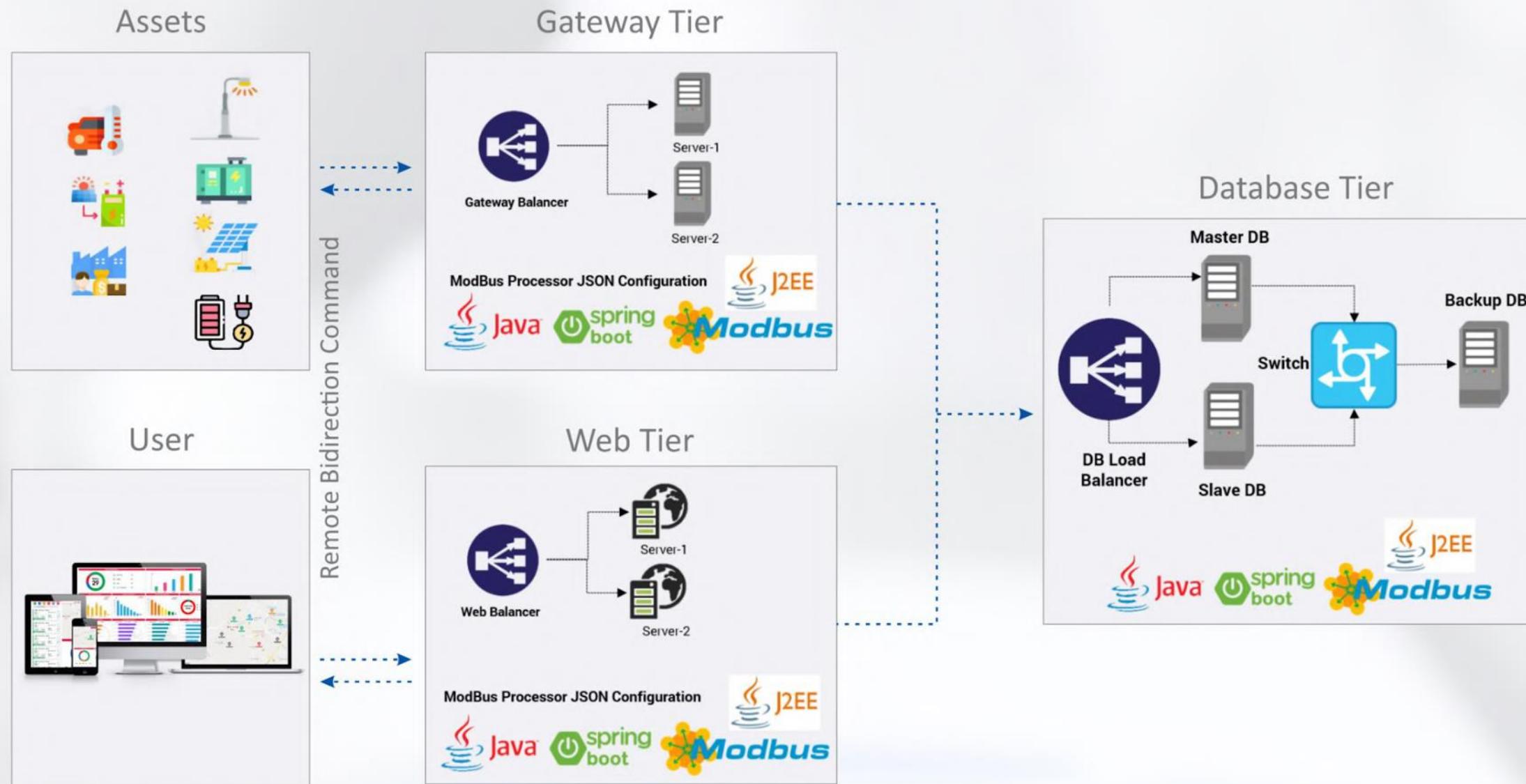


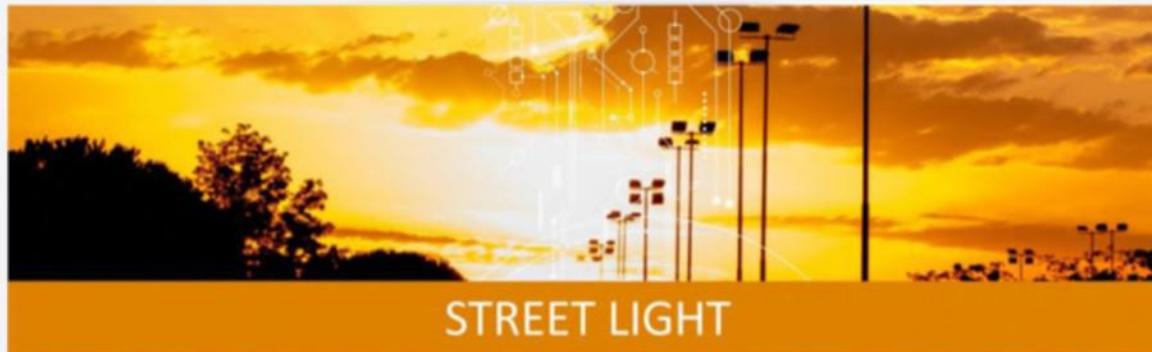
# INTERNET OF THINGS

## OUR SOLUTIONS





## IMPLEMENTATIONS



# FUEL SENSOR FOR DG

To monitor fuel in DG where Fuel Filling, Fuel Theft Detection and Fuel Consumption are the major key notes of this application



# With Roshan Anyone Can Be Millionaire!

Spend 250 Afn in a month and  
win 1,000,000 Afn.

Spend 50 Afn in a week and win 50,000 Afn.  
and more exciting teleco prizes.

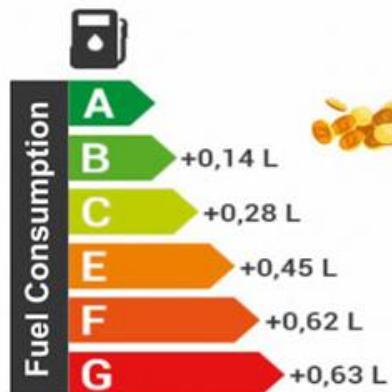


## PAIN POINTS



Fuel Theft

### Fuel Filling



## SOLUTIONS



Fuel Theft  
Alert & Report



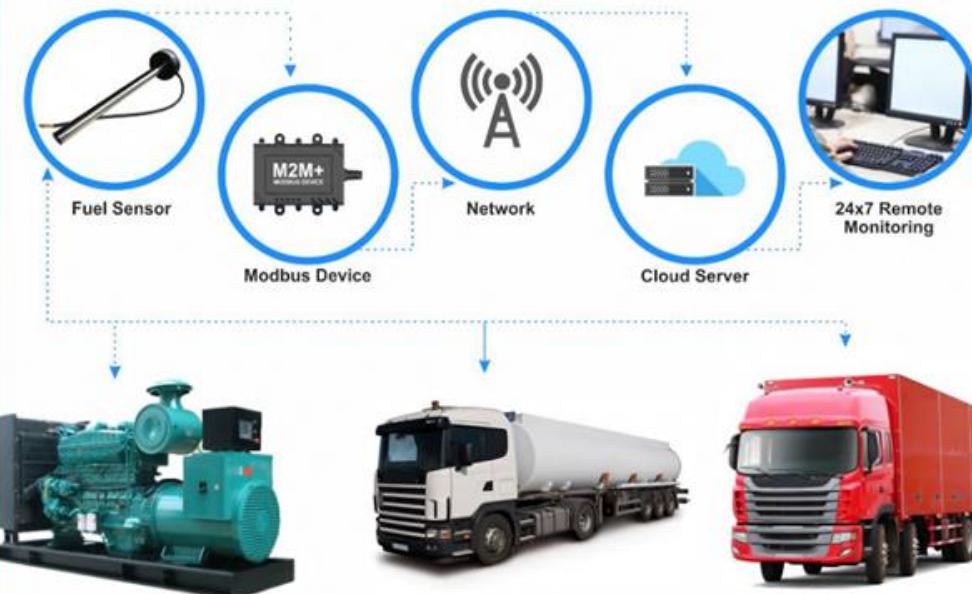
Fuel Filling  
Alert & Report



Fuel  
Consumption  
Alert & Report



Low Fuel  
Alert & Report



# APPLICATION SCREENSHOTS

**Dashboard**   **Manage**   **Alerts**   **Reports**   **Alarms**

**Filter**

Running    None    DG

Site Communication   All   **Clear**

**Search**   Enter Location/site

- Afghanistan
- Herat
  - HRT049 G1
  - HRT048 G1
  - HRT045 G1
  - HRT006 G2
  - HRT023
  - HRT024
  - HRT019 G1
  - HRT032 G1
  - HRT073
  - HRT035
  - HRT054
  - HRT045 G2

Site Id	Location	SIM	LCT	DG	Litre	mm	kw
KDZ001	Kunduz	ROSHAN	13-08-2022 17:48		247.0	183.0	4.02
JLD082 G2	Jalalabad	ROSHAN	13-08-2022 17:48		626.0	471.0	3.45
KBL074	Kabul	ROSHAN	07-04-2022 14:15		106.0	79.0	6.33
HRT045 G1	Herat	ROSHAN	13-08-2022 17:48		1005.0	764.0	2.61
MZR089 G2	Mazar	ROSHAN	13-08-2022 17:48		582.0	432.0	4.89
KST004 G2	Khost	ROSHAN	13-08-2022 17:47		882.0	704.0	2.61
BMN001 G1	Bamyan	ROSHAN	13-08-2022 17:48		655.0	335.0	2.75
MZR027 G2	Mazar	ROSHAN	13-08-2022 17:33		777.0	620.0	0.94
KBL068 G1	Kabul	ROSHAN	20-04-2022 10:36		751.0	435.0	4.04

Go to page: 1 Show rows: 10 1-10 of 73

**Alarms**

Description	Aging HH:MM
DG OFF	5:13

Map View

Level   Run Hr   Energy   SiteID: HRT049 G1   Daily

● DG Run.Hr in hours

Aug-13 00:00 Aug-13 01:00 Aug-13 02:00 Aug-13 03:00 Aug-13 04:00 Aug-13 05:00 Aug-13 06:00 Aug-13 07:00 Aug-13 08:00 Aug-13 09:00 Aug-13 10:00 Aug-13 11:00 Aug-13 12:00 Aug-13 13:00

SITE DETAILS

SITE ID	
HRT049 G1	Siteld
MZR069	IMEI No.
KDR009	Asset
KST006 G1	Manufacturer
MZR088 G1	Lat Long
KST009 G2	Site Address
GZN010 G1	Transmission Alarm(Min)
KBL093	Site Type
KDZ001	Type
HRT048 G1	
JLD082 G2	
KBL179	

Add  Edit 

KST006 G1

866758049229970 

FuelSensor

GreenP

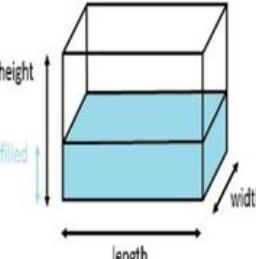
33.337527135703255,69.93841553572564 

Khost Site KVA 20 kva Tank Model GP-20P(S)/.

15 Low Fuel 200 liters width(cm) 72

Fuel + DG Tank Type Rectangle height(cm) 84.2

Capacitive Fuel consume/hr: 6 length(cm) 174



India

Afghanistan

Kabul

Herat

Mazar

Kunduz

Faryab

Wardak

Badakhshan

Baghlan

**Khost**

Bamyan

Farah

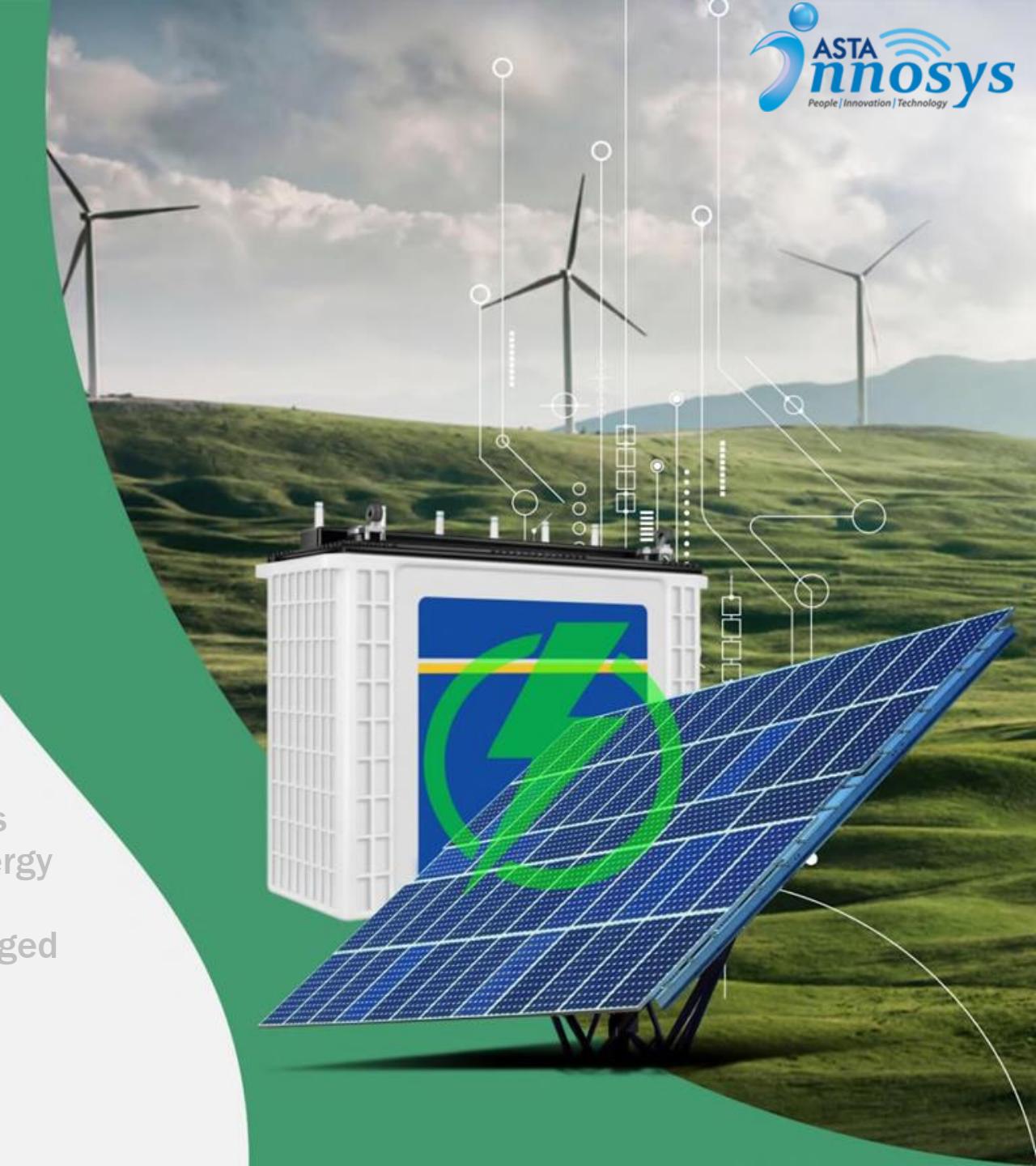
Kandahar

Debugging Mode

Submit Close

# PREPAID ENERGY

Prepaid Energy: Administrator can monitor the various parameters of Battery, Inverter & Solar. When the energy reaches the limit inverter will be turned OFF automatically. It will be turned it ON back once recharged by the user.





