

# Correction Exercice 2

A venir dans quelques temps ... essayer de chercher et de trouver une solution ....

## Rappels

Dans un premier temps , je vous montre comment afficher la température de l'ESP32 sur le Dashboard avec la Gauge ensuite avec un graphique

Dans un deuxième temps , je vous montrerais comment afficher la température avec un DHT11 raccordé sur L'esp32.

Dans le tuto precedent , vous avez la methode pour declarer le mode temperature de l'esp32 dans tasmota



Tous les ESP ( ESP8266 ??) ne permettent pas l'affichage de leur température .... Il faut raccorder un DHT11 ou DHT22 ou un DS18B20

- Si vous avez un ESP32, Ouvrir la console de tasmota ( revenir au premier ecran) est entrer les commandes "SetOption146 1" + Entrée( validation de l'envoi de la temperature de l'ESP32) et "teleperiod 5" + Entrée ( definit la periode d'envoi des informations vers MQTT ici tous les 5 s)

```

ESP32-DevKit
Tasmota

17:49:39.855 MOT: tele/tasmota_6B2128/POWER=ON
17:49:39.855 MOT: tele/tasmota_6B2128/INFO = {"Info": {"Module": "ESP32-DevKit", "Version": "12.4.0 (tasmota)", "FallbackTopic": "cmd/DIVES 6B2128 fb/", "GroupTopic": "cmd/tasmota/"}, "Server": {"ServerNode": "Admin", "Hostname": "tasmota-6B2128-0296", "IPGlobal": "", "IPLocal": "fe80::9af4:abff:fedb:2128"}}
17:49:39.854 MOT: tele/tasmota_6B2128/INFO = {"Info": {"RestartReason": "RTC Watch dog reset digital core and rtc module", "BootCount": 0}}
17:49:39.969 MOT: stat/tasmota_6B2128/RESULT = {"POWER": "ON"}
17:49:39.911 MOT: stat/tasmota_6B2128/POWER = ON
17:49:43.062 MOT: tele/tasmota_6B2128/STATE = {"Time": "2023-04-08T17:19:43", "Uptime": "0T00:00:00", "UptimeSec": 0, "Heap": 161, "SleepMode": "Dynamic", "Sleep": 50, "LoadAvg": 19, "MqttCount": 1, "Berry": {"HeapUsed": 3, "Objects": 43}, "POWER": "ON"}
17:49:44.022 MOT: tele/tasmota_6B2128/SENSOR = {"Time": "2023-04-08T17:19:44", "ESP32": {"Temperature": 36.1}, "TempUnit": "C"}
17:49:44.022 MOT: tele/tasmota_6B2128/STATE = {"Time": "2023-04-08T17:19:53", "Uptime": "0T00:00:18", "UptimeSec": 18, "Heap": 160, "SleepMode": "Dynamic", "Sleep": 50, "LoadAvg": 19, "MqttCount": 1, "Berry": {"HeapUsed": 3, "Objects": 43}, "POWER": "ON"}
17:49:44.046 MOT: tele/tasmota_6B2128/SENSOR = {"Time": "2023-04-08T17:19:53", "ESP32": {"Temperature": 36.7}, "TempUnit": "C"}
