



SEITECH G7M MULTI DEVICES PAYLOAD

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1. Architecture

1.1. Multi-Device Systems

- Inverters (1-5)
- FlowMeters (1-2)
- EnergyMeters (1-5)

Each device type has its own identity

Device Type	Cloud Device Names
Inverters	Inverter_1, Inverter_2, Inverter_3...
FlowMeters	FlowMeter_1, FlowMeter_2
EnergyMeters	EnergyMeter_1, EnergyMeter_2...

Total Devices in Cloud: Up to 12 separate entities

Cloud Dashboard		
<div>Inverter_1</div> <ul style="list-style-type: none"> frequency pump_voltage pump_current pump_power bus_voltage inverter_temperature motor_speed inverter_direction pump_status inverter_status inverter_supply_source StartCommandMode totalWaterVolume_m3 water_pumped_flow_rate total_energy energy_per_day daily_solar_consumption daily_nonsolar_consumption pump_energy_consumption hourly_solar_consumption hourly_nonsolar_consumption accumulated_solar accumulated_nonsolar TotalCO2Mitigated money_saved 	<div>Inverter_2</div> <ul style="list-style-type: none"> frequency pump_voltage pump_current pump_power bus_voltage inverter_temperature motor_speed inverter_direction pump_status inverter_status inverter_supply_source StartCommandMode totalWaterVolume_m3 water_pumped_flow_rate total_energy energy_per_day daily_solar_consumption daily_nonsolar_consumption pump_energy_consumption hourly_solar_consumption hourly_nonsolar_consumption accumulated_solar accumulated_nonsolar TotalCO2Mitigated money_saved 	<div>Inverter_3</div> <ul style="list-style-type: none"> frequency pump_voltage pump_current pump_power bus_voltage inverter_temperature motor_speed inverter_direction pump_status inverter_status inverter_supply_source StartCommandMode totalWaterVolume_m3 water_pumped_flow_rate total_energy energy_per_day daily_solar_consumption daily_nonsolar_consumption pump_energy_consumption hourly_solar_consumption hourly_nonsolar_consumption accumulated_solar accumulated_nonsolar TotalCO2Mitigated money_saved
<div>FlowMeter_1</div> <ul style="list-style-type: none"> water_pumped_flow_rate totalWaterVolume_m3 flowmeter_conductivity 	<div>FlowMeter_2</div> <ul style="list-style-type: none"> water_pumped_flow_rate totalWaterVolume_m3 flowmeter_conductivity 	
<div>EnergyMeter_1</div> <ul style="list-style-type: none"> em_voltage_a em_voltage_b em_voltage_c em_current_a em_current_b em_current_c em_frequency em_energy_total em_power_factor em_monthly_energy daily_nonsolar_consumption 	<div>EnergyMeter_2</div> <ul style="list-style-type: none"> em_voltage_a em_voltage_b em_voltage_c em_current_a em_current_b em_current_c em_frequency em_energy_total em_power_factor em_monthly_energy daily_nonsolar_consumption 	<div>EnergyMeter_3</div> <ul style="list-style-type: none"> em_voltage_a em_voltage_b em_voltage_c em_current_a em_current_b em_current_c em_frequency em_energy_total em_power_factor em_monthly_energy daily_nonsolar_consumption
<div>TDS_Sensor</div> <ul style="list-style-type: none"> tds_sensor (ppm) Range: 0-1000 ppm Input: ADC 	<div>Pressure_Sensor</div> <ul style="list-style-type: none"> pressure_sensor (bar) Range: 0-16 bar Input: 4-20mA (AI1) 	<div>Level_Sensor</div> <ul style="list-style-type: none"> level_sensor (m) Range: 0-5 m Input: 4-20mA (AI0)

Cloud Dashboard

INVERTERS

Inverter_1
frequency
pump_voltage
pump_current
pump_power
bus_voltage
inverter_temperature
motor_speed
inverter_direction
pump_status
inverter_status
inverter_supply_source
StartCommandMode
totalWaterVolume_m3
water_pumped_flow_rate_per_hour
total_energy
energy_per_day
daily_solar_consumption
daily_nonsolar_consumption
pump_energy_consumption
hourly_solar_consumption
hourly_nonsolar_consumption
accumulated_solar_consumption
accumulated_nonsolar_consumption
TotalCO2Mitigated

Inverter_2
Same 25 telemetries as Inverter_1

Inverter_3
Same 25 telemetries as Inverter_1

FLOWMETERS

FlowMeter_1
water_pumped_flow_rate_per_hour
totalWaterVolume_m3
flowmeter_conductivity