Up to 80% Savings on Power!  
**Go Solar Today**

**VIEW SOLUTIONS**

**GET IT NOW**



Welcome to our site, if you need help simply reply to this message, we are online and ready to help. Start with your name and phone number so we can pick up where we left off if we are disconnected. Thank you



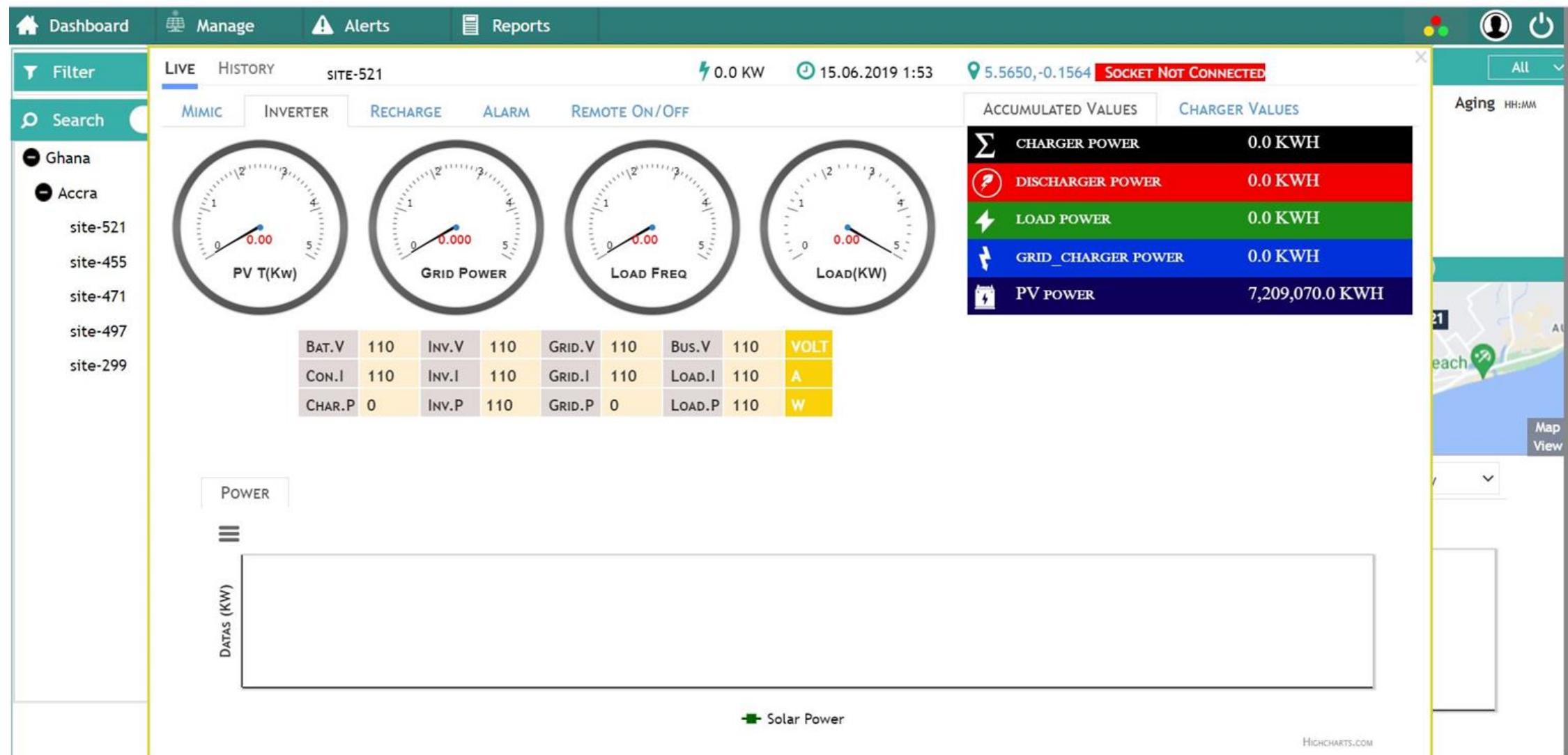
Customer Support

13 minutes ago

Type here and press enter..



# APPLICATION SCREENSHOTS



# DG MONITORING AND CONTROL

To Monitor various DG parameters and Lock/Turn OFF  
DG and Unlock the control panel via remote



Enquire Now



Power Equipment

Construction Equipment

Lifting Equipment

Concrete Equipment

Commercial Trucks

Rental Equipment

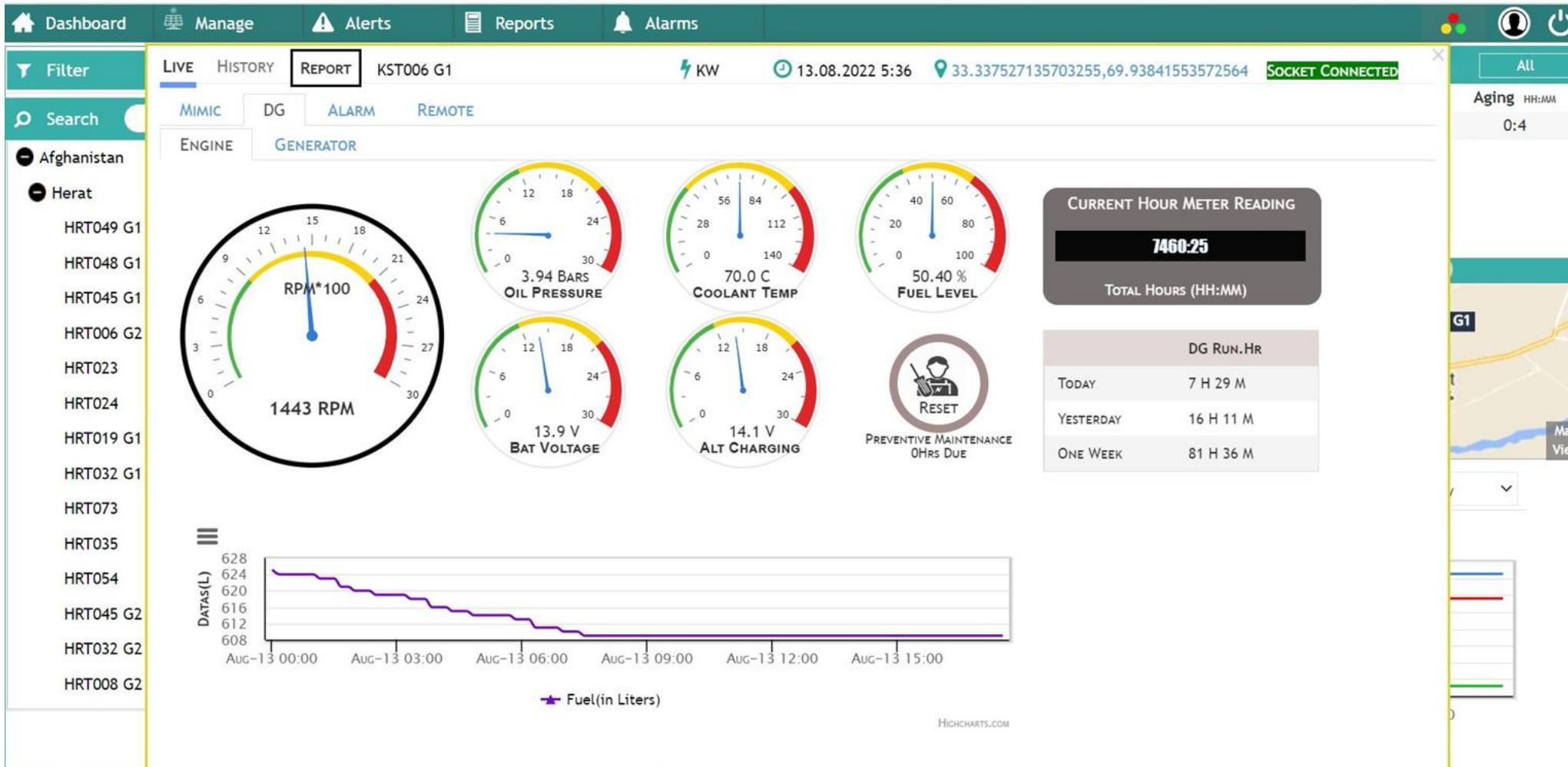
## DOOSAN



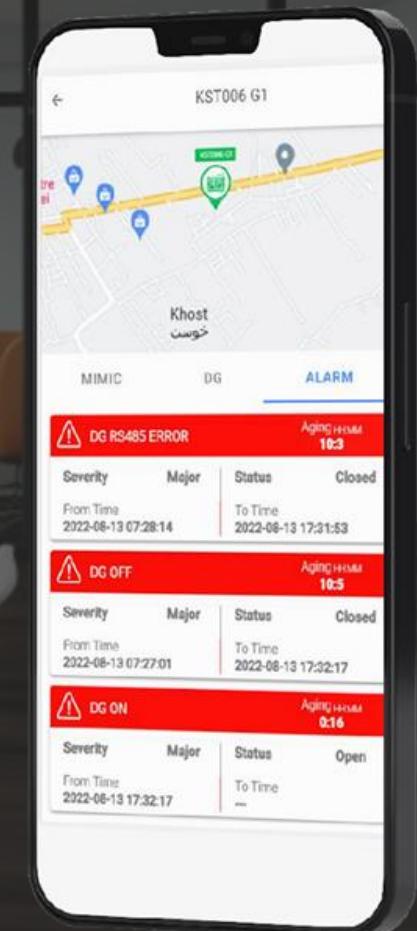
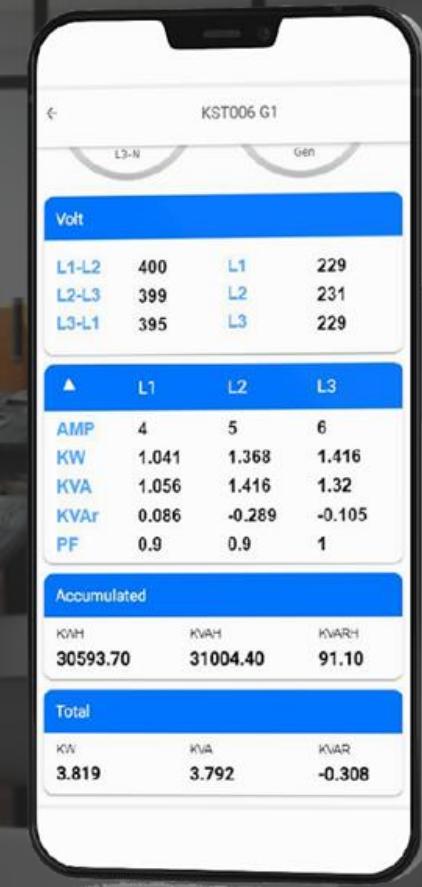
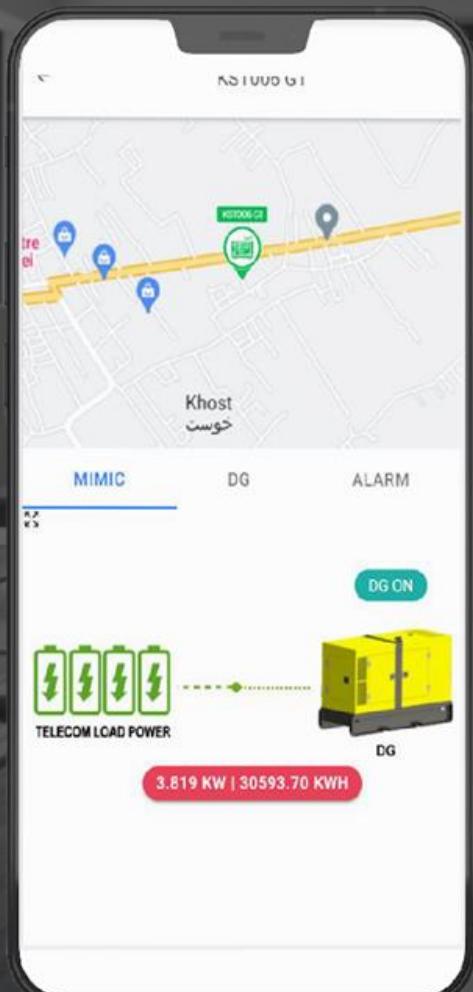
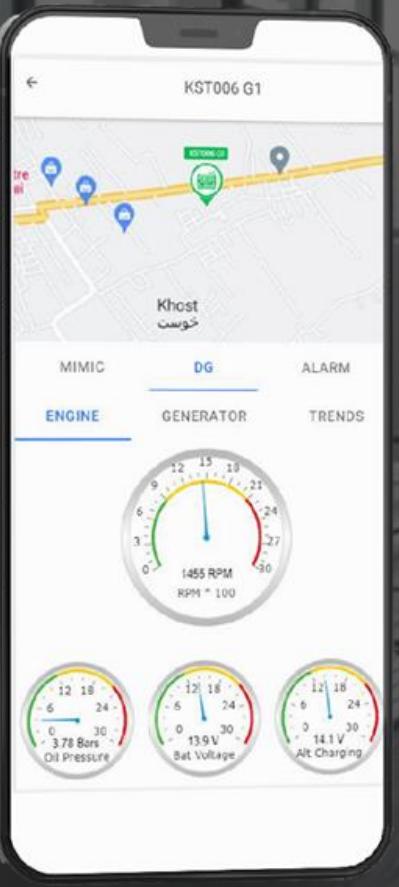
## POWER EQUIPMENT

The Region's power Specialists. Founded in 1978 with core business of selling and manufacturing diesel generator sets for local market, SDEC has since branded itself as the sole provider of fully customized power solutions within the regional market.

