

## neOSensor, the neOCampus ultra low-cost sensors !

ESP8266 based sensors and actuators

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### Context & aims

- At the very beginning, the need for real-time noise sensors across the whole building (BU),
- No captive data, low-cost and nice WEB UI!

neOCampus decided to build its own noise sensor extended with temperature, luminosity and, optionally an IR sensor.

### Features

- OTA firmware upgrades,
- neOCampus integration,
- Follow MQTT topics conventions  
<building>/<room>/<type>[/command]  
e.g **bu**/hall/noise & **bu**/hall/noise/**command**,
- Size 50mm x 40mm, #15€,
- You can extend its capabilities with all kinds of i2c sensors (with a firmware upgrade).

✓ Sending order to a noise sensor (with proper mqtt login / passwd)

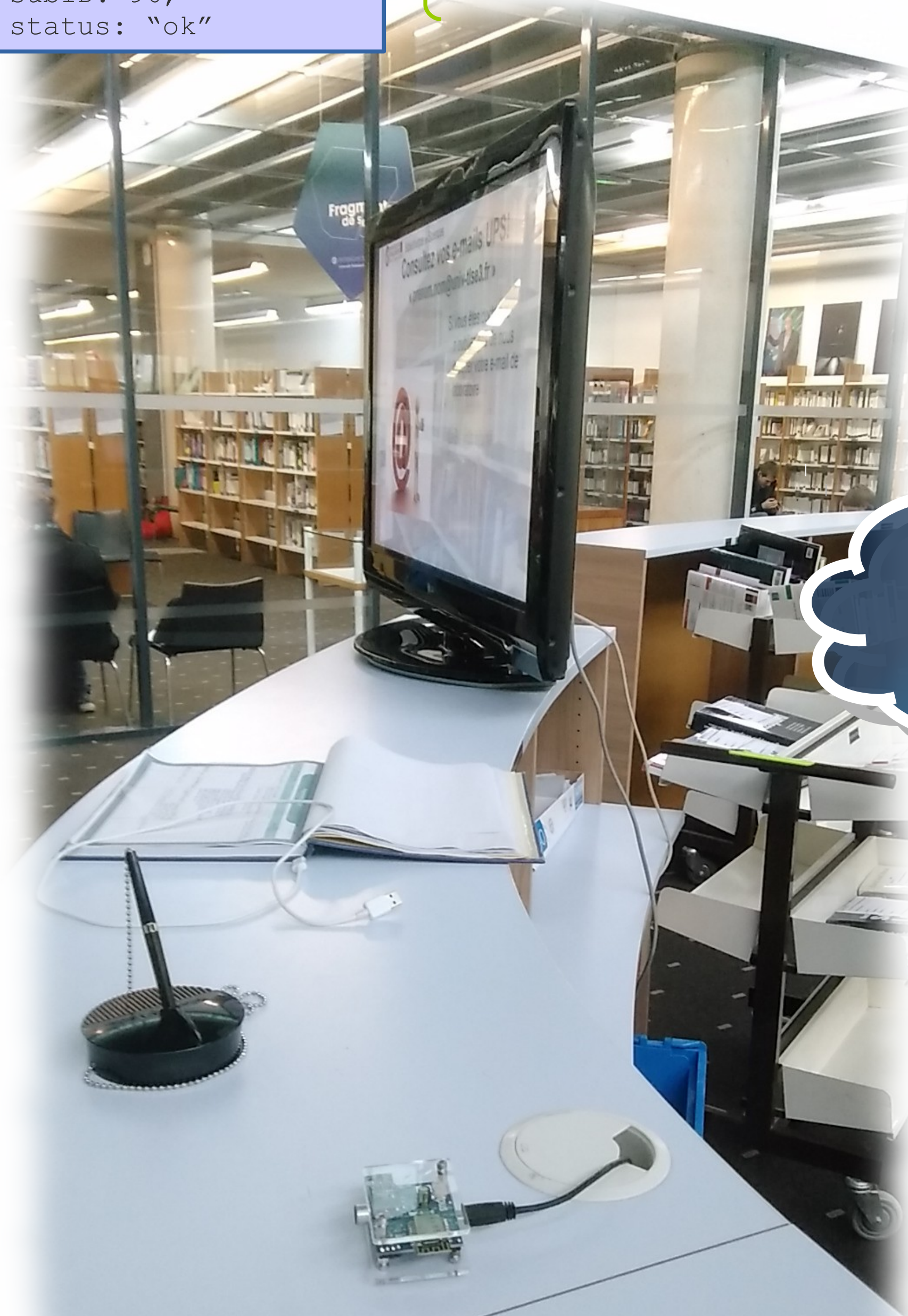
```
dest: "all",
order: "sensitivity",
value: "30%"
```