FlowMeter_2
water_pumped_flow_rate_per_hour
totalWaterVolume_m3
flowmeter_conductivity

ENERGYMETERS

EnergyMeter_1
em_voltage_a
em_voltage_b
em_voltage_c
em_current_a
em_current_b
em_current_c
em_frequency
em_energy_total
em_power_factor
em_monthly_energy
em_daily_energy
em_comm_status
daily_nonsolar_consumption
accumulated_solar_consumption
accumulated_nonsolar_consumption

EnergyMeter_2
Same 15 telemetries as EnergyMeter_1

EnergyMeter_3
Same 15 telemetries as EnergyMeter_1

LEGEND

- Yellow = Inverter telemetries (25 per device)
- Green = FlowMeter telemetries (3 per device)
- Red = EnergyMeter telemetries (15 per device)
- Purple = SHARED (Inverter ↔ EnergyMeter)

SHARED TELEMETRIES (Inverter ↔ EnergyMeter)

- daily_nonsolar_consumption
- accumulated_solar_consumption
- accumulated_nonsolar_consumption
- EnergyMeter measured values supplement Inverter calculations

SHARED TELEMETRIES (Inverter ↔ FlowMeter)

- water_pumped_flow_rate_per_hour
- totalWaterVolume_m3
- FlowMeter measured values take precedence over Inverter

TELEMETRY SUMMARY

Inverter: 25 telemetries × 3 devices = 75 total
FlowMeter: 3 telemetries × 2 devices = 6 total
EnergyMeter: 15 telemetries × 3 devices = 45 total
TOTAL: 126 telemetries across all devices

Device Details

Inverter Telemetry (per device) - 25 Telemetries

#	Telemetry	JSON Key	Description	Update Rate
1	Frequency	frequency	Running frequency (Hz)	Real-time
2	Pump Voltage	pump_voltage	Motor output voltage (V)	Real-time
3	Pump Current	pump_current	Motor output current (A)	Real-time
4	Pump Power	pump_power	Motor output power (kW)	Real-time
5	Bus Voltage	bus_voltage	DC bus voltage (V)	Real-time
6	Temperature	inverter_temperature	Inverter temperature (°C)	Real-time
7	Motor Speed	motor_speed	Estimated RPM	Real-time
8	Direction	inverter_direction	RunForward / RunBackward	On change
9	Pump Status	pump_status	Running / Stopped / Unknown / Overload	On change
10	Inverter Status	inverter_status	Power & Communication / Locked / Power OFF	On change
11	Supply Source	inverter_supply_source	Solar / Grid / Diesel	On change
12	Start Command Mode	StartCommandMode	KeypadControl / TerminalControl / CommunicationControl	On change
13	Total Water Volume	totalWaterVolume_m3	Calculated water pumped (m ³)	5 min
14	Hourly Pump Rate	water_pumped_flow_rate_per_hour	Flow rate (m ³ /h)	1 hour
15	Total Energy	total_energy	Total energy consumed (kWh)	On change
16	Daily Energy	energy_per_day	Daily energy consumption (kWh)	Daily

17	Daily Solar	daily_solar_consumption	Daily solar energy (kWh)	Daily
18	Daily NonSolar	daily_nonsolar_consumption	Daily non-solar energy (kWh)	Daily
19	Hourly Energy	pump_energy_consumption	Hourly consumption (kWh)	1 hour
20	Hourly Solar	hourly_solar_consumption	Hourly solar (kWh)	1 hour
21	Hourly NonSolar	hourly_nonsolar_consumption	Hourly non-solar (kWh)	1 hour
22	Accum Solar	accumulated_solar_consumption	Total solar energy (kWh)	On change
23	Accum NonSolar	accumulated_nonsolar_consumption	Total non-solar energy (kWh)	On change
24	CO2 Mitigated	TotalCO2Mitigated	Total CO2 saved (kg)	On change
25	Money Saved	money_saved	Cumulative money saved (EGP)	On change

FlowMeter Telemetry (per device) - 3 Telemetries

#	Telemetry	JSON Key	Register ID	Description	Update Rate
1	Flow Rate	water_pumped_flow_rate_per_hour	0x030A	Current flow rate (m ³ /h)	1 min
2	Total Volume	totalWaterVolume_m3	0x0304	Accumulated flow (m ³)	5 min
3	Conductivity	flowmeter_conductivity	0x032C	Water conductivity (μS/cm)	30 min