# APPLICATION SCREENSHOTS



# MOBILE APPLICATION



# SOLAR INVERTER MONITORING



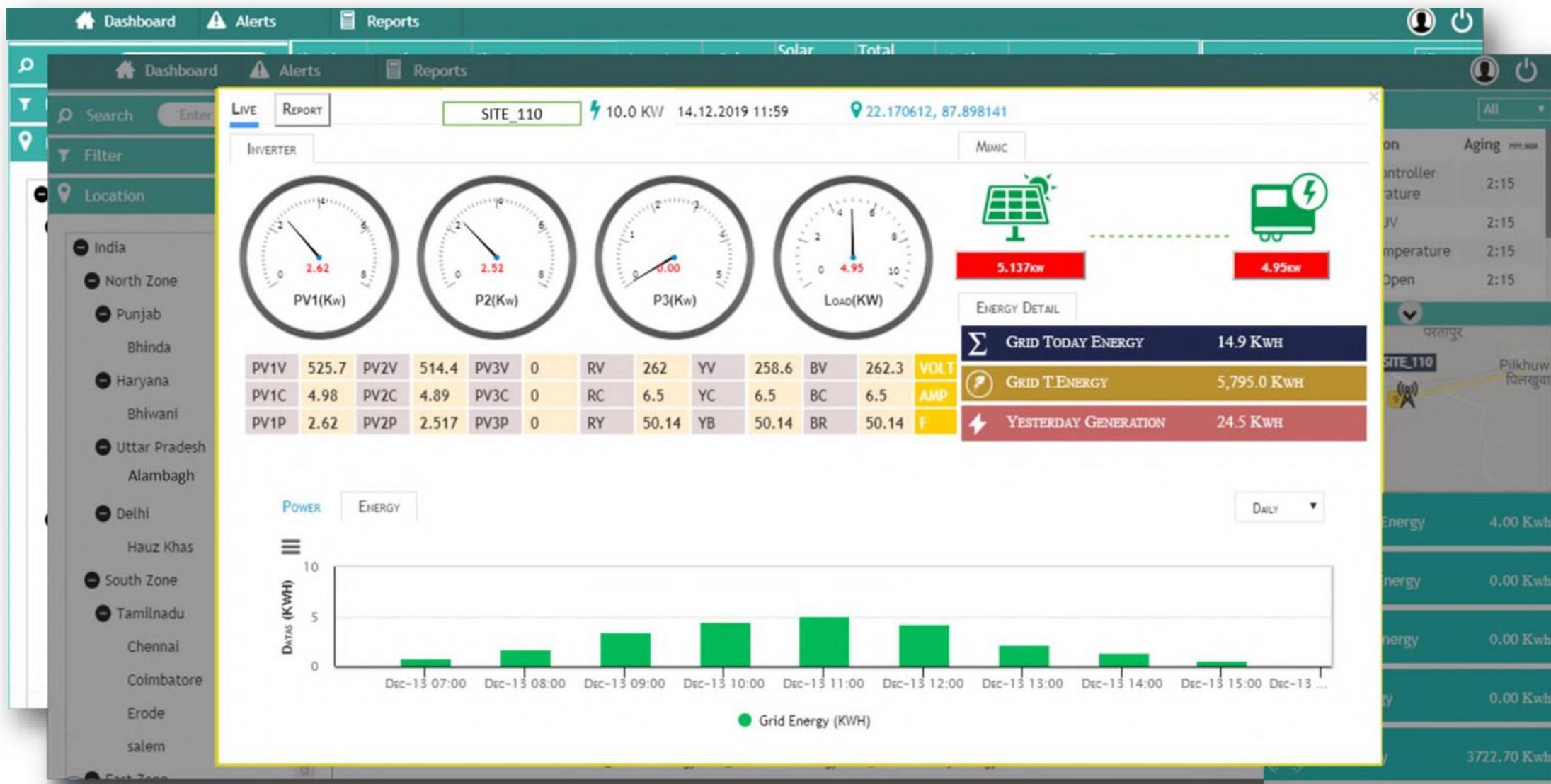


EmP⚡WERing lakhs of  
lives by distributing  
renewable energy  
leveraging micropower

○ ○ ○



# APPLICATION SCREENSHOTS



# ALERTS & ESCALATION MATRIX : APPLICATION

Dashboard  
 Alerts  
 Reports

Standard  
 Escalation

🔍 Search Enter Location

▼ Filter

📍 Location

- India
  - North Zone
  - Punjab
  - Bhinda
  - SITE\_110
  - SITE\_109
- Haryana
  - Bhiwani
  - SITE\_107
- Uttar Pradesh
  - Alambagh
  - SITE\_405
- Delhi

Escalation

Name	Severity	Level
Bus Volt Unbalance	Super Critical	Fault
Site on Battery	Super Critical	Event
DG Battery Low	Super Critical	Fault
Sink Temperature Over	Super Critical	Fault
Low oil pressure	Super Critical	Fault
DG Start Battery Voltage	Super Critical	Remote
Rectifier Overload	Super Critical	Fault
Oil pressure sender fault	Super Critical	Fault
Low fuel level	Super Critical	Fault
Emergency stop	Super Critical	Fault
Inverter Fail	Super Critical	Fault
Rectifier UV	Super Critical	Fault
Inverter Dc Currenrt Over	Super Critical	Fault
Plant Battery Equalization( absorbed Stage)	Super Critical	Fault
Generator high voltage	Super Critical	Fault
Loading Voltage alarm	Super Critical	Fault