17:49:44.046 MOT: tele/tasmota_6B2128/STATE = {"Time": "2023-04-08T17:19:53", "Uptime": "0T00:00:18", "UptimeSec": 18, "Heap": 159, "SleepMode": "Dynamic", "Sleep": 50, "LoadAvg": 19, "MqttCount": 1, "Berry": {"HeapUsed": 3, "Objects": 43}, "POWER": "ON"}
17:49:44.067 MOT: tele/tasmota_6B2128/SENSOR = {"Time": "2023-04-08T17:19:54", "ESP32": {"Temperature": 36.7}, "TempUnit": "C"}
17:49:44.067 MOT: tele/tasmota_6B2128/STATE = {"Time": "2023-04-08T17:19:54", "Uptime": "0T00:00:38", "UptimeSec": 38, "Heap": 158, "SleepMode": "Dynamic", "Sleep": 50, "LoadAvg": 19, "MqttCount": 1, "Berry": {"HeapUsed": 3, "Objects": 43}, "POWER": "ON"}
17:49:44.088 MOT: tele/tasmota_6B2128/SENSOR = {"Time": "2023-04-08T17:19:54", "ESP32": {"Temperature": 36.7}, "TempUnit": "C"}
17:49:44.088 MOT: tele/tasmota_6B2128/STATE = {"Time": "2023-04-08T17:19:54", "Uptime": "0T00:00:38", "UptimeSec": 38, "Heap": 157, "SleepMode": "Dynamic", "Sleep": 50, "LoadAvg": 19, "MqttCount": 1, "Berry": {"HeapUsed": 3, "Objects": 43}, "POWER": "ON"}
17:49:44.109 MOT: tele/tasmota_6B2128/SENSOR = {"Time": "2023-04-08T17:19:55", "ESP32": {"Temperature": 36.7}, "TempUnit": "C"}
17:49:44.109 MOT: tele/tasmota_6B2128/STATE = {"Time": "2023-04-08T17:19:55", "Uptime": "0T00:00:48", "UptimeSec": 48, "Heap": 157, "SleepMode": "Dynamic", "Sleep": 50, "LoadAvg": 19, "MqttCount": 1, "Berry": {"HeapUsed": 3, "Objects": 43}, "POWER": "ON"}
17:49:44.130 MOT: tele/tasmota_6B2128/SENSOR = {"Time": "2023-04-08T17:19:55", "ESP32": {"Temperature": 36.7}, "TempUnit": "C"}
17:49:44.130 MOT: tele/tasmota_6B2128/STATE = {"Time": "2023-04-08T17:19:55", "Uptime": "0T00:00:48", "UptimeSec": 48, "Heap": 156, "SleepMode": "Dynamic", "Sleep": 50, "LoadAvg": 19, "MqttCount": 1, "Berry": {"HeapUsed": 3, "Objects": 43}, "POWER": "ON"}
17:49:44.151 MOT: SetOption146 1
17:49:44.151 MOT: stat/tasmota_6B2128/RESULT = {"SetOption146": "ON"}[{"Time": "2023-04-08T17:20:33", "Uptime": "0T00:00:59", "UptimeSec": 59, "Heap": 156, "SleepMode": "Dynamic", "Sleep": 50, "LoadAvg": 19, "MqttCount": 1, "Berry": {"HeapUsed": 3, "Objects": 43}, "POWER": "ON"}]
17:49:44.151 MOT: tele/tasmota_6B2128/SENSOR = {"Time": "2023-04-08T17:20:34", "ESP32": {"Temperature": 37.2}, "TempUnit": "C"}[{"Time": "2023-04-08T17:20:34", "Uptime": "0T00:00:59", "UptimeSec": 59, "Heap": 156, "SleepMode": "Dynamic", "Sleep": 50, "LoadAvg": 19, "MqttCount": 1, "Berry": {"HeapUsed": 3, "Objects": 43}, "POWER": "ON"}]

Enter command
Consoles
Tasmota 12.4.0 by TeamArclis