EnergyMeter Telemetry (per device) - 11 Telemetries

#	Telemetry	JSON Key	Register ID	Description	Update Rate
1	Voltage A	em_voltage_a	0x0800	Phase A voltage (V)	1 min
2	Voltage B	em_voltage_b	0x0802	Phase B voltage (V)	1 min

3	Voltage C	em_voltage_c	0x0804	Phase C voltage (V)	1 min
4	Current A	em_current_a	0x080C	Phase A current (A)	1 min
5	Current B	em_current_b	0x080E	Phase B current (A)	1 min
6	Current C	em_current_c	0x0810	Phase C current (A)	1 min
7	Frequency	em_frequency	0x0834	Grid frequency (Hz)	1 min
8	Total Energy	em_energy_total	0x0842	Cumulative energy (kWh)	5 min
9	Power Factor	em_power_factor	0x0832	Total power factor	5 min
10	Monthly Energy	em_monthly_energy	0x7002	Monthly consumption (kWh)	5 min
11	Daily NonSolar	daily_nonsolar_consumption	-	Daily non-solar usage (kWh)	5 min

Shared Telemetry

The following telemetries can be published from **both** Inverter and FlowMeter:

Telemetry	JSON Key	Inverter Source	FlowMeter Source
Flow Rate	water_pumped_flow_rate_per_hour	Calculated from energy	Measured (0x030A)
Total Volume	totalWaterVolume_m3	Calculated from energy	Measured (0x0304)

Note: When a FlowMeter is connected, its measured values take precedence over Inverter calculated values.

Telemetry Summary

Device	Count	Instances	Total
Inverter	25	5	125
FlowMeter	3	2	6
EnergyMeter	11	5	55
TDS Sensor	1	1	1
Pressure Sensor	1	1	1
Level Sensor	1	1	1
TOTAL			189

2. Device Telemetries

2.1.Topic

devices/<device_id>/telemetry

2.2.Inverter related parameters

All telemetry data are related to inverters **except** those listed below:

```
"SW_VERSION"
"HW_VERSION"
"HW_TARGET"
"lifebox_code"
"contract_ref_number"
"commissioning_date"
"system_components"
"subscription_type"
"client_tier"
"location"
"installation_date"
"Device_ID"
```

2.3.Payload

Current:

```
{
  "data": {
    "PowerSourceOfBox": {
      "id": "0x000",
      "value": "Battery"
    }
  }
}
```

Proposed:

Adding a string obj "DeviceName"

```
{
  "DeviceName": <STRING>,
  "data": {
    "PowerSourceOfBox": {
      {
        "id": "0x000",
        "value": "Battery"
      }
    }
  }
}
```

2.4.Example

```
{
  "DeviceName": "Inverter_1",
  "data": {
    "frequency": {"id": "0x1001", "value": "50.00"},
    "pump_voltage": {"id": "0x1002", "value": "380"},
    "pump_current": {"id": "0x1003", "value": "15.5"},
    "pump_power": {"id": "0x1004", "value": "8.75"},
    "bus_voltage": {"id": "0x1005", "value": "540"},
    "inverter_temperature": {"id": "0x1006", "value": "45.2"},
    "motor_speed": {"id": "0x1007", "value": "1450"},
    "inverter_direction": "RunForward",
    "pump_status": "Running",
    "inverter_status": "Power & Communication",
    "inverter_supply_source": "Solar",
    "StartCommandMode": "CommunicationControl",
    "totalWaterVolume_m3": {"id": "0x000", "value": "12500.50"},
    "water_pumped_flow_rate_per_hour": {"id": "0x000", "value": "25.5"},
    "total_energy": {"id": "0x000", "value": "45678.90"},
    "energy_per_day": {"id": "0x000", "value": "125.50"},
    "daily_solar_consumption": {"id": "0x000", "value": "95.25"},
    "daily_nonsolar_consumption": {"id": "0x000", "value": "30.25"},
    "pump_energy_consumption": {"id": "0x000", "value": "5.25"},
    "hourly_solar_consumption": {"id": "0x000", "value": "4.15"},
    "hourly_nonsolar_consumption": {"id": "0x000", "value": "1.10"},
    "accumulated_solar_consumption": {"id": "0x000", "value": "35420.50"},
    "accumulated_nonsolar_consumption": {"id": "0x000", "value":
"10258.40"},
    "TotalCO2Mitigated": {"id": "0x000", "value": "28500.75"},
    "money_saved": {"id": "0x000", "value": "125000.50"}
  }
}
```