**Severity** Super Critical

**Notification**  E-Mail  Sms

**LEVEL 1**

Email: abc@zohomail.com

Contact: 9876543210

**LEVEL 2**

Duration(Hr) 2

Email: def\_123@gmail.com

Contact: 9876543211

**LEVEL 3**

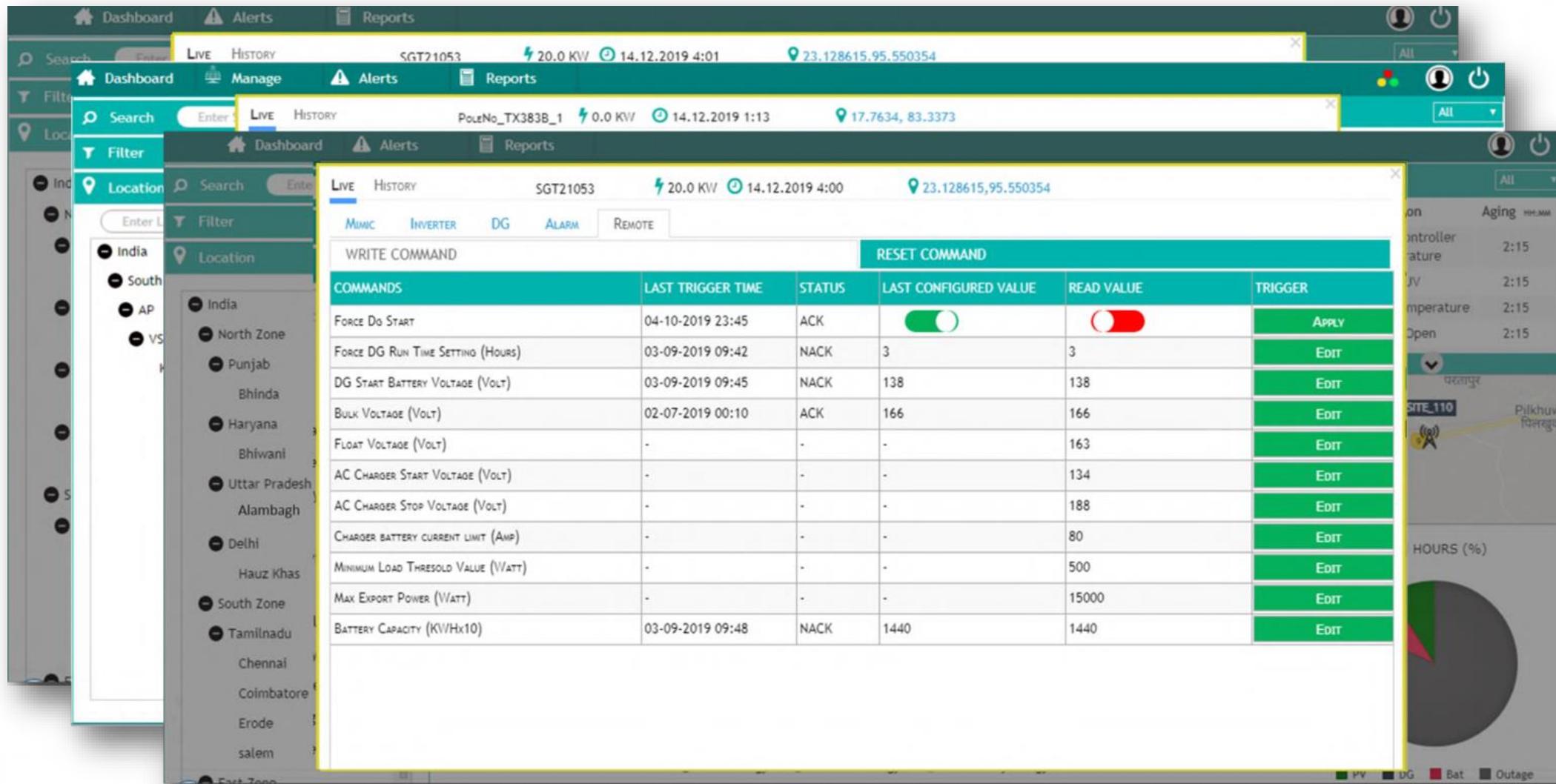
Duration(Hr) 3

Email: ghi\_123@gmail.com

Contact: 9876543212

Submit Clear

# REMOTE COMMAND : APPLICATION SCREENSHOTS



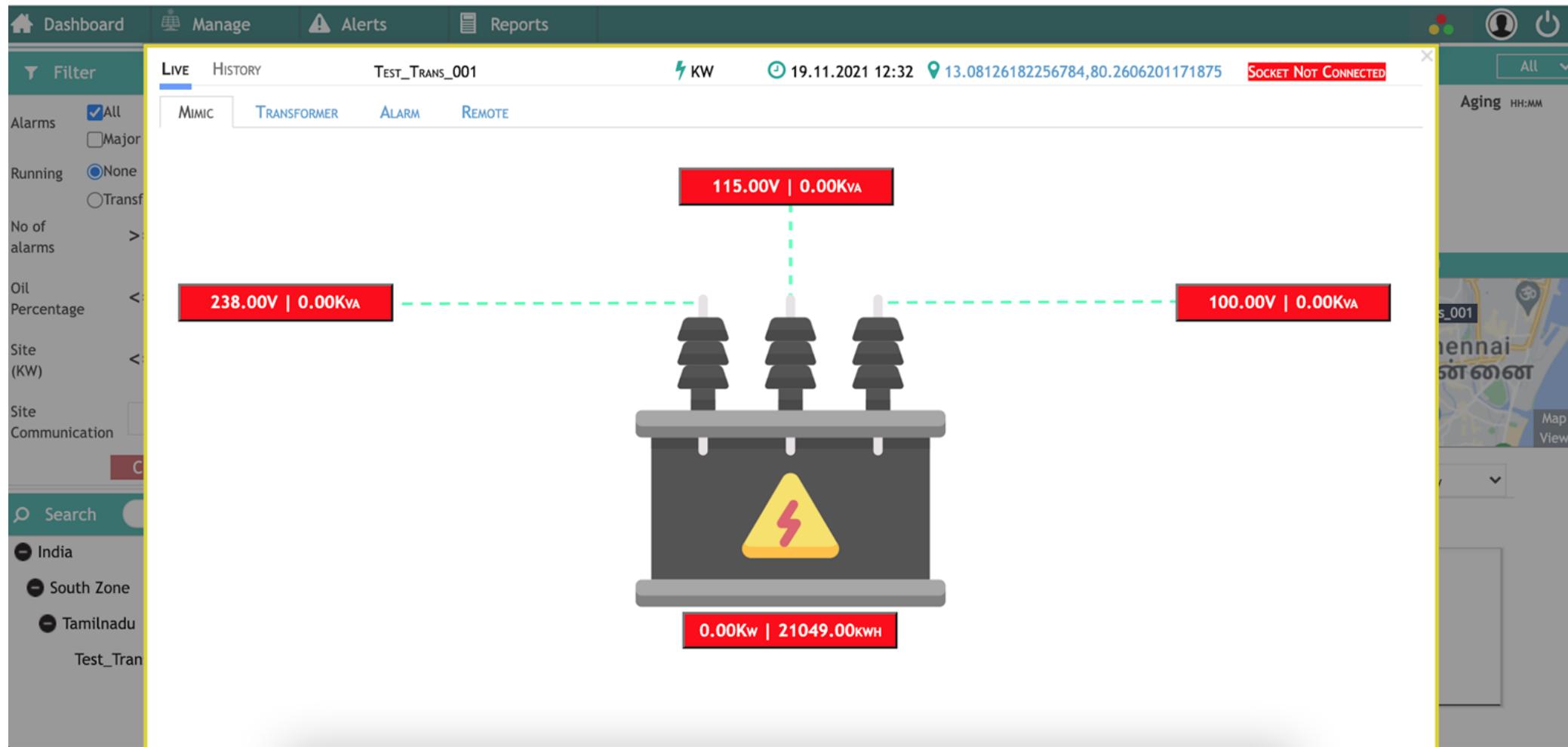
The screenshot displays a multi-layered interface of the ASTA Innosys Remote Command application. The top window shows a live feed for SGT21053 with 20.0 KW power at 14.12.2019 4:01, located at 23.128615, 95.550354. Below it is another window for PoleNo\_TX383B\_1 with 0.0 KW power at 14.12.2019 1:13, located at 17.7634, 83.3373. A third window for SGT21053 is also visible, showing a detailed table of commands with columns: COMMANDS, LAST TRIGGER TIME, STATUS, LAST CONFIGURED VALUE, READ VALUE, and TRIGGER. The table includes rows for various parameters like Force Do Start, DG Start Battery Voltage, Bulk Voltage, etc. To the right, there's a map showing locations like Pilkhuwa and a pie chart for hours (%). The left sidebar features a hierarchical location tree for India, South, AP, VS, and other regions.

COMMANDS	LAST TRIGGER TIME	STATUS	LAST CONFIGURED VALUE	READ VALUE	TRIGGER
FORCE DO START	04-10-2019 23:45	ACK			<button>APPLY</button>
FORCE DG RUN TIME SETTING (HOURS)	03-09-2019 09:42	NACK	3	3	<button>EDIT</button>
DG START BATTERY VOLTAGE (VOLT)	03-09-2019 09:45	NACK	138	138	<button>EDIT</button>
BULK VOLTAGE (VOLT)	02-07-2019 00:10	ACK	166	166	<button>EDIT</button>
FLOAT VOLTAGE (VOLT)	-	-	-	163	<button>EDIT</button>
AC CHARGER START VOLTAGE (VOLT)	-	-	-	134	<button>EDIT</button>
AC CHARGER STOP VOLTAGE (VOLT)	-	-	-	188	<button>EDIT</button>
CHARGER BATTERY CURRENT LIMIT (AMP)	-	-	-	80	<button>EDIT</button>
MINIMUM LOAD THRESHOLD VALUE (WATT)	-	-	-	500	<button>EDIT</button>
MAX EXPORT POWER (WATT)	-	-	-	15000	<button>EDIT</button>
BATTERY CAPACITY (KWHx10)	03-09-2019 09:48	NACK	1440	1440	<button>EDIT</button>

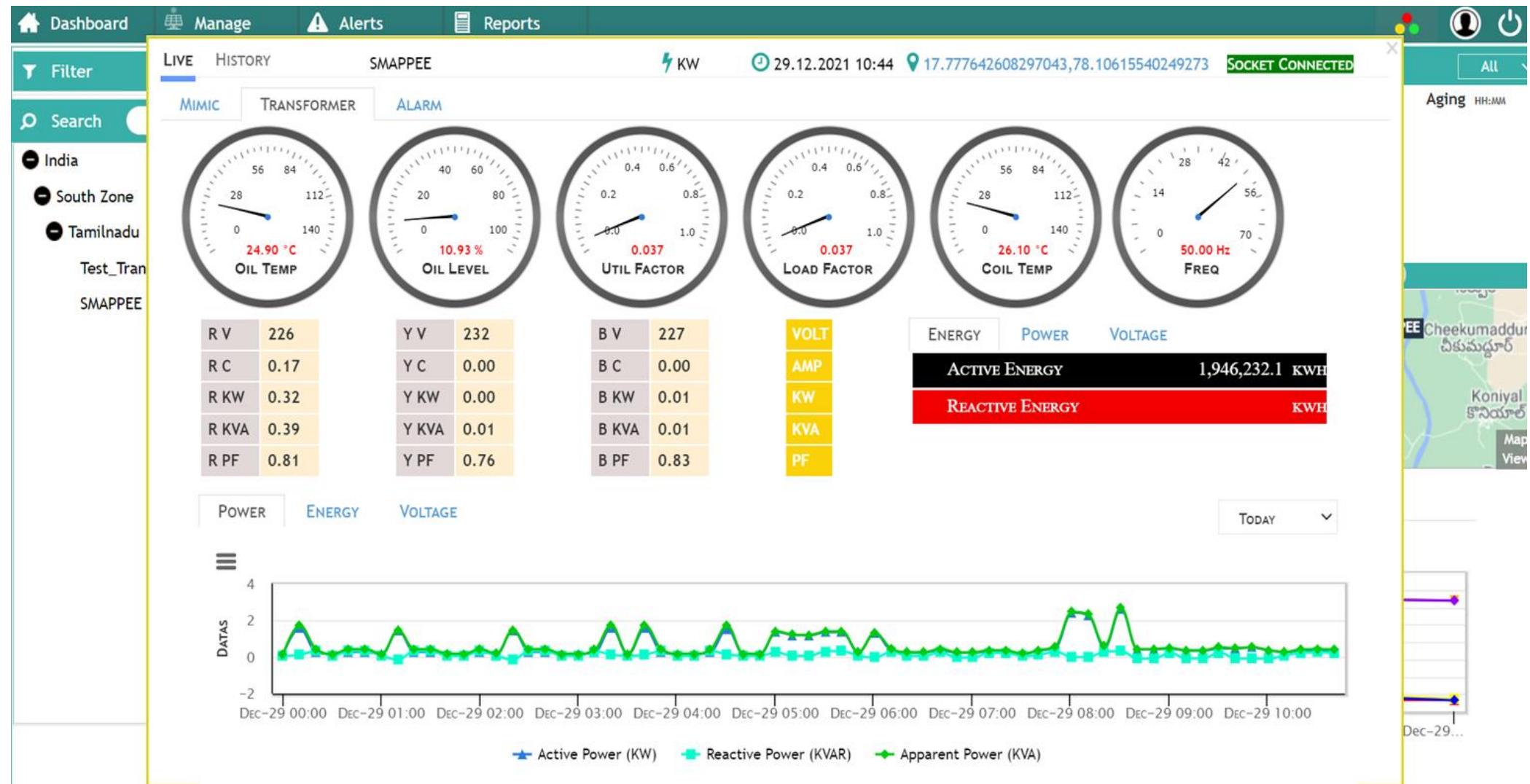
# TRANSFORMER MONITORING SYSTEM



# DASHBOARD ACTION LIVE MIMIC (DIAGRAM)



# DASHBOARD ACTION LIVE MIMIC (INVERTER)



# ON - GRID / OFF - GRID SOLAR REMOTE MONITORING SOLUTION

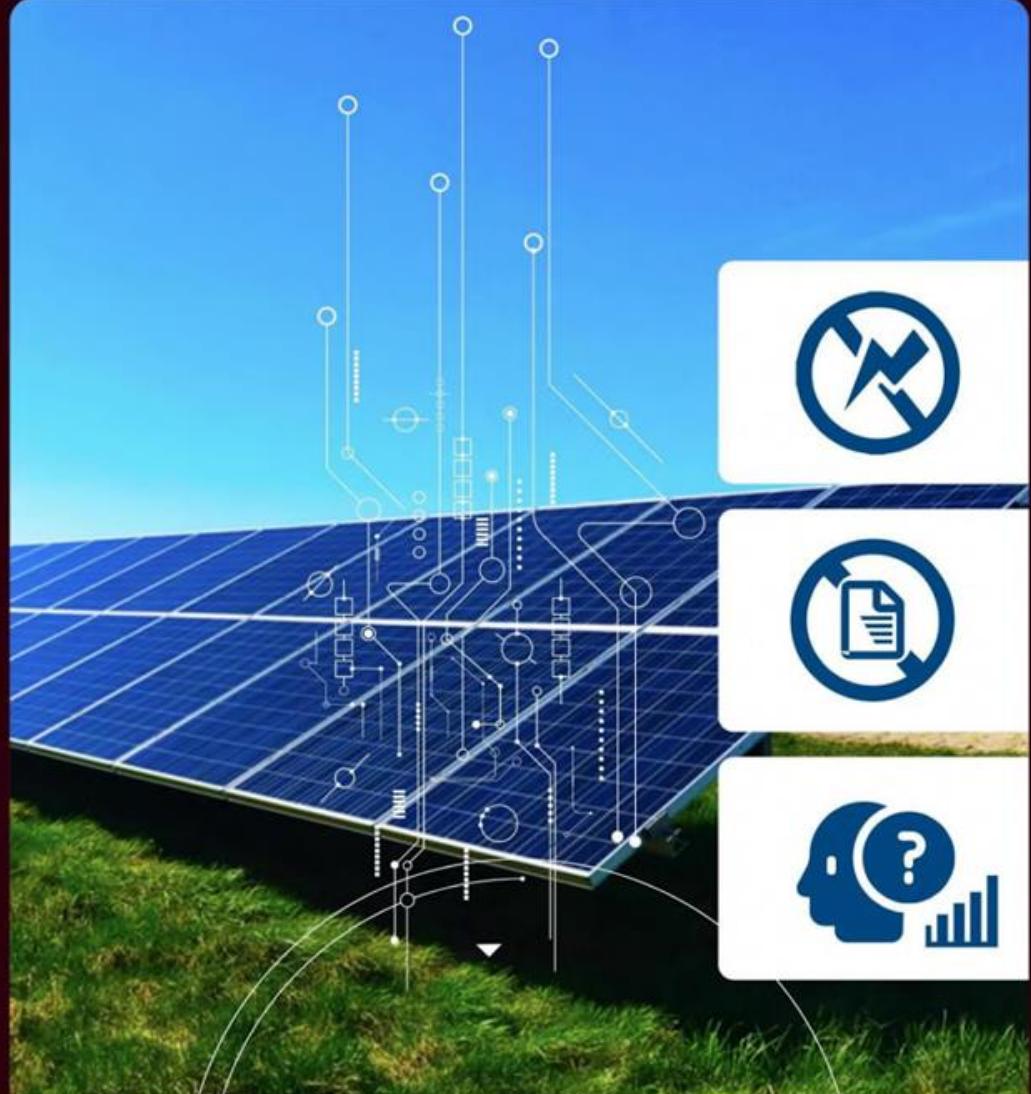




HIGHER PRODUCTIVITY WITH  
DIMINISHED COST  
SMART SWITCH TO SOLAR



## PAIN POINTS



## SOLUTIONS



Battery  
Alert & Report



Storage  
Alert & Report



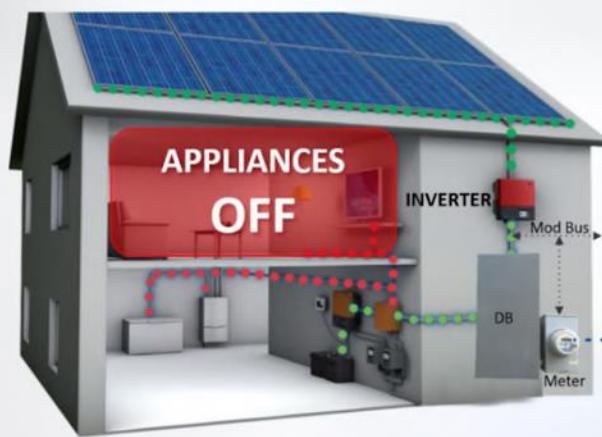
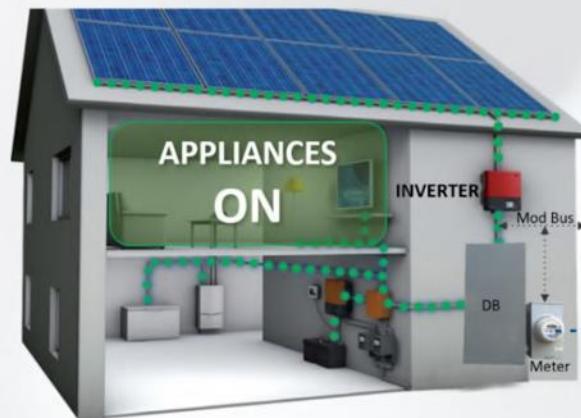
Energy  
Generate  
Alert & Report