```

Vous devez voir afficher :

```

17:20:28.274 CMD: SetOption146 1
17:20:28.281 MQT: stat/tasmota_6B2128/RESULT = {"SetOption146": "ON"}[{"Time": "2023-04-08T17:20:33", "Uptime": "0T00:00:59", "UptimeSec": 59, "Heap": 156, "SleepMode": "Dynamic", "Sleep": 50, "LoadAvg": 19, "MqttCount": 1, "Berry": {"HeapUsed": 3, "Objects": 43}, "POWER": "ON"}]

```

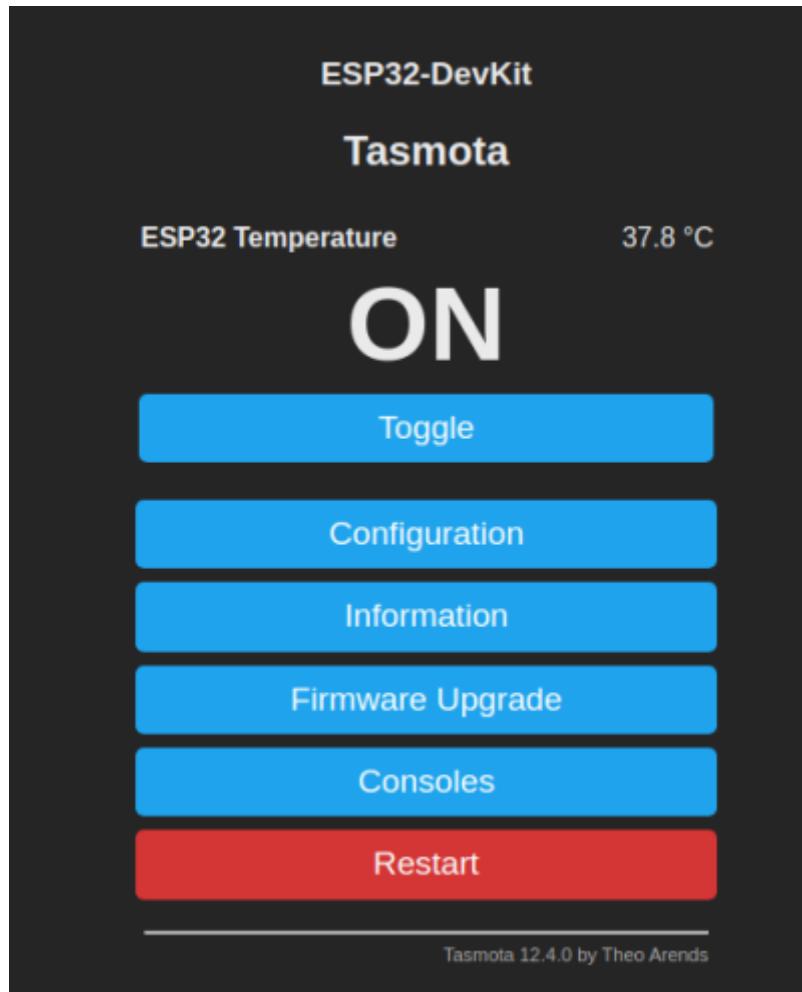
Et la periode d 'envoi ( même si indiquer 5 il mettra 10 ...)

```

17:23:12.292 CMD: teleperiod 5
17:23:12.299 MQT: stat/tasmota_6B2128/RESULT = {"TelePeriod": 10}

