We have 2 datasets which are logs from access control system (unlocking doors).

1) rpc data from device

2)Metadata from device

It is a database export formatted as a text table with | separators. We converted both files to .csv format.

1a) First set of data:

\_id – unique identifier (event, unlock swipe)

\_uuid – device identifier, door lock

\_timestamp – event time

rpc – the type of action/event (always “unlock” )

\_ack\_timestamp – acknowledgement time (when the system confirmed the event).

\_ack\_status – acknowledgement result (0 means success, empty means not acknowledged).

2a) Second dataset is a diagnostic telemetry from a Nordic nRF91 cellular IoT device (LTE-M/NB-IoT).

It’s recording resets, uptime, firmware versions, and network signal strength.

\_id – unique row identifier (event, unlock swipe).

\_uuid – device identifier (same one as in a first file: 359404230082423)

timestamp – when the record was captured.

just\_booted – t means the device had just restarted when the log was recorded.

reset\_reason – numeric code for why the device reset (e.g., 0, 2, 16 … probably mapped to watchdog, power cycle, etc.).

uptime – how many seconds the device had been running before the log.

fw\_version – firmware version running on the device.

modem\_fw\_version – modem firmware version (mfw\_nrf91x1\_2.0.1).

rsrp – signal strength (Reference Signal Received Power, typical for LTE/5G modules).

Here’s a quick analysis of your combined dataset 📊

General

Total rows: 90

Contains both unlock events (from test\_data1.cs) and device telemetry (from test\_data2.cs).

Unlock Events (44 events)

Acknowledged: ~81.8% (\_ack\_status = 0)

Average acknowledgment delay: ~1.1 seconds

Device Resets (44 events)

Reset reasons:

0 → 35 times (normal reset / power cycle)

2 → 8 times (likely watchdog or fault)

16 → 1 time (special condition)

Uptime

Average uptime: ~3,343 seconds (~55 minutes)

Max uptime: ~39,824 seconds (~11 hours)

Signal Strength (RSRP)

Mean: ~-97 dBm

Range: -112 dBm (worst) to -85 dBm (best)

⚡ So the picture is:

The device is rebooting often (many just-booted logs).

Network signal is quite weak (around -97 dBm, borderline LTE-M quality).

Unlock commands are acknowledged fairly quickly, usually within a second.