Analysis  
Alert & Report



## HOW IT WORKS



M2M+ Device

Government  
Electrical Poll AC Supply



Tracking Data Sent

Tracking  
Data Sent 24/7



Cloud Server

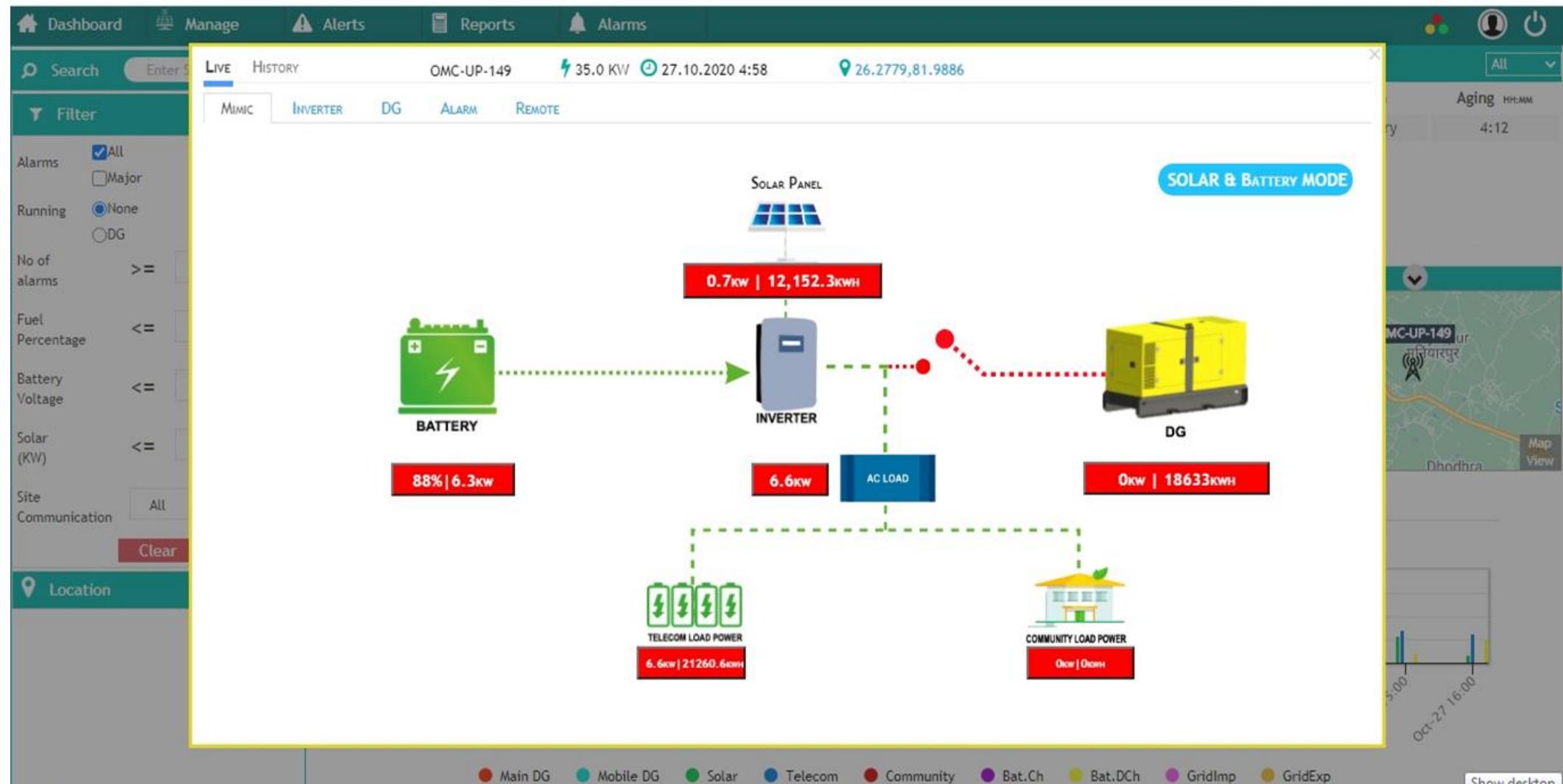


Internet

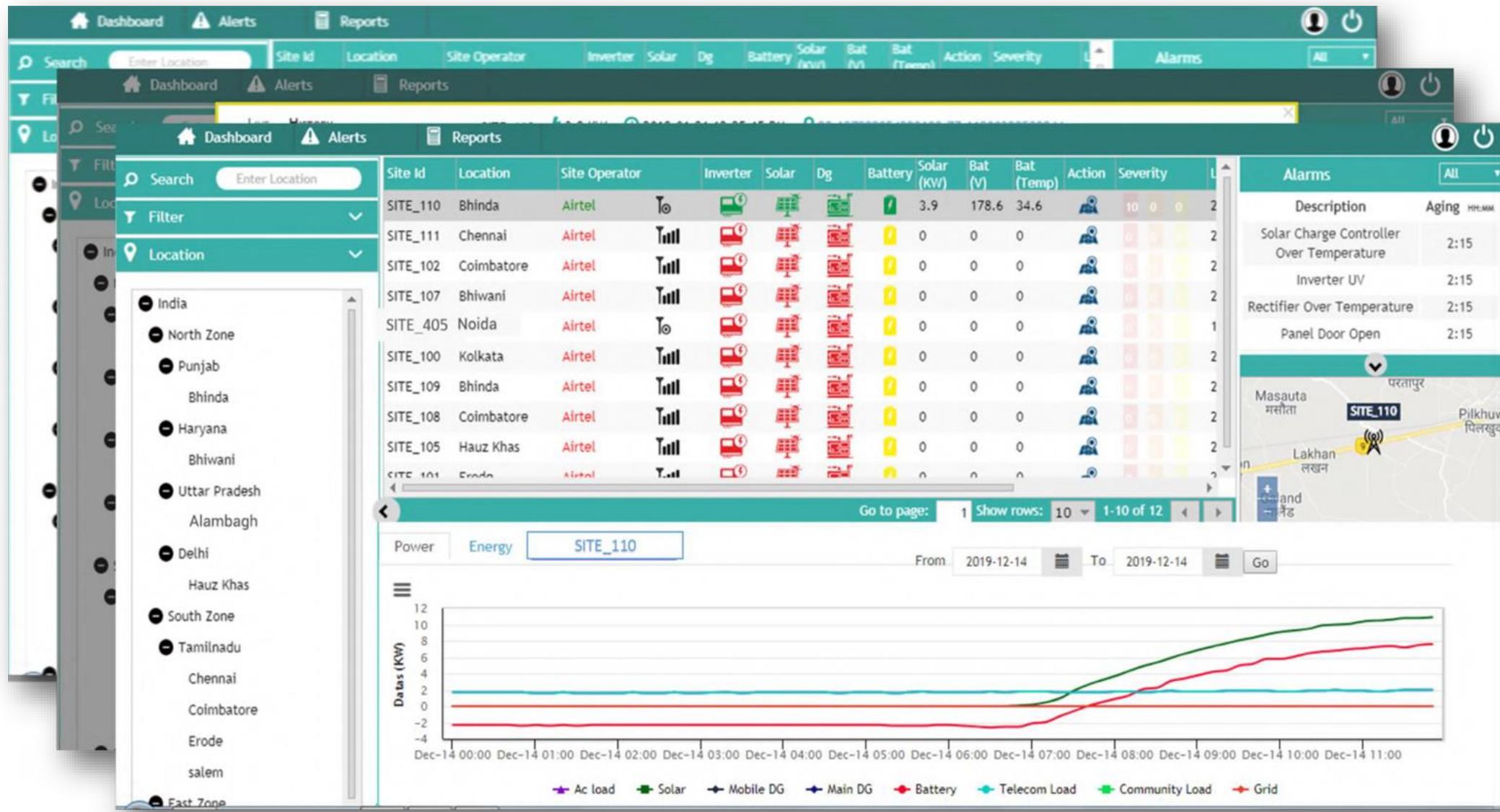


Application

# MIMIC DIAGRAM



# APPLICATION SCREENSHOTS



# STREET LIGHT

Solution is to monitor and control street lights



Dashboard   Manage   Alerts   Reports   Filter   Search

LIVE HISTORY POLENo\_TX383B\_1 0.0 KW 13.05.2022 1:08 17.7634,83.3373 SOCKET NOT CONNECTED

MIMIC METER REMOTE ON/OFF

GRID

CONTROLLER LCT "2022-05-13T07:38:26.000Z"  
AIRTEL 0

LIGHT OFF

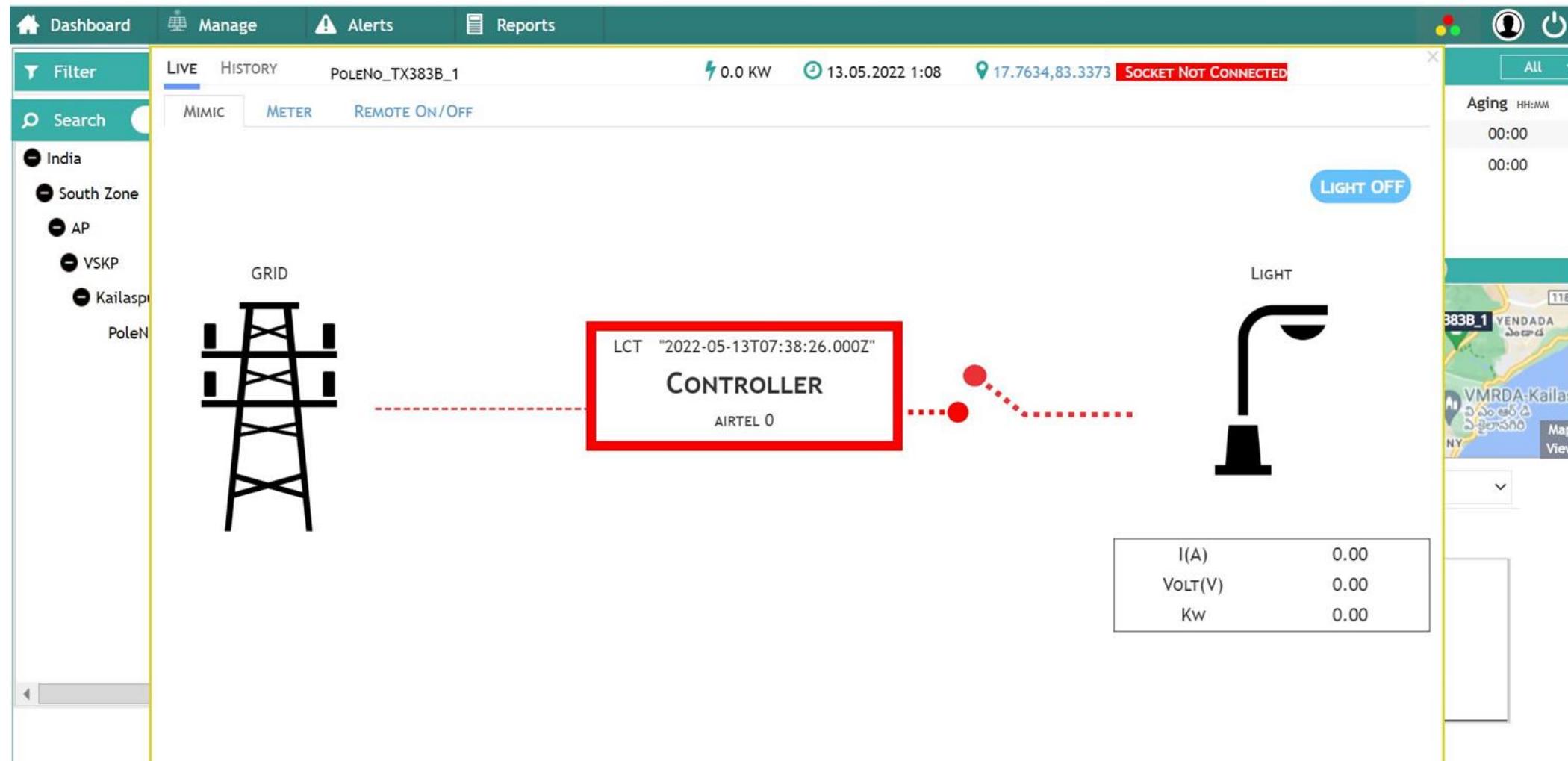
LIGHT

I(A) 0.00  
VOLT(V) 0.00  
Kw 0.00

Aging HH:MM  
00:00  
00:00

All

Map View



# APPLICATION SCREENSHOTS

Dashboard   Manage   Alerts   Reports   SOCKET NOT CONNECTED

LIVE HISTORY POLENo\_TX383B\_1 0.0 KW 13.05.2022 1:08 17.7634,83.3373

MIMIC METER REMOTE ON/OFF

TURN ON DEVICE INTERVAL TIME

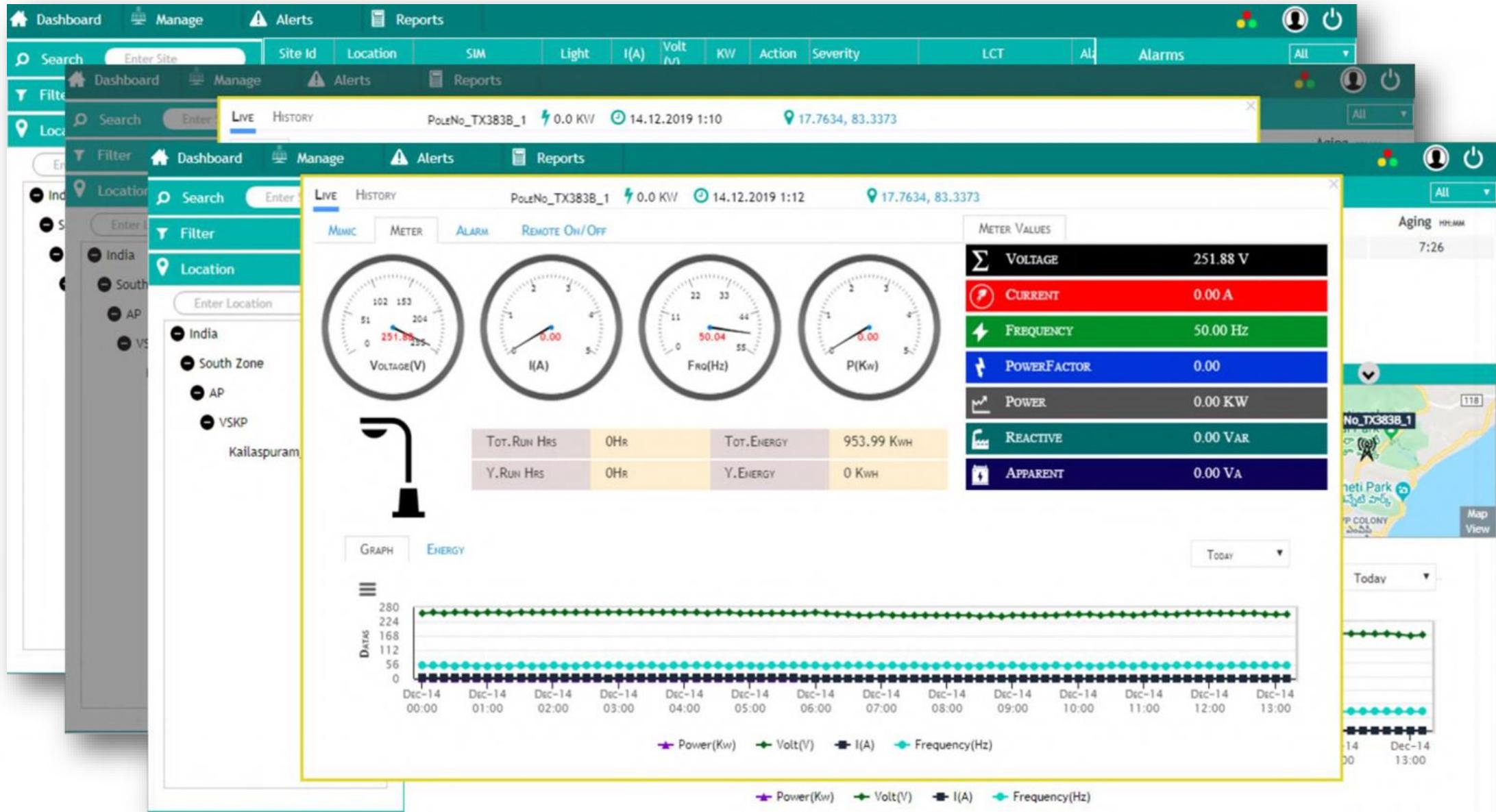
COMMAND	LAST TRIGGER TIME	LAST VALUE	STATUS	FROM	To	TRIGGER
TIMEAM	2020-03-09 19:43:49	12:00 AM to 6:00 AM	ACK	06:00 <input type="button" value=""/>	11:00 <input type="button" value=""/>	<input type="button" value="APPLY"/>