```

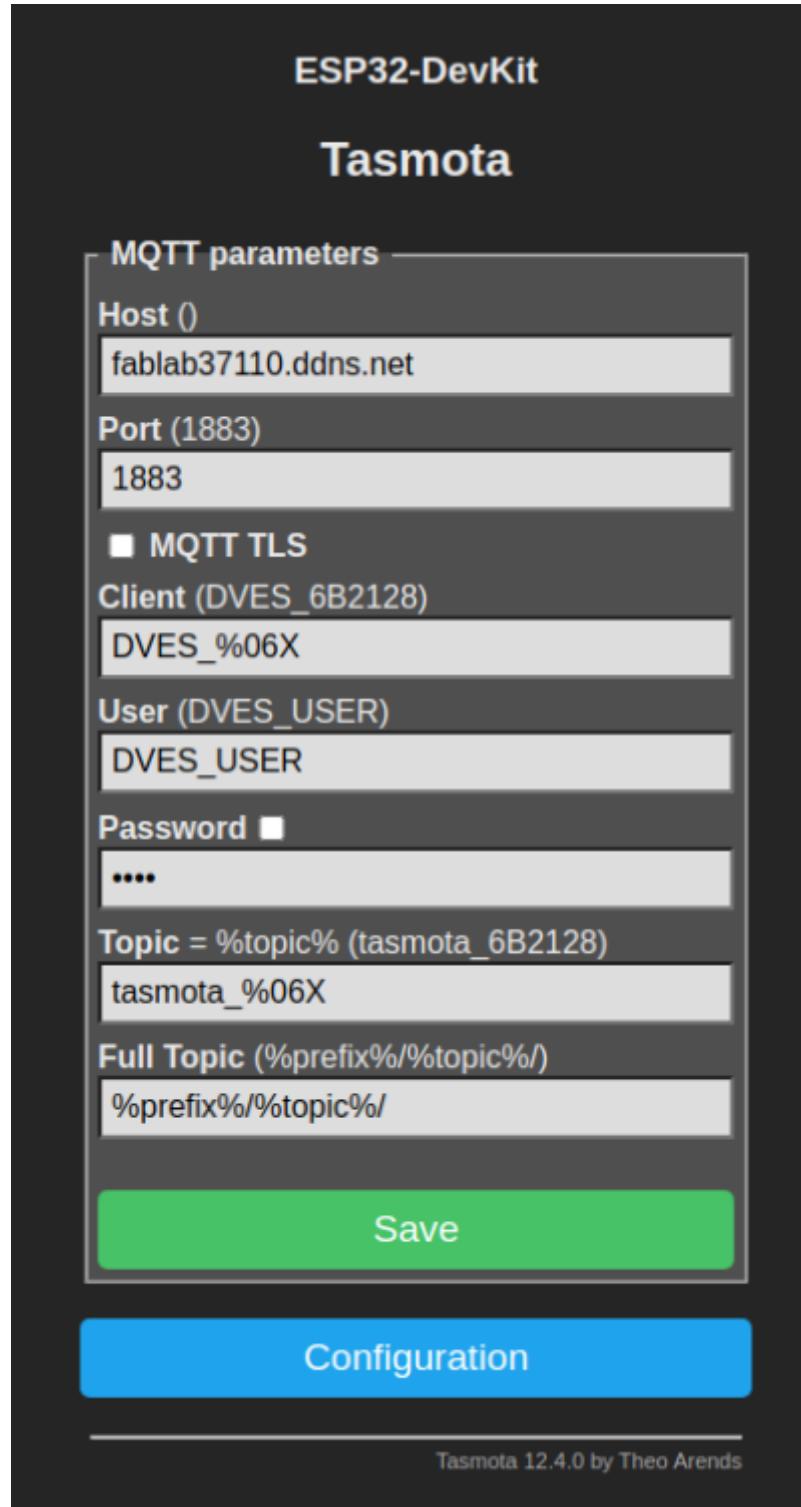
En retournant sur le menu principal vous devez avoir ce ceci , La temperature de l'ESP32 et le bouton (si vous l'avez configurer ):



Vous allez à nouveau sur la console et vous copier cette ligne : l'indication 6B2128 sera différente en fonction de votre ESP32

```
tele/tasmota_6B2128/SENSOR
```

Avant de vous connecter sur VOTRE serveur node-red , **verifié que le paramétrage de MQTT est bon**



Pour l'exercice je prends le serveur : [fablab37110.ddns.net:1883](https://fablab37110.ddns.net:1883) . Mais vous pouvez le configurer avec un autre serveur MQTT , il faut juste que sur Tasmota et node-red , ce soit le même...

## On se connecte sur SON serveur node-red

pour l'exercice : "castellab.ddnsfree.com:18xx" xx correspond à VOTRE serveur node-red ( voir le courriel )

On insere un noeud "MQTT IN" , on le parametre avec I @IPMQTT:1883 ( exemple

Last update: faire\_preparation:soireeinfo:tp:corex2 https://www.fablab37110.chanterie37.fr/doku.php?id=faire\_preparation:soireeinfo:tp:corex2&rev=1680975221  
2023/04/08 19:33

fablab37110.ddns.net:1883 ) et le bon topic “tele/tasmota\_6B2128/SENSOR” on appuis sur “Done”

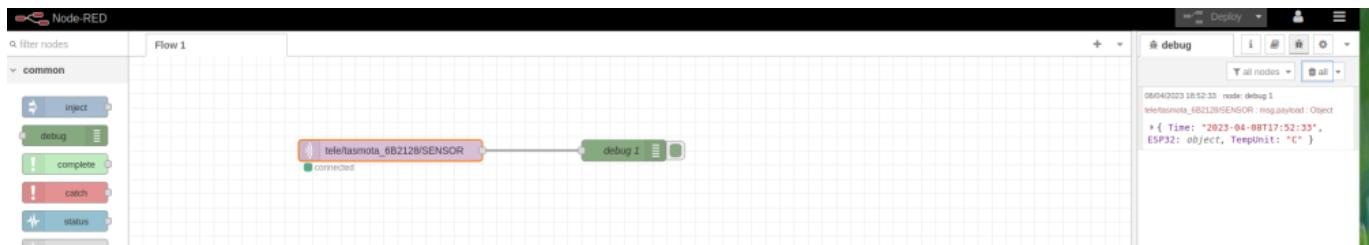
On insere un noeud “Debug”

