**HTTP APIs :**

NOTE:

Binary data from device is represented in Hexadecimal format. For example: ‘**077c**’ represents 2 bytes 0x07 and 0x7c respectively. “646174613d” is “data=” which is HTTP variable name to be ignored from all frames.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **API** | **Data frame Format** | **Output** | **Sample Hex List in Request** |
| 1 | /v1.0/parse/register/ | Device ID | Token (16 Bytes) | 646174613d3030303030303434 |
| 2 | /v1.0/parse/authenticate/ | Device ID | Token | true / false | 646174613d30303030303034347c513553726b6b62594655454279627555 |
| 3 | /v1.0/parse/raw\_data\_multiple/ | DeviceID | Token # Timestamp | VoltageA ~ VoltageB ~ VoltageC ~ CurrentA ~ CurrentB ~ CurrentC ~ PowerFactorA ~ PowerFactorB ~ PowerFactorC ~ FreqA ~ FreqB ~ FreqC ~ THDVoltA ~ THDVoltB ~ THDVoltC ~ ReactivePowerA ~ ReactivePowerB ~ ReactivePowerC # TimeStamp | VoltageA ~ VoltageB ~ VoltageC ~ CurrentA ~ CurrentB ~ CurrentC ~ PowerFactorA ~ PowerFactorB ~ PowerFactorC ~ FreqA ~ FreqB ~ FreqC ~ THDVoltA ~ THDVoltB ~ THDVoltC ~ ReactivePowerA ~ ReactivePowerB ~ ReactivePowerC | 201 created/ 400 Bad request / 500 internal server error | 646174613d30303030303034347c513553726b6b62594655454279627555231214371e01e1**077c**000072437ee17af43f7e14aec73e7ecdcc4c3d7ecdcc4c3d7ecdcc4c3d7e0000803f7eae47e13d7e295c0f3e7e5c8f48427e000048427e8fc246427ec3f5b0407eae47e7417e5c0fd9427e000000007e000000007e00000000 |
| 4 | /v1.0/parse/alarms/ | DeviceID | Token | TimeStamp1 ~ AlarmID1 | TimeStamp2 ~ AlarmID2 … | TimeStampN ~ AlarmIDN | 201 created / 400 Bad request / 500 internal server error | 646174613d30303030303034347c513553726b6b625946554542796275557c05262e1e01e1077e057c05262e1e01e1077e10 |
| 5 | /v1.0/parse/events/ | DeviceID | Token | Timestamp | ApplianceID ~ FromState ~ ToState | Timestamp | ApplianceIDn ~ FromStaten ~ ToStaten | 201 created / 400 Bad request / 500 internal server error | 646174613d30303030303034347c513553726b6b625946554542796275557c0517381e01e1077c01030f6400017e007e017c0517381e01e1077c01030f6400017e017e007c0517381e01e1077c01030f6400017e007e01 |
| 6 | /v1.0/parse/energy\_multiple/ | DeviceID | Token # FromTimeStamp | ToTimeStamp | SourceID , TotalEnergy , ApplianceID1 ~ ApplianceEnergy1 \_ ApplianceID2 ~ ApplianceEnergy2 \_ ApplianceIDn ~ ApplianceEnergyn # FromTimeStamp | ToTimeStamp | SourceID , TotalEnergy , ApplianceID1 ~ ApplianceEnergy1 \_ ApplianceID2 ~ ApplianceEnergy2 \_ ApplianceIDn ~ ApplianceEnergyn | 201 created / 400 Bad request / 500 internal server error | 646174613d30303030303034347c513553726b6b62594655454279627555230823001e01e1077c1214391e01e1077c012ce17a943e2c01046f0200017e000000005f01030f6400017e0ad7a33d |

Where,

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| --- | --- | --- |
| **Field** | **Byte Length** | **Format** |
| Device ID 3030303030303434 | 8 | ASCII string 00000044 |
| Token | 16 | ASCII string |
| Timestamp | 7 | 1stByte - hour (int8) |
|  |  | 2ndByte - minute (int8) |
|  |  | 3rdByte - Second (int8) |
|  |  | 4thByte - Day (int8) |
|  |  | 5thByte - Month (int8) |
|  |  | 6-7 Bytes - Year (int16) |
| Delimiters | 1 | | ~ \_ # , (Int8) |
| Voltage, Current, Power factor, Frequency, Voltage THD, Total Energy, Appliance Energy, Reactive power | 4 | (float32) |
| Appliance ID | 6 | 1stByte – Category(int8)  2ndByte – Type(int8)  3rdByte – Make(int8)  4-5 Bytes – Wattage(int16)  6Byte – Number(int8) |
| From state, To state | 1 | (int8) |
| Alarm ID | 1 | (int8) |
| Source ID | 1 | (int8) |