TIMEPM	2020-03-09 19:44:33	6:00 PM to 11:59 PM	ACK	13:00 <input type="button" value=""/>	18:00 <input type="button" value=""/>	<input type="button" value="APPLY"/>
TIMEALL	2019-10-22 20:22:43	OFF	ACK	18:00 <input type="button" value=""/>	05:00 <input type="button" value=""/>	<input type="button" value="APPLY"/>

Filter   Search   India   South Zone   AP   VSKP   Kailasp   PoleNo   All

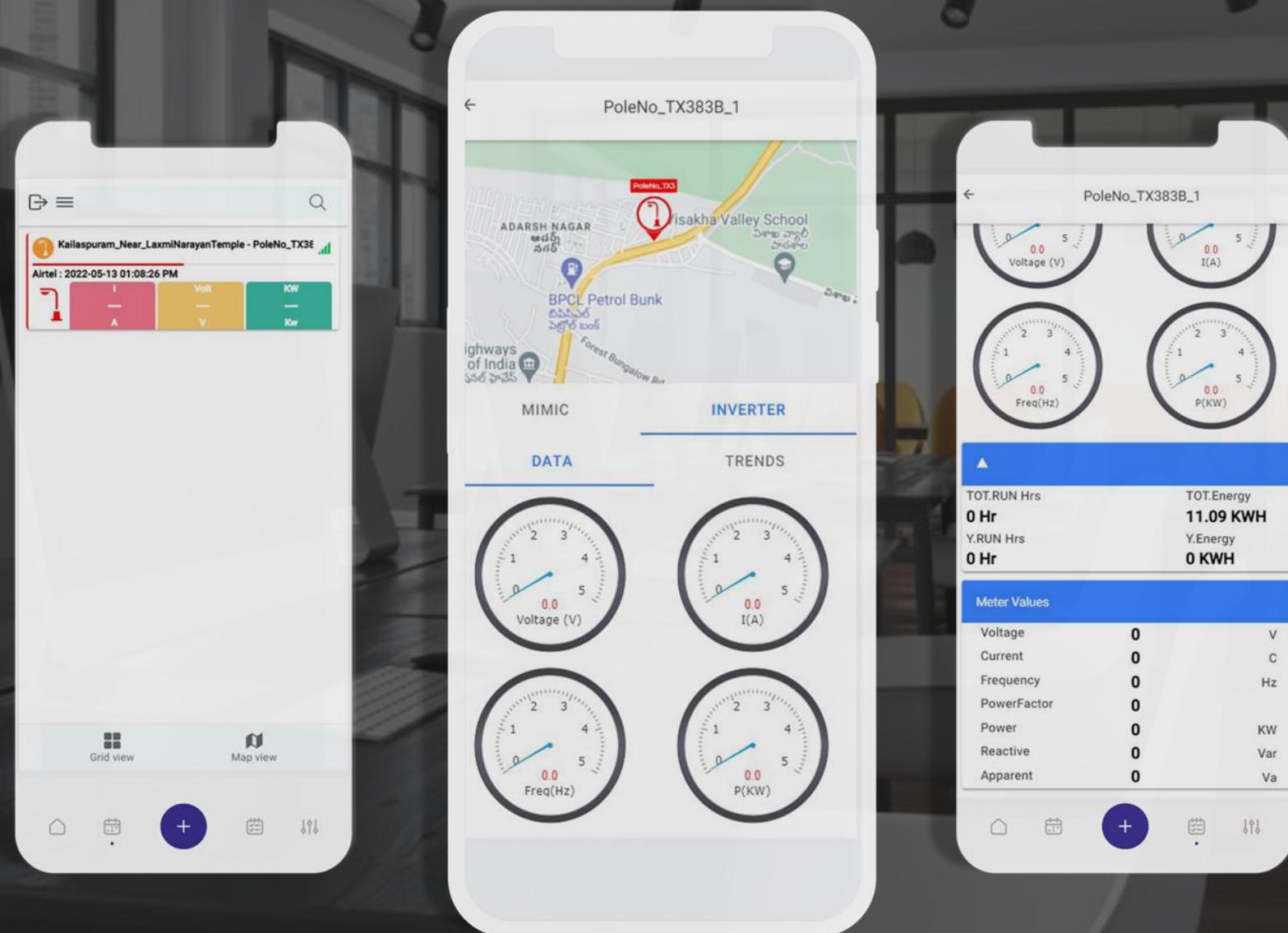
Aging HH:MM 00:00 00:00

Map View

# APPLICATION SCREENSHOTS



# MOBILE APPLICATION



# Intelligent Transport Systems

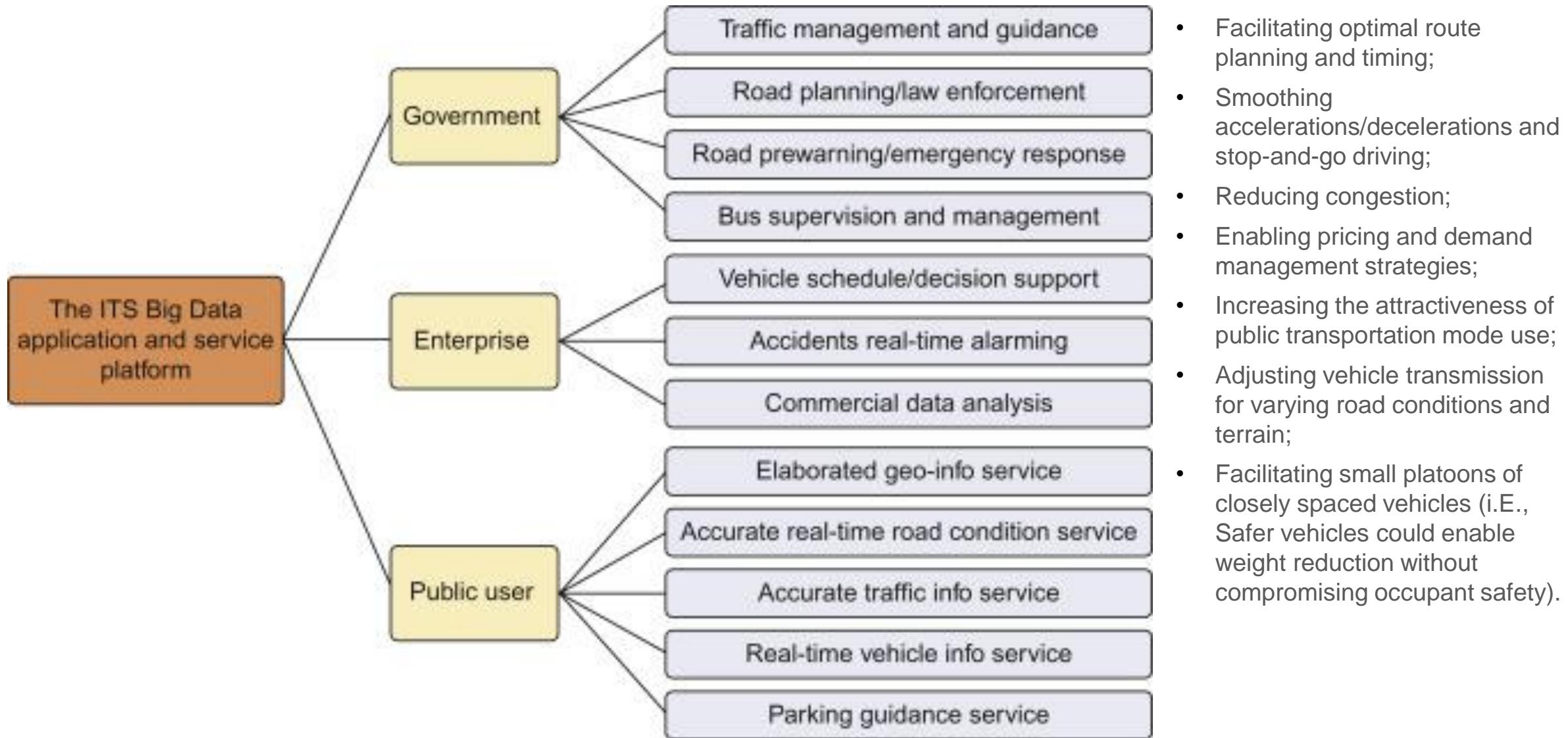


# Intelligent Transportation Systems (ITS) Solutions

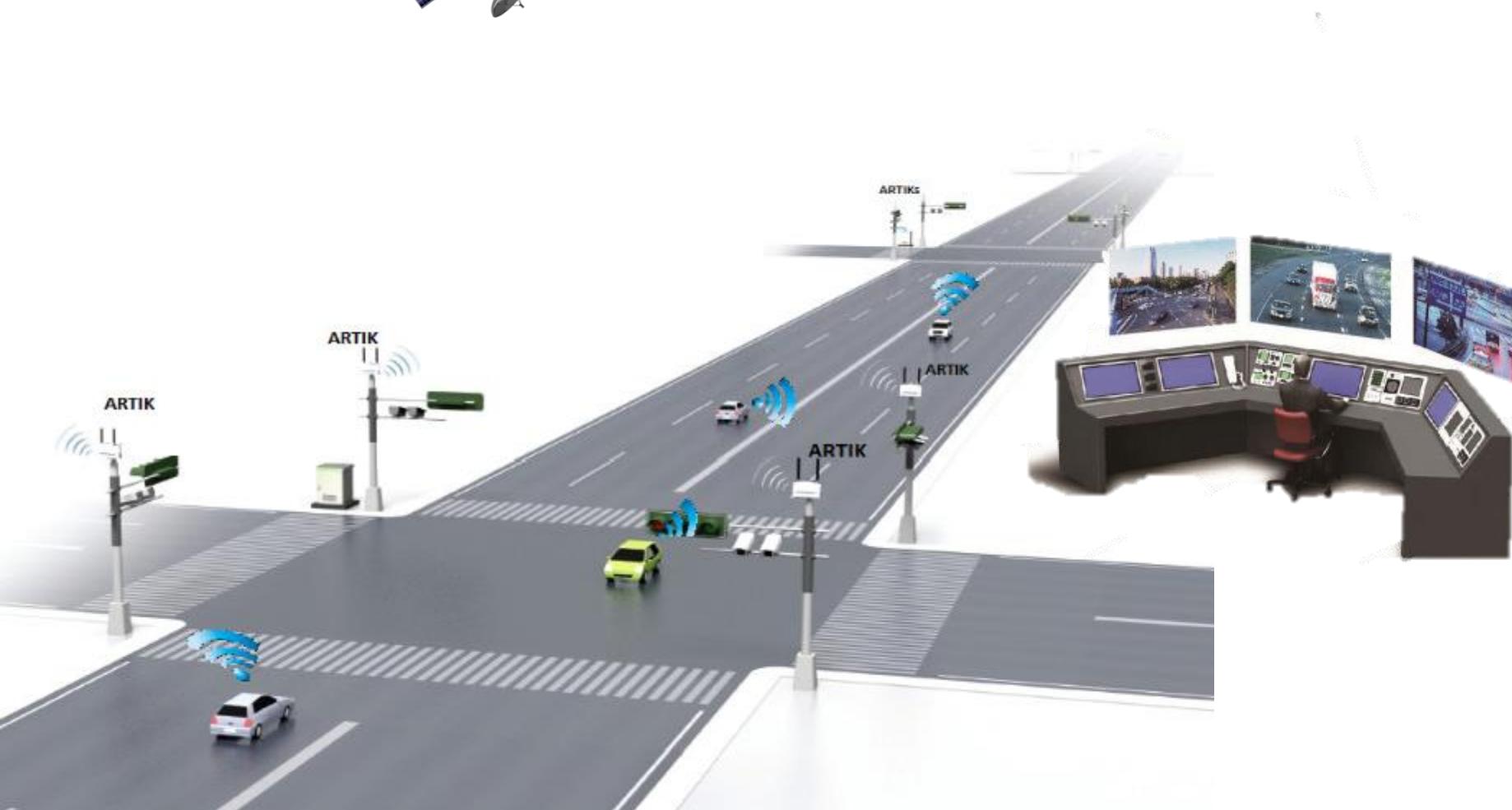


- We provide solutions of Intelligent transportation systems (ITS) to various countries.
- ITS technologies include state-of-the-art wireless, electronic, and automated technologies.
- Collectively, these technologies have the potential to integrate vehicles (transit, trucks, and personal vehicles), system users, and infrastructure (roads and transit)
- The Solution can be tailored based on the nature of the systems and behaviors exist in the country.