3. Device Alarms

3.1.Topic

device/<device_id>/alarm

3.2.Inverter related parameters

All alarms data are related to inverters **except** those listed below:

SMS service error

BMS over-voltage

BMS under-voltage

3.3.Payload

Inverter temperature pre-alarm

Current:

```
{
  "type": "temperature",
  "title": "Pre-Alarm Inverter temperature is rising",
  "status": 1,
  "severity": 3,
  "propagate": true
}
```

Proposed:

```
{
  "DeviceName": "<STRING >",
  "type": "temperature",
  "title": "Pre-Alarm Inverter temperature is rising",
  "status": 1,
  "severity": 3,
  "propagate": true
}
```

4. Device Events

4.1.Topic

device/<device_id>/event

4.2.Inverter related parameters

Inverter task with SW version

Inverter is unlocked

Inverter input scource

Supply of the box in case of inverter

Connection with the inverter

Start command mode

Temperature setpoint

4.3.Payload

Inverter input scource

Current:

```
{
  "type": "Inverter_input_source",
  "title": "The inverter's input source is Diesel",
  "propagate": true
}
```

Proposed:

```
{
  "DeviceName": "<STRING >",
  "type": "Inverter_input_source",
  "title": "The inverter's input source is Diesel",
  "propagate": true
}
```

4.4.Examples

- 1- {"DeviceName":"Inverter_1","type": "ConnectionWithInverter","title": "Communication With Inverter Is back"}
- 2- {"DeviceName":"Inverter_1","type": "Inverter_input_source","title": "The inverter's input source is Diesel"}
- 3- {"DeviceName":"Inverter_1","type": "InverterUnLocked","title": "Inverter is Unlocked"}

5. Device Commands

5.1.Topic

devices/<device_id>/commands

5.2.Inverter related parameters

Control Pump Forward1:

direction: <value>

Select Start Command Mode:

SelectStartCommandMode: <value>

Change Inverter Temperature SetPoint:

InvTempSetPoint: <value>

Pre-alarm Temperature Setpoint:

TempTH:<value>

Inverter Cancel pass:

InvCancelPass: <value>

Inverter Change Password:

InvPassWord: <value>

Inverter_Reg_Addr:

{frequency_addr: <value>,pump_voltage_addr: <value>,pump_current_addr: <value>,pump_power_addr: <value>,motor_speed_addr: <value>,bus_volt_addr: <value>}

Inverter_Reg_Addr2:

{inverter_temp_addr: <value>,pump_energy_consump:<value>,control_pump_addr:<value>}

Inverter_Remote_AlarmReset:

AlarmReset: <value>

Control Pump:

control: <value>

control_master:

master: <value>

device_code:

device_code:<value>

5.3.Payload

Current:

1- Control Pump Forward1:

direction: InvFwd

2- TDS_RANGE:

InvPassWord: <value>

Proposed:

1- Control Pump Forward1:

```
{
  "DeviceName": "<STRING >",
  "Command": "direction: InvFwd"
```

```
}
```

2- Inverter Change Password:

```
{
  "DeviceName": "<STRING >",
  "Command": "InvPassWord: <value>"
}
```

5.4.Example

- 1- {"DeviceName": "Inverter_1", "Command": "direction: InvFwd"}
- 2- {"DeviceName": "Inverter_1", "Command": "control: 1"}
- 3- {"DeviceName": "Inverter_1", "Command": "master: false"}

6. Energy Meter:

6.1. Telemetries

- 1- {"DeviceName":"EnergyMeter_1","data":{"em_voltage_a":{"id":"0x0061","value":"221.60"}}}
- 2- {"DeviceName":"EnergyMeter_1","data":{"em_voltage_b":{"id":"0x0062","value":"0.00"}}}
- 3- {"DeviceName":"EnergyMeter_1","data":{"em_voltage_c":{"id":"0x0063","value":"0.00"}}}
- 4- {"DeviceName":"EnergyMeter_1","data":{"em_current_a":{"id":"0x080C","value":"0.00"}}}
- 5- {"DeviceName":"EnergyMeter_1","data":{"em_current_b":{"id":"0x080E","value":"0.00"}}}
- 6- {"DeviceName":"EnergyMeter_1","data":{"em_current_c":{"id":"0x0810","value":"0.00"}}}
- 7- {"DeviceName":"EnergyMeter_1","data":{"em_energy_total":{"id":"0x081A","value":"12345.6"}}}
- 8- {"DeviceName":"EnergyMeter_1","data":{"em_power_factor":{"id":"0x0832","value":"0.95"}}}
- 9- {"DeviceName":"EnergyMeter_1","data":{"em_frequency":{"id":"0x0834","value":"50.02"}}}
- 10- {"DeviceName":"EnergyMeter_1","data":{"daily_nonsolar_consumption":{"id":"0x0000","value":"156.78"}}}
- 11- {"DeviceName":"EnergyMeter_1","data":{"hourly_nonsolar_consumption":{"id":"0x0000","value":"6.54"}}}
- 12- {"DeviceName":"EnergyMeter_1","data":{"em_monthly_energy":{"id":"0x7002","value":"4523.45"}}}