On relie les 2 noeuds

On valide par “Deploy”

On se positionne sur l'onglet “Debug”

On verifie que les infos de temperatures arrive bien sur le serveur node-red

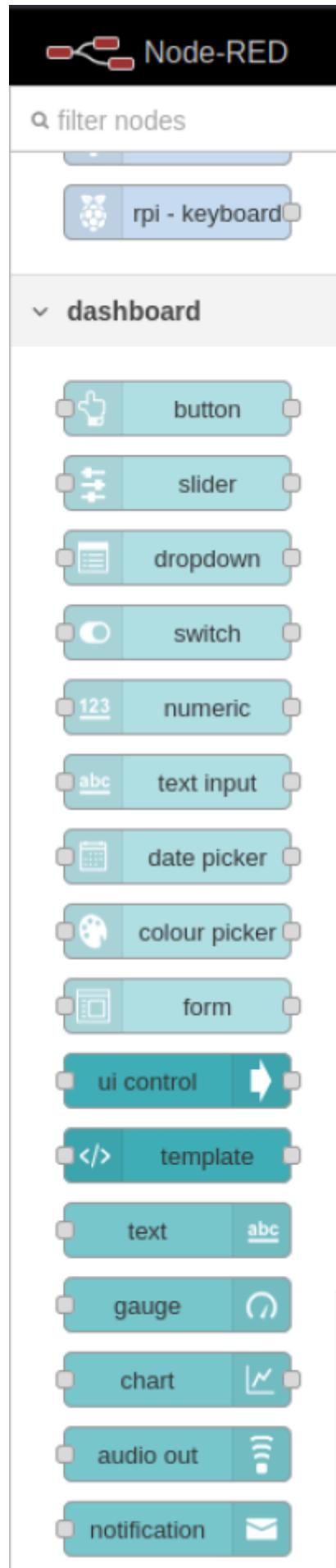


Pour lire la temperature , cliquer sur l'info ESP32 en rouge : **ESP32: object, TempUnit: "C" }**

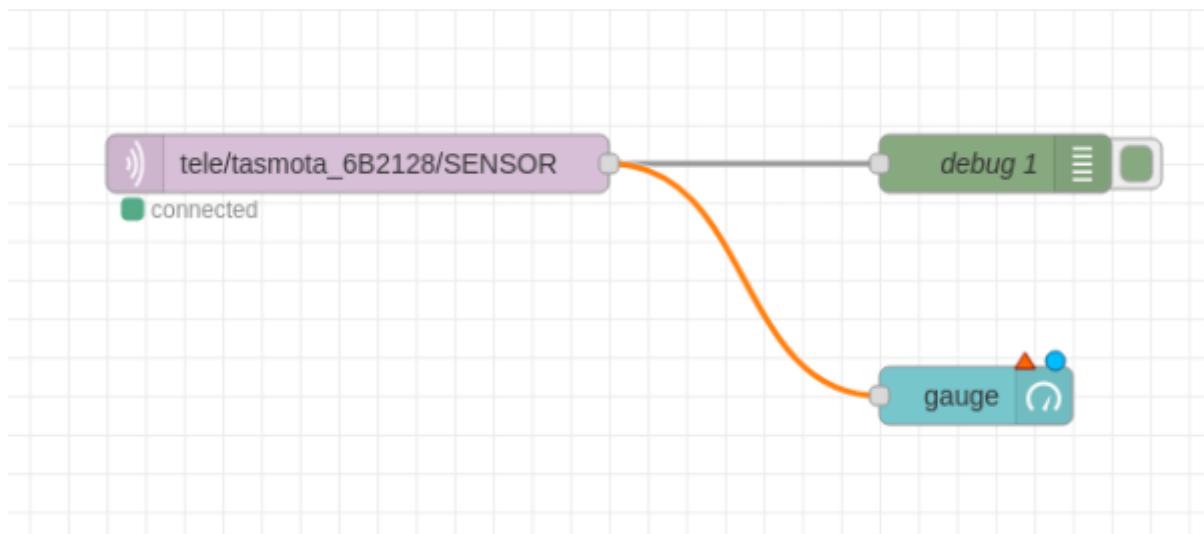
```
08/04/2023 18:53:24  node: debug 1
tele/tasmota_6B2128/SENSOR : msg.payload : Object
  ▼ object
    Time: "2023-04-08T17:53:22"
  ▼ ESP32: object
    Temperature: 38.9
    TempUnit: "C"
```