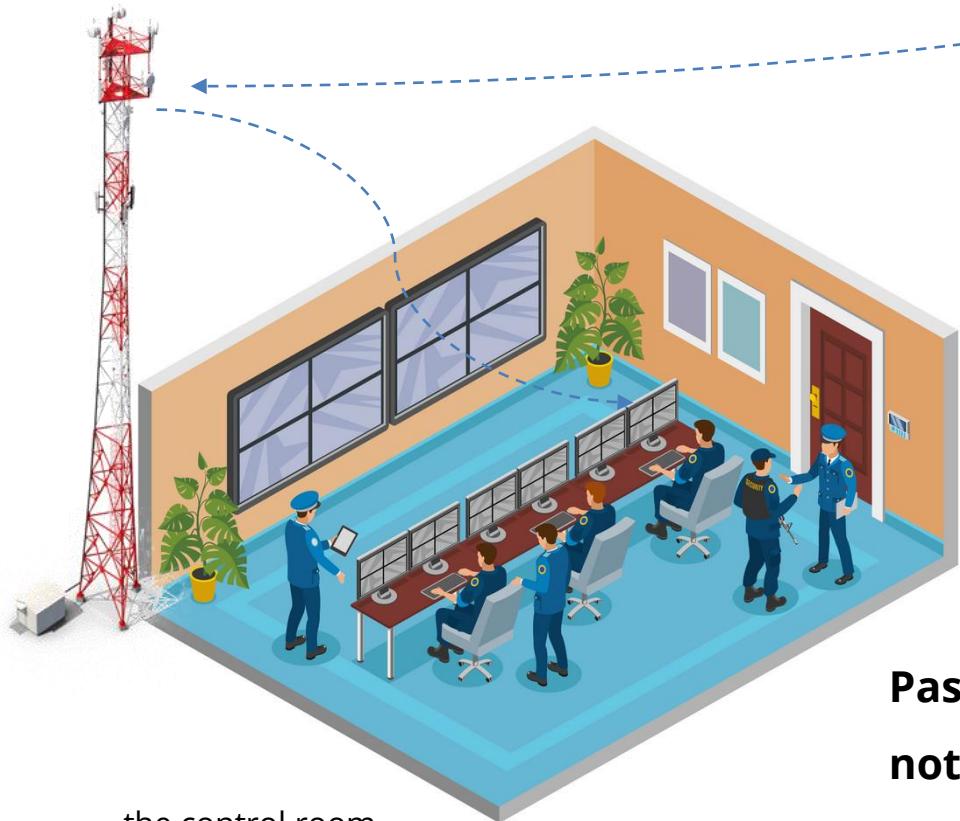
## BENEFITS OF ITS TO THE GOVT.



Intelligent Transportation System (ITS) is to **gain total control over public transportation system** of the country.

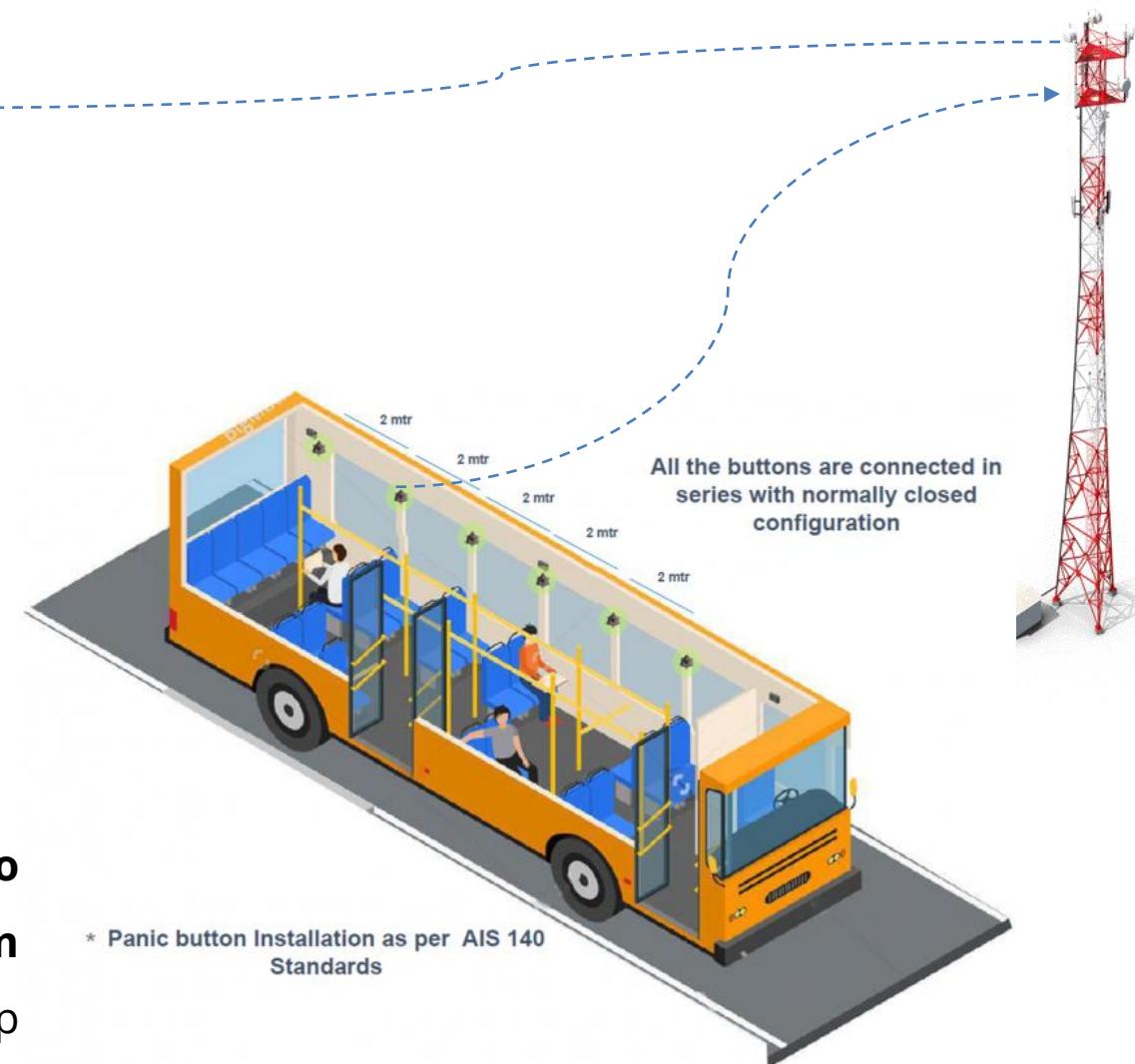


It is believed ITS would narrow all traffic-related issues and help Regional Traffic Office (RTO) in **tracking a vehicle in case of an emergency such as smuggling, Kidnapping or any illegal activities.**

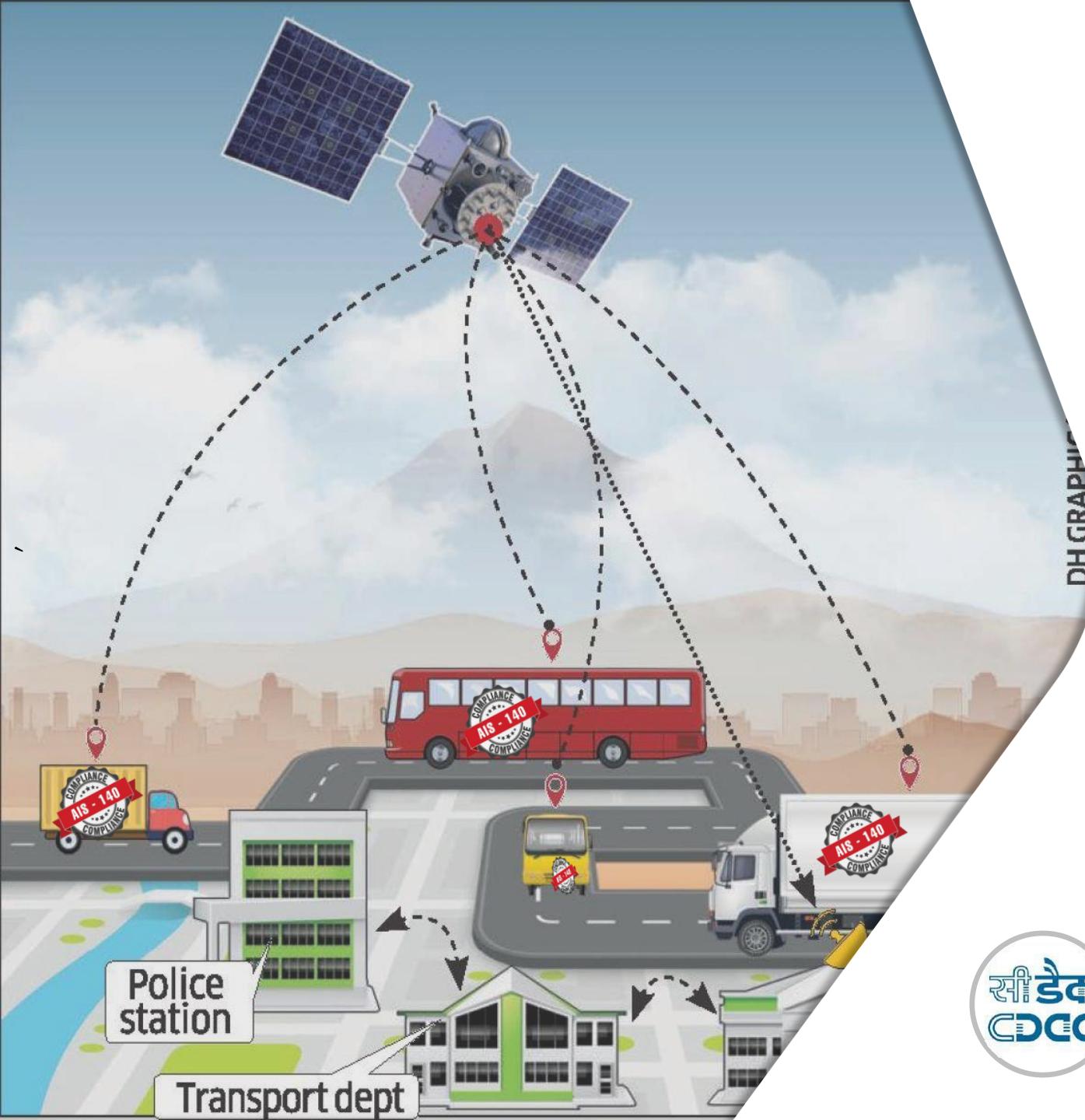


the control room

**Passengers can also notify the control room** in the event of a mishap or other emergencies.

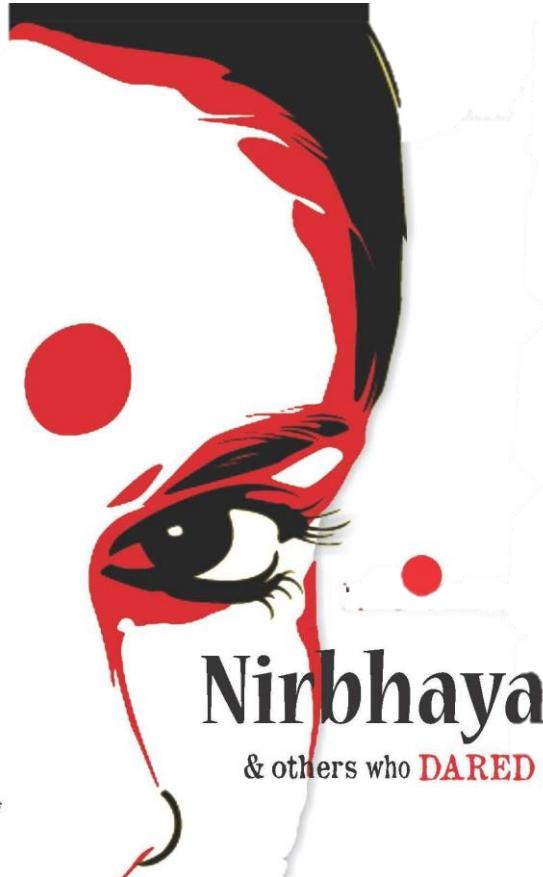


\* Panic button Installation as per AIS 140 Standards



# AIS140 VTS





The 2012 Delhi gang rape and murder in a bus, commonly known as the Nirbhaya case, involved a rape and fatal assault that occurred on 16 December 2012 in Munirka, a neighborhood in South West Delhi.

