

# How to manage devices that are remotely installed





- **Change**
  - **behaviour**
  - **settings**
  - **firmware**

- **Monitor performance**





# The mobile networks and its possibilities







# **Different use-cases**

**Broadband**

**5G**

**Sensors and trackers**

**Ultra reliable**





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# 4G/5G

## SENSORS

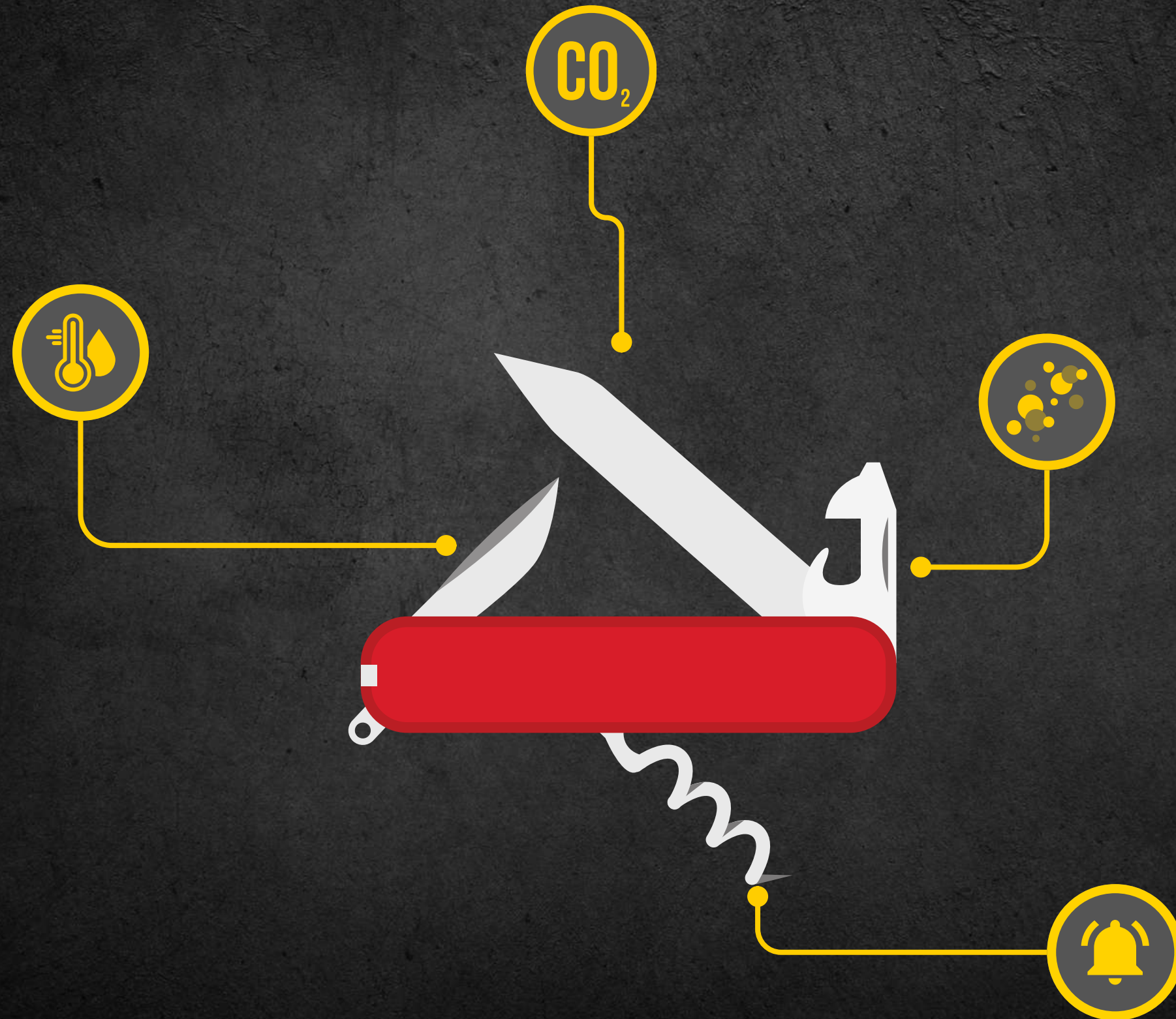


# MQTT

## MESSAGE QUEUING TELEMETRY TRANSPORT



# IoT's Swiss Army Tool





**PUBLISH**



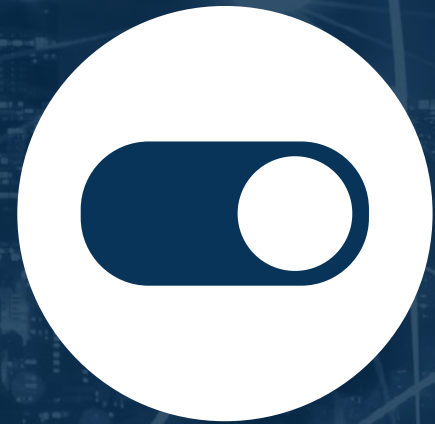
**SUBSCRIBE**







**Monitoring device health**



**Receive updates**



**Adopt behaviour**

# Secure Continuity





# Platforms for monitoring

