GAS + Water+ EC

**Requirements:**

1. Application Setup (Software Installation)
2. Setup Tariff
3. Setup Community
4. Setup Block
5. Alerts Configuration
6. Customer Registrations
7. Dash board
8. Configurations commands
9. Configurations Status
10. Reports
11. Alerts
12. Users
13. Vacation
14. Customer login
15. Online payment.
16. SMS gateway
17. Gateway integration( LoRa)
18. Integration of BLE communication
19. Billing
20. Electricity

**Note :**  < All paginations >

< Require search option in each page >

< Export option in each page to Excel & pdf formats >

1. **Application Setup (Software Installation)**

* **Communication type:**

LoRa + Blue tooth

Blue tooth

* Disable online payment, Configuration commands, status, Customer login
* Remaining all same.
* **Reconnections charges:**

Only integers reaming all not accepted

Min 10 Max 1000

<Reconnection charges applied on 0 and low emergency credit >

* **Fixed charges**

Only integers reaming all not accepted

Min 10 Max 1000

<Every month deduction @ top up>

* **Emergency credit**

Only integers reaming all not accepted

Min 10 Max 1000

<Every time @ top up>

* **Non communication (MIU) Alert**

No of hours (3 digits)

* **Water and Gas**

CAN number for water

CRN number for Gas

UAN number for Electricity

1. **Setup Tariff:**

* Tariff name < Only Alpha numeric max 25 >
* Per unit tariff amount.
* Tariff and Alarm credit Float value range 0.10 to 1000/-
* Edit all parameters.
* Delete.
* **Tariff is community wise**

1. **Setup Community:**

* Community name
  + Only Alphabetic ,Length: min 5 and max 35
* Address
  + Accepted all.
  + Min 4 Max 35
* Email id
  + Standard format.
* Mobile number
  + 0 to 9 accepted and reaming all not accepted<length 10 digit>
* **Tariff name (selectable) is community wise**
* All are Editable.
* Delete.
* Add multiple communities.

1. **Setup Block:**

* Community name (selectable)
* Block Name
  + Alpha and numeric <first word should be alpha>
  + Min 4 Max 35
* Locations

Only alphabetic, Min 4 Max 35

* Email id
  + Standard email id.
* Mobile number
  + 0to 9 accepted and reaming all not accepted<length 10>
* All parameters are Editable
* Delete.
* Add multiple blocks.
* Add Multiple Gateways
  + Gate Ways Name
  + IP and Port Number

1. **Alerts Configuration**

* MIU interval time
* Time out
* Per unit Gas in KG
  + Commercial
* Per unit Water in Liters
  + - Commercial and Industrial
  + Water meter sizes
    - 15 mm to 300 mm
* Reconnections Charges
* Max Value
* Min Value
* For electricity
  + Peak Voltage
  + Peak Current
  + Threshold Values
  + Reaming any I will updated you

1. **Customer Registrations:**

* Community name(selectable)
* Block Name (selectable)

**Customer Name:**

Only alphabetic and numeric Min 5 max 35

**Flat No:**

Alpha numeric along with special characters (Ex: Abs#/-…), Min4 Max 35

**Mobile number:**

0to 9 accepted and reaming all not accepted.

**Email Id:**

* + Standard email id.

**CRN / CAN number /UAN: <CRN** for gas, CAN for water, UAN for Electricity **>**

Only Alphanumeric < Should not start with “0”, special characters not acceptable >

Min 4 Max length 16

CRN / CAN /UAN number is unique.

**Meter serial number:**

Only Alphanumeric < should not start with “0”, special characters not acceptable >

Min 4 Max length 15

MSN number is unique.

Add multiple Meter serial numbers for Water max 10

Add Meter serial number for Gas max 2

Add Meter serial number for Electricity 1

**MIU id (Meter Interface Unit):**

Only Alphabetic and numeric < should not start with “0”, special characters not acceptable>

21 Length min 4 max 25

MIU id number is unique.