In the wake of the infamous gang rape and murder incident that took place on December 16, 2012 in New Delhi popularly known as Nirbhaya case, the Union ministry of road transport and highways had directed all the states of the country to have vehicle tracking system particularly on public transport vehicles and install panic button for safety of women and child passengers.

Speed Post/E-mail

No. RT-16011/1/2018-T  
Government of India  
Ministry of Road Transport & Highways  
Transport Section  
Transport Bhawan, 1, Parliament Street, New Delhi-110001

15<sup>th</sup> January, 2020

To,

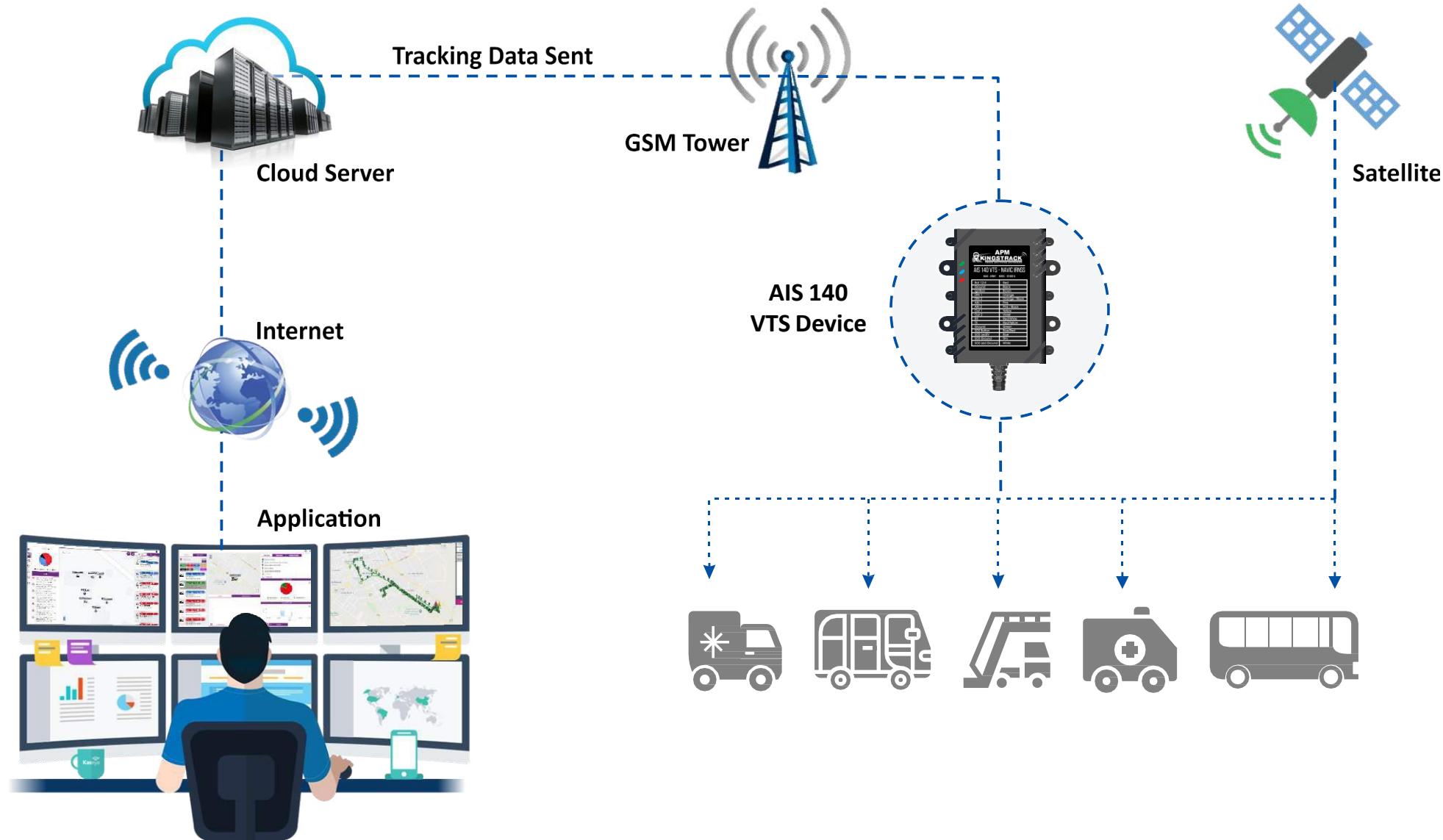
- 1) The Principal Secretary(Transport) / Secretary (Transport) and Transport Commissioners of all States/UTs.

**Subject:**Scheme for Implementation of “Development, Customization, Deployment and Management of State-wise vehicle tracking platform for Safety & Enforcement as per AIS 140 Specifications”, in States / UTs under Nirbhaya Framework

Sir/Madam,

1. A copy of the scheme finalised by this Ministry for implementation of the State-wise vehicle tracking platform for Safety & Enforcement as per AIS 140 Specifications”, in States / UTs under Nirbhaya Framework is attached for your further necessary action.

## HOW ITS WORKS?



## AIS 140 Specifications

### AUTOMOTIVE INDUSTRY STANDARD

#### **Intelligent Transportation Systems (ITS) - Requirements for Public Transport Vehicle Operation**

PRINTED BY  
THE AUTOMOTIVE RESEARCH ASSOCIATION OF INDIA  
P.B. NO. 832, PUNE 411 004

ON BEHALF OF  
AUTOMOTIVE INDUSTRY STANDARDS COMMITTEE

UNDER  
CENTRAL MOTOR VEHICLE RULES – TECHNICAL STANDING COMMITTEE

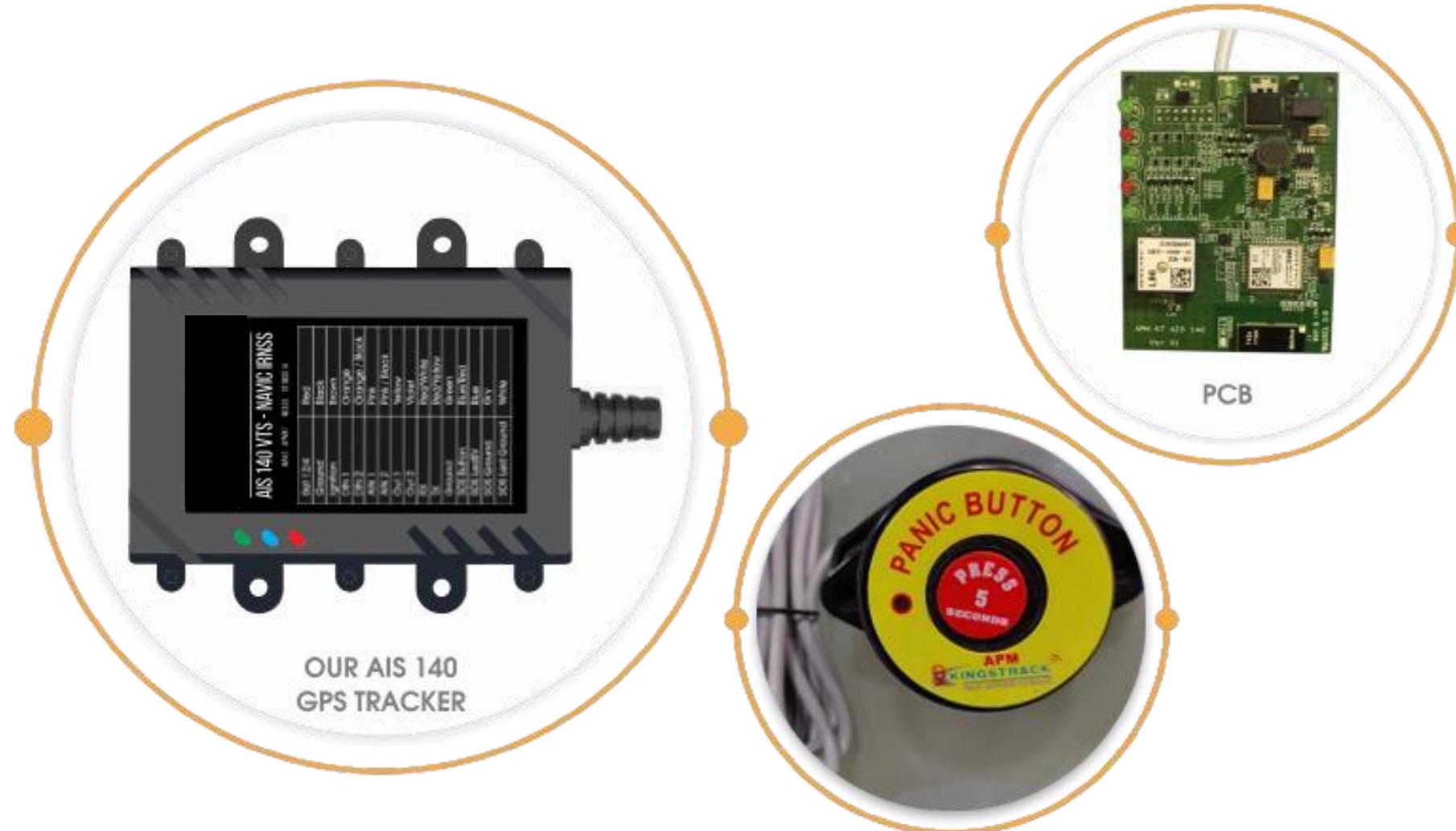
SET-UP BY  
MINISTRY OF ROAD TRANSPORT and HIGHWAYS  
(DEPARTMENT OF ROAD TRANSPORT and HIGHWAYS)  
GOVERNMENT OF INDIA

October 2016

<https://araiindia.com/hmr/Control/AIS/14201910518PMAIS-140.pdf>

## INTRODUCTION TO AIS140

- ✓ Automotive Industry Standard 140 (AIS 140) is a set of standards published by ARAI (Automotive) for vehicle tracking system (VTS) and emergency request button.
- ✓ To comply with AIS 140 guidelines, All passengers carrying vehicles and national permit commercial vehicle will need to have a GPS tracking system and an emergency button.
- ✓ Both the existing vehicles as well as the new vehicles will be required to be fitted with GPS and emergency button. This implies that the automotive OEMs along with aftermarket companies and Tier 1 suppliers need to have these systems ready.



**CELLULAR**

GSM / GPRS Module      Quectel M66  
GSM/GPRS/EDGE coverage

2G Bands                  GSM: Quad-band 850/ 900/ 1800/ 1900MHz

Protocols                TCP/ UDP/ PPP/ FTP/ HTTP/ SMTP/ CMUX/ SSL

GSM Antenna            Internal PCB Antenna

**GNSS**

Tracking Sensitivity    -165dBm

Accuracy                < 2.5M

Hot Start                < 2s

Warm Start              < 28s

Cold Start                < 35s

GPS Antenna            Patch Antenna

**MCU**

Core                     Arm® Cortex®-M0 core with 32-bit  
48MHz

**MEMORY FOR OFFLINE LOGS**

Type                    NAND Flash  
Size                    16Mbit / 10000 Logs

**RS-232**

Baud Rate              2400 to 115200 Configurable  
Hardware Handshake    No

**INERTIAL MEASUREMENT UNIT (IMU)**

Accelerometer & Gyroscope      LSM6DSLTR

Measurement Range               +/-2g to +/- 16g  
Resolution                        16Bit

**ELECTRICAL**

Input Voltage Protections        6V to 30VDC  
Reverse Battery, Transient Protection, Built-In PTC Fuse,  
Under Voltage lockout

ESD Protection                4kV  
Power Consumption            Less than 1 watt (In High- Performance mode)  
Less than 0.25 watt (In Power-Saving mode)

**INTERNAL BATTERY**

Type                    Li-ion Rechargeable  
Capacity              800mAh @ 3.7V  
Protection            Built in to battery pack  
Backup                Upto 48hrs

**ENVIRONMENTAL**

Storage Temp            -40°C to +85°C  
Operation Temp        -20°C to +80°C  
Degrees in Humidity    15%-95%

**MECHANICAL**

Dimensions              L-28cm, H-2.5cm, W-8.4cm  
Box Material            ABS  
Dust & Water Protection    IP 65 of IC 60529  
Weight                    160g approx.



## IRNSS+GPS+AGPS Tracking

Allow the location to be pinpointed in real time or periodically



## ACC Detection For Ignition Status

Be aware of the ignition status whenever you need



## Remote Cut-Off (petrol/power)

Compel the vehicle to stop by breaking off the fuel connection



## Tracked by: SMS, APP, Web

Reports location in real time through different interfaces



## 50000 Internal Data Storage

Memorize a large amount of GPS data for history review



## Multiple I/Os

Digital Input/Output for remote monitoring and control



## IP 65 Dust & Waterproof

Water-resistant to ensure stable operation in tough environment



## Door Status Detection

Get instant alert when your car's door is open unexpectedly



## RS:232 Serial Communication Interfaces

Support Fuel level sensor, RFID reader



## Multiple Alarms

Instant alerts for SOS, overspeed, low battery, vibration, etc



## Driver Behavior Monitoring

Monitor the driving behavior of the driver based on the accelerometer



## Multiple Alarms

Instant alert for power off, GEO-Fence



## SOS Emergency Call

In case of emergency, Press the SOS button to trigger an urgent call

## Overseas



## India

