

# MQTT:

## Sending alerts/states:

Format of alarms/source:

```
{  
  "System Info" : {  
    "Unique ID": 0x3428752354236787  
    "Time stamp": in UTC  
  },  
  "source": {  
    "sourceIdentification": 1,  
    "startTime": "02:41:30",  
    "endTime": "02:41:30"  
  },  
  "alarms": {  
    "frequency": 0,  
    "overload": 0,  
    "phaseLoss": 0,  
    "fuelTampering": 0  
  }  
}
```

# Sending of Data:

Format of Data:

Interval can be set according to server. Minimum 1second

```
{
  "System Info": {
    "Unique ID": 0x3428752354236787
    "Time stamp": in UTC
  },
  "sourceRelatedProperties": {
    "V1": 230.5,
    "V2": 229.8,
    "V3": 231.0,
    "I1": 10.2,
    "I2": 9.8,
    "I3": 11.1,
    "P1": 2.3,
    "P2": 2.2,
    "P3": 2.5,
    "energy": 150.75,
    "frequency": 50.0
  },
  "source": {
    "sourceIdentification": 2,
    "startTime": "02:41:30",
    "endTime": "03:00:00"
  },
  "alarms": {
    "frequency": 0,
    "overload": 1,
    "phaseLoss": 0,
    "fuelTampering": 1
  }
}
```

```
,
"fuel": {
  "fuelLevel": 75,
  "fuelConsumption": 60,
  "refuelingStartTime": "02:00:00",
  "refuelingEndTime": "02:30:00"
},
"battery": {
  "batteryLevel": 85,
  "batteryChargeStartTime": "01:00:00",
  "batteryChargeEndTime": "02:00:00"
},
"IDs": {
  "fuelTankID": 123456789,
  "generatorID": 987654321,
  "batteryID": 192837465
},
"temperatureAndHumidity": {
  "temperature": 25.5,
  "humidity": 60.2
}
}
```

## Commands:

Important: For reception the broker should have ability to retain commands on its side.

Server establishes the link first by sending commands.

### Set commands:

setFuelTankID: 500

Reply: ACK/NACK

setGeneratorID: 200

Reply: ACK/NACK

setBatteryID: 100

Reply: ACK/NACK

setTimedate: (In UTC)

Reply: ACK/NACK

setDataInterval: (Value will be in seconds)

Reply: ACK/NACK

## Get commands:

getFuelTankID

Reply: FuelTankID: 500

getGeneratorID

Reply: GeneratorID: 200

getBatteryID

Reply: BatteryID: 100

getTimeDate

Reply: TimeDate: UTC

getDataInterval

Reply: DataInterval: (Value will be in seconds)