Add multiple MIU Ids for Water max 10

* Water meter sizes (selectable)

Add multiple MIU ids for Gas max 2

Add multiple MIU ids for Electricity 1

**Combinations-1**

Water, Gas, Electricity

Water + Gas, Water +Gas +Electricity

**Combinations-2**

**Water Postpaid+ Gas Prepaid + Electricity Prepaid**

**Water Postpaid+ Gas prepaid + Electricity Prepaid**

Note : < **MSN, CAN / CRN/ UAN** are fixed, reaming columns are editable>

**6. Dash board:**

|  |  |
| --- | --- |
| Total No of MIUs configured | 30 |
| Communications | 20 |
| Non communications | 10 |

Search option Excel/pdf download

* Community name
* Block Name
* Customer Name
* Float No
* CRN/CAN/ UAN number
* Meter serial number
* MIU id
* Reading <m3>
* Per Litter
  + For Water
* Per Kg <1Reading = 2.6kg>
  + For Gas
* Available credit
* Tariff per unit
* Emergency credit
* Valve status
* Tampers
* Battery status in %
* Last Date and time

Note :< dashboard columns are hide ding and unhanding >

Advanced Dash board filters:

* Communications / Non communications / All
* Reading between max and min
* Tamper
* Battery status in <% >
* Date from to end

**7. Configurations:**

* Community name(selectable)
* Block Name(selectable)
* CRN/CAN/UAN number(selectable)
* Upon selection of Community name, Block Name, CRN/CAN/UAN number MIU id and MSN to be displayed
* Command Types (selectable)
  + - Set default reading <user entry >
* Default Reading (numeric value)
* 0000000 to 9999999 (7 digit value)
  + - Clear Tampers.
    - Value open
    - Value close
    - Set RTC (24 hrs format)
    - Clear Meter
    - Mode < Maintenance, Shut Down, Active (Dropdown options )>

**Top up Page:**

* Community name(selectable)
* Block Name(selectable)
* CRN / CAN / UAN (selectable)
* Upon selection of Community name, Block Name, CRN/CAN/UAN number MIU id and MSN to be displayed
* Tariff per unit <Not Editable >
* Emergency credit <Not Editable>
* Alarm Credit <Not Editable>
* Recharge Amount <Min 10/- and multiples of 10 max 100000/->

**8. Configurations Status:**

ConfigartionsCommands status success or failure   
 Top up status success or failure

**9. Alerts**

* + - Sending email /SMS /whatsApp
    - Admin

Tampers

Low battery

Communications failure

* + - Customer

Top up Status

SMS Alert Based on Available Balance/ Average rating/ Low Credit

Billing information

**10. Reports:**

* + - * Export data in to Excel , PDF
      * Hourly, Daily ,monthly and yearly Consumption Report
      * Activity Trends, Graphical Representation

1. **Financial Report:**

Selection options Community wise or block wise or CRN / CAN / UAN wise with selectable period (Year, month)

Adding total consumptions history + Top up history

1. **Consumption Report:**

Selectable Day/week/monthly/year

Customer history <include already delete customer >

1. **Top up summary:**
2. **Alarms Report s**
3. **Billing Reports**
4. **Electricity Reports** I will updated you

**11. Users:**

* + - * Supper Admin (meter management, user’s management under all Community )
        + Asst.Supper Admin (Super visor) (read-only under Supper Admin)
      * Admin (meter management, user’s management under selected Block, location name )
        + Asst.Admin (Super visor) (read-only under respective Admin)
      * Super Admin can able to add multiple Asst.Supper Admin, Admin
      * Admin can able to add multiple Asst.Admin

< Display of actions performed >

<Creation of User IDs for Customers and Block Admins At the time of Registrations>

**12. Customer login:**

Customer login (read-only < Should be able to edit profile on Admin’s approval >,

<Online payment options required for customer>

**13. Vacation Command:**

From Date and End Date with per pone, post pone and Cancel options.

**Billing information**

**13. Online payment**

* Customer recharge
* Super Admin recharge, By cash
* Admin recharge, By cash

**14. SMS gateway**

Sending Alerts /Events

**15. Gateway integration**

* Reference document will be provided

**16. Integration of BLE communication**

* Will provide the commands / data format

**17. Billing**

**Water Postpaid**

**Gas Postpaid**

**Electricity Prepaid Dash Board**

* Credit Left in kWh Units (Balance)
* Cumulative kWh (EB & DG) EB: Electricity Board DG: Digital Generator
* Voltage (Average &Phase wise)
* Current (Average & Phase Wise)
* Frequency
* Watts (Average & Phase Wise)
* VA(Average & Phase Wise)
* PF(Average & Phase Wise)

If any points are adding I will updated you.

