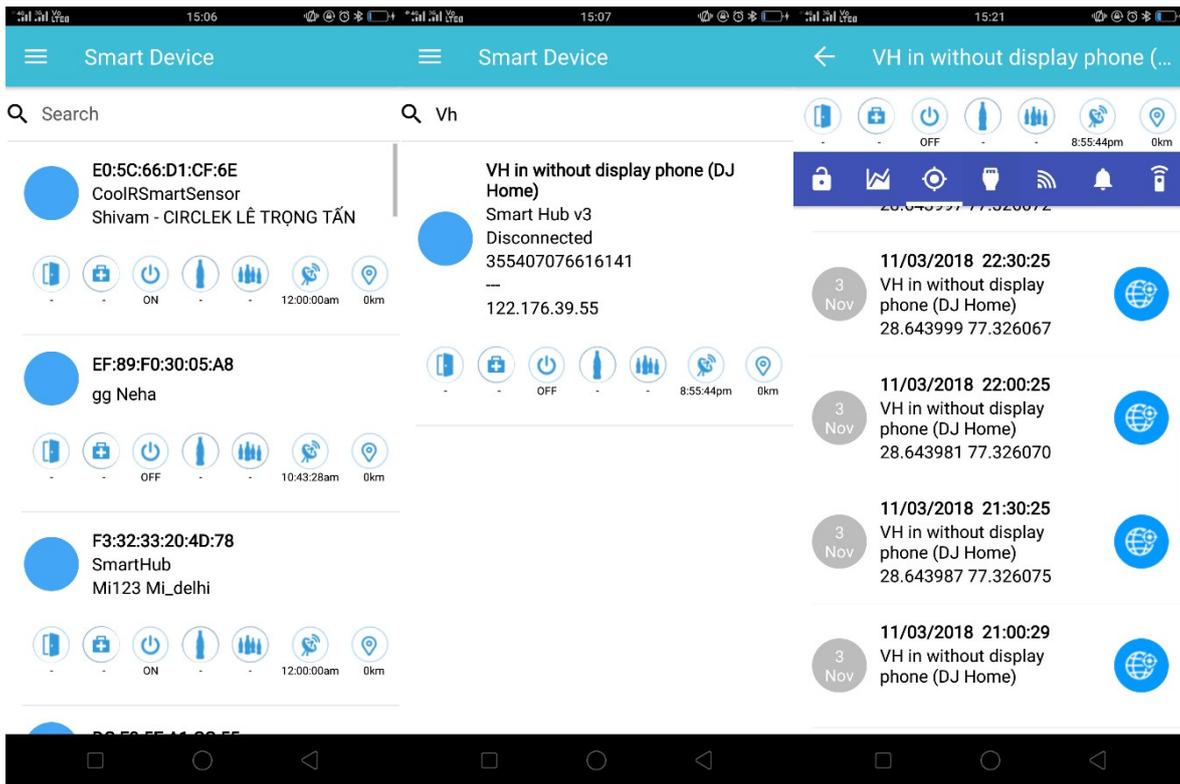
The 'Gateways' section shows a table with columns: Device Type, Mac Address, Serial Number, Status, IMEI, Sim#, Last Ping, Battery Level, Build Version, and Firmware Version. A red arrow points to the 'Smart Device' column header in this table.

The 'Smart Device' section shows a table with columns: Smart Device#, Smart Device Mac, Smart Device Type, Latitude, Longitude, RSSI, Advertisement, App Version, First Seen, Hub Battery %, Charging, Event Id, and Created On. Red arrows point to the 'Smart Device' column header, the 'First Seen' column header, and the 'Created On' column header in this table.

3.2 Mobile

3.2.1 Log In: - We need RN App “Mobile App Version” to logging in. We can use same credentials which we have used in Web Dashboard.