bu / hall / noise / command

✓ ... then sensor publish its status back

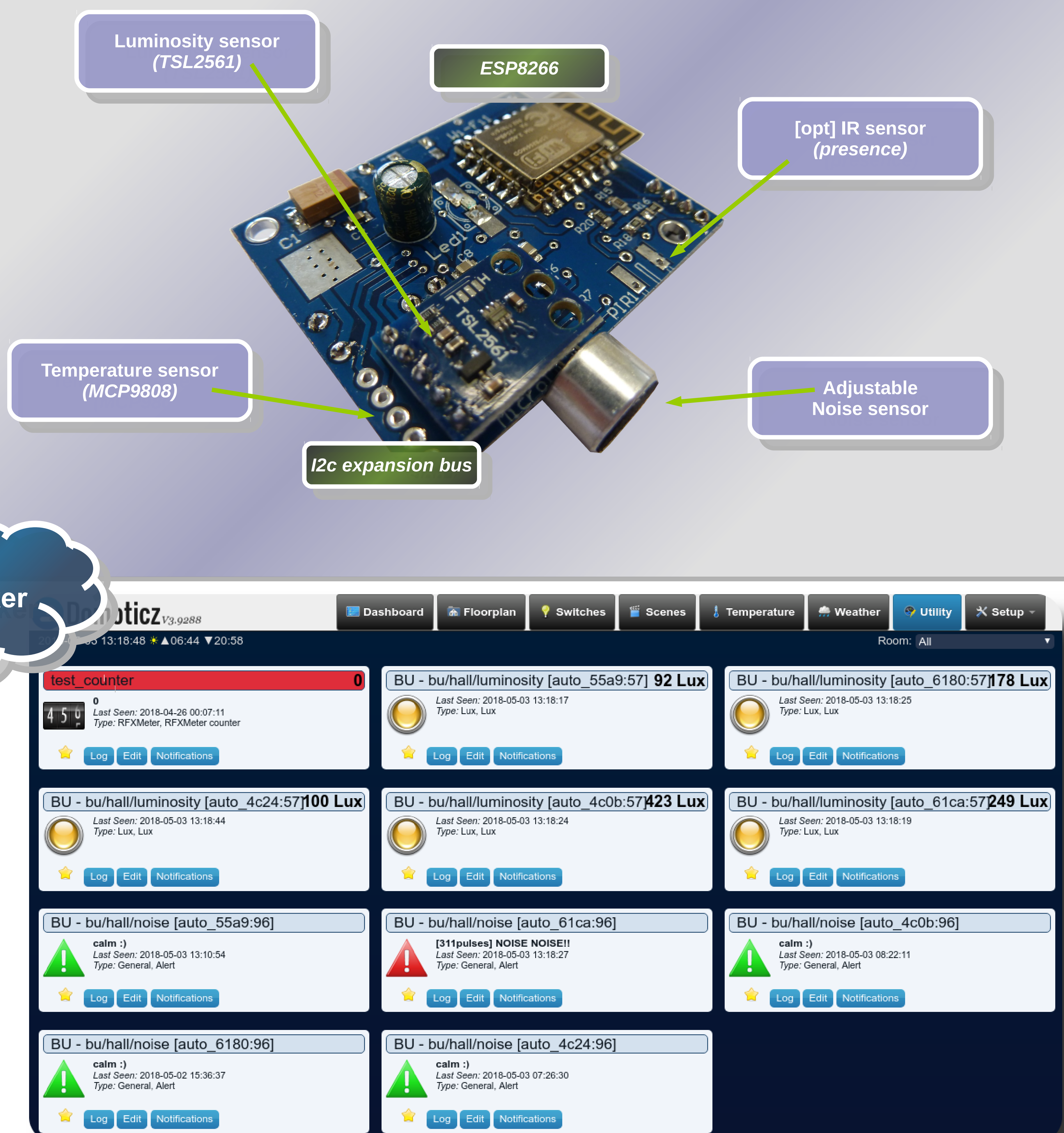
```
sensitivity: "30%",
threshold: 300,
unitID: "auto_C6D3",
subID: 96,
status: "ok"
```

bu / hall / noise



BU sciences Toulouse3

MQTT broker



[tags] ESP8266, multi-sensors (temp., presence, luminosity, noise), MQTT, neOCampus integration, low-cost.