➤ Grouped

```
{
  "DeviceName": "EnergyMeter_1",
  "data": {
    "em_voltage_a": {"id": "0x0800", "value": "230.5"},
    "em_voltage_b": {"id": "0x0802", "value": "231.2"},
    "em_voltage_c": {"id": "0x0804", "value": "229.8"},
    "em_current_a": {"id": "0x080C", "value": "15.25"},
    "em_current_b": {"id": "0x080E", "value": "14.98"},
    "em_current_c": {"id": "0x0810", "value": "15.10"},
    "em_frequency": {"id": "0x0834", "value": "50.02"},
    "em_energy_total": {"id": "0x0842", "value": "12345.6"},
    "em_power_factor": {"id": "0x0832", "value": "0.95"},
    "em_monthly_energy": {"id": "0x7002", "value": "4523.45"},
    "daily_nonsolar_consumption": {"id": "0x0000", "value": "156.78"}
  }
}
```

6.2. Alarms

- 1- {"DeviceName":"EnergyMeter_1","title":"Energy Meter Phase Loss",
"type":"EnergyMeter_PhaseLoss","severity":3,"status":1,"propagate":true}
- 2- {"DeviceName":"EnergyMeter_1","title":"Energy Meter Communication Lost", "type":
"EnergyMeter_CommLost","severity":3,"status":1,"propagate":true}
- 3- {"DeviceName":"EnergyMeter_1","title":"Energy Meter Over voltage", "type":
"EnergyMeter_Overvoltage","severity":3,"status":1,"propagate":true}
- 4- {"DeviceName":"EnergyMeter_1","title":"Energy Meter Under
voltage","type":"EnergyMeter_Undervoltage","severity":3,"status":1,"propagate":true}
- 5- {"DeviceName":"EnergyMeter_1","title":"Energy Meter Over current",
"type":"EnergyMeter_Overcurrent","severity":3,"status":1,"propagate":true}

6.3. Events

- 1- {"DeviceName":"EnergyMeter_1","propagate":true,"title":"[EnergyMeter]: CT/PT Changed - PT:2, CT:100","type":"EnergyMeter_1_CT_PT_ConfigUpdate"}
- 2- {"DeviceName":"EnergyMeter_1","propagate":true,"title":"[EnergyMeter] Setting frozen time daily by hour: ","type":"EnergyMeter_1 Frozen Time daily ConfigUpdate"}
- 3- {"DeviceName":"EnergyMeter_1","propagate":true,"title":"[EnergyMeter] Setting frozen time Monthly by day: %d and Hour : %d","type":"EnergyMeter_1 Frozen Time monthly ConfigUpdate"}
- 4- {"DeviceName":"EnergyMeter_1","propagate":true,"title":"[EnergyMeter]: Overvoltage threshold set successfully %.2fV","type":"EnergyMeter_1 Overvoltage Threshold ConfigUpdate"}
- 5- {"DeviceName":"EnergyMeter_1","propagate":true,"title":"[EnergyMeter]: Undervoltage threshold set successfully %.2fV","type":"EnergyMeter_1 Undervoltage Threshold ConfigUpdate"}
- 6- {"DeviceName":"EnergyMeter_1","propagate":true,"title":"[EnergyMeter]: Overcurrent threshold set successfully %.2fA","type":"EnergyMeter_1 Overcurrent Threshold ConfigUpdate"}
- 7- {"DeviceName":"EnergyMeter_1","propagate":true,"title":"EnergyMeter Count Updated","type":"1"}
- 8- {"DeviceName":"EnergyMeter_1","propagate":true,"title":"EnergyMeter Count Update Failed - Out of Range","type":"1"}
- 9- {"DeviceName":"EnergyMeter_1","propagate":true,"title":"EnergyMeter Count Update Failed - Invalid Digits","type":"1"}