3.2.2 Finding Your Device: - After log in, select the Smart Device option from Menu Bar.

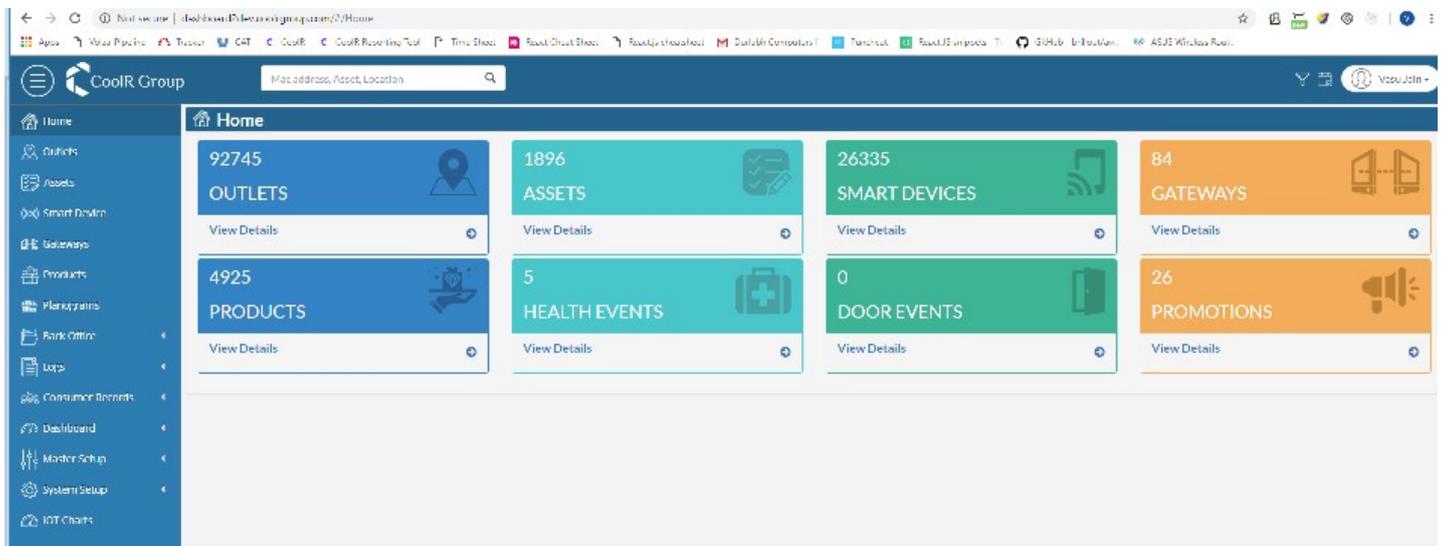


E. Remote Management (form CoolR Dashboard)

4.1 Web

4.1.1 Options: - User have an option to Manage the Device Remotely from Dashboard -

<http://dashboard2dev.CoolRgroup.com> . We can access our device and check and validate the data as well. We can add or delete the Asset / Client / user / Outlets / products /Assign the roles as well. Also we can set Planograms and check the Consumer Records as well.



4.1.2 Validate: - User can be Validate data of Pings events / Connectivity / Door Events / can check and upload Images from Vista / can check Latitude and Longitude of Location, it will change through GPS system which are installed in the device.

4.2 Mobile

4.2.1 Options: - We have an another option to manage our device remotely by using MDM Application. It has android and iOS version as well; we can use either as per our requirement. It has all the functionality for check and Validate the data.

4.2.2 Validate: - We can validate the data of pings, check the door status, connectivity, Remote Commands status, Battery Status, Get Date and Time status and also can check the status of Install and Uninstall Application by using Remote commands.

F. Remote Commands

We can change settings from Remote Command like Enable or Disable Wi-Fi / Enable or Disable Bluetooth / Install or Uninstall Application as many more options are listed below: -

ADB Enable or Disable

App Data Usage

Data Usage

Bluetooth ON/OFF

Get Date and Time

Hotspot ON/OFF

Install and Uninstall App

Kill App

Wi-Fi Enable and Disable

Wi-Fi Scan

Launch App

Take Screenshot

Update App

Update Config

Upload Logs