On a bien la temperature qui arrive sur node-red , maintenant il faut l'afficher sur une gauge dans un dashboard

Il faut donc avoir installer les noeuds Dashboard “**node-red-dashboard**” ou l'installer maintenant ( revoir le tuto précédent )



Inserer le noeud "Gauge" dans votre Flow et relié le à votre MQTT IN



### Paramétrage du noeud “Gauge”

**Edit gauge node**

**Properties**

- Group: [principal] test001
- Size: auto
- Type: Gauge
- Label: gauge
- Value format: {{payload.ESP32.Temperature}}
- Units: units
- Range: min 0 max 45
- Colour gradient: (green, yellow, red)
- Sectors: 0 optional optional ... 45
- Fill gauge from centre:
- Class: Optional CSS class name(s) for widget
- Name: (empty input field)

**debug**

```

> { Time: "2023-04-08T18:10:53", ESP32: object, TempUnit: "C" }
08/04/2023 19:11:03 node: debug 2
tele/tasmota_6B2128/SENSOR : msg.payload : Object
> { Time: "2023-04-08T18:11:02", ESP32: object, TempUnit: "C" }
08/04/2023 19:11:13 node: debug 2
tele/tasmota_6B2128/SENSOR : msg.payload : Object
object
Time: "2023-04-08T18:11:13"
ESP32: object
TempUnit: "C"
08/04/2023 19:11:23 node: debug 2
tele/tasmota_6B2128/SENSOR : msg.payload : Object
> { Time: "2023-04-08T18:11:22", ESP32: object, TempUnit: "C" }
08/04/2023 19:11:33 node: debug 2
tele/tasmota_6B2128/SENSOR : msg.payload : Object
> { Time: "2023-04-08T18:11:32", ESP32: object, TempUnit: "C" }
08/04/2023 19:11:43 node: debug 2
tele/tasmota_6B2128/SENSOR : msg.payload : Object
> { Time: "2023-04-08T18:11:43", ESP32: object, TempUnit: "C" }
08/04/2023 19:11:54 node: debug 2
tele/tasmota_6B2128/SENSOR : msg.payload : Object
> { Time: "2023-04-08T18:11:53", ESP32: object, TempUnit: "C" }

```

Cliquer sur le crayon : dans “Name” Indiquer le nom du groupe d’objets exemple Chambre etage et dans “Tab” Maison ( avec le crayon) On peut dire que Name ce sont les pieces à l’interieur d une maison “Tab”

Edit gauge node > Edit dashboard group node

[Delete](#) [Cancel](#) [Update](#)

[Properties](#)

Name	test001
Tab	principal <a href="#"></a>
</> Class	Optional CSS class name(s) for widget
Width	10
<input checked="" type="checkbox"/> Display group name	
<input type="checkbox"/> Allow group to be collapsed	

Fait "Update"

Vous retrouver le 1er écran "Edit gauge node"

Edit gauge node

Delete Cancel Done

**Properties**

Group: [maison] Chambre etage

Size: auto

Type: Gauge

Label: gauge

Value format: {{payload.ESP32.Temperature}}

Units: units

Range: min 0 max 45

Colour gradient: Green, Yellow, Red

Sectors: 0 ... optional ... optional ... 45

Fill gauge from centre:

</> Class: Optional CSS class name(s) for widget

Name:

Vous retrouvez les informations du Group = [maison]Chambre etage

Le type = Gauge

Le label , ce que vous voulez , j'ai mis " Temperature de la chambre etage "

Le champ "Value Format" est important : il faut mettre entre 2 fois des accolades  
{payload.ESP32.Temperature}

From:  
<https://www.fablab37110.chanterie37.fr/> - Castel'Lab le Fablab MJC de Château-Renault

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Last update: 2023/04/08 19:33