6.4. Commands

- 1- {"DeviceName":"EnergyMeter_1", "Command":"EnergyMeter_SetParameters: CT_Ratio= 2"}
- 2- {"DeviceName":"EnergyMeter_1", "Command":"EnergyMeter_SetParameters: PT_Ratio= 2"}
- 3- {"DeviceName":"EnergyMeter_1", "Command":"EnergyMeter_SetParameters: Over_Voltage_th= 100"}
- 4- {"DeviceName":"EnergyMeter_1", "Command":"EnergyMeter_SetParameters: Under_Voltage_th= 100"}
- 5- {"DeviceName":"EnergyMeter_1", "Command":"EnergyMeter_SetParameters: Over_Current_th= 100"}
- 6- {"DeviceName":"EnergyMeter_1", "Command":"EnergyMeter_SetParameters: Frozen_Time_Daily= 15"}
- 7- {"DeviceName":"EnergyMeter_1", "Command":"EnergyMeter_SetParameters: Frozen_Time_Monthly= H/D"}
- 8- {"DeviceName":"EnergyMeter_2", "Command":"EnergyMeter_SetParameters: Set_EnergyMeter_Time= (SEC: 10,MIN: 30,HOUR: 12,DAY: 1,MONTH: 10,YEAR: 26)"}

7. Flow Meter

7.1. Telemetries

```
{
  "DeviceName": "FlowMeter_1",
  "data": {
    "totalWaterVolume_m3": {
      "id": "0x0304",
      "value": "1077936128.00"
    },
    "water_pumped_flow_rate_per_hour": {
      "id": "0x030A",
      "value": "2.00"
    },
    "flowmeter_conductivity": {
      "id": "0x032C",
      "value": "600.22"
    }
  }
}
```

7.2. Alarms

- 1- {"DeviceName": "FlowMeter_1", "type": "EmptyPipe", "title": "Flow Meter Empty Pipe Detected", "status": 1, "severity": 2, "propagate": true}
- 2- {"DeviceName": "FlowMeter_1", "type": "Excitation", "title": "Flow Meter Excitation Error", "status": 1, "severity": 2, "propagate": true}
- 3- {"DeviceName": "FlowMeter_1", "type": "HighFlow", "title": "Flow Meter High Flow Alarm", "status": 1, "severity": 2, "propagate": true}
- 4- {"DeviceName": "FlowMeter_1", "type": "LowFlow", "title": "Flow Meter Low Flow Alarm", "status": 1, "severity": 2, "propagate": true}
- 5- {"DeviceName": "FlowMeter_1", "type": "CommLost", "title": "Flow Meter Communication Lost", "status": 3, "severity": 3, "propagate": true}

7.3. Events

- 1- {"DeviceName": "FlowMeter_1", "type": "FlowMeter_1 ConfigUpdate", "title": "Range:424.00 AlarmHigh:100.00 AlarmLow:10.00 Unit:m3", "propagate": true}
- 2- {"DeviceName": "FlowMeter_1", "type": "Water FlowStart", "title": "FlowMeter_1 Flow Started", "propagate": true}
- 3- {"DeviceName": "FlowMeter_1", "type": "Water FlowStop", "title": "FlowMeter_1 Flow Stopped", "propagate": true}
- 4- {"DeviceName": "FlowMeter_1", "type": "1", "title": "FlowMeter Count Updated", "propagate": true}
- 5- {"DeviceName": "FlowMeter_1", "type": "0", "title": "FlowMeter Count Update Failed - Out of Range", "propagate": true}

7.4. Commands

- 1- InverterCount: <value>,FlowMeterCount: <value>,EnergyMeterCount: <value>

8. Note:

- 1- In Telemetries, Alarms, Events or Commands

"DeviceName": <STRING>

<STRING> would be "Inverter_1", "Inverter_2", "Inverter_3", "Inverter_4", "Inverter_5", "FlowMeter_1", "EnergyMeter_1" And "System" for generic data not related to inverters or sensors.

- 2- TDS, level and Pressure sensors are treated as System
- 3- device_code is used in both telemetry and commands

Incoming Command (from Cloud):

```
{"DeviceName": "Inverter_2", "Command": "device_code: 17"}
```

Outgoing Telemetry (to Cloud) - Published per Inverter:

```
{"DeviceName": "Inverter_2", "data": {"device_code": {"id": "0", "value": "17"}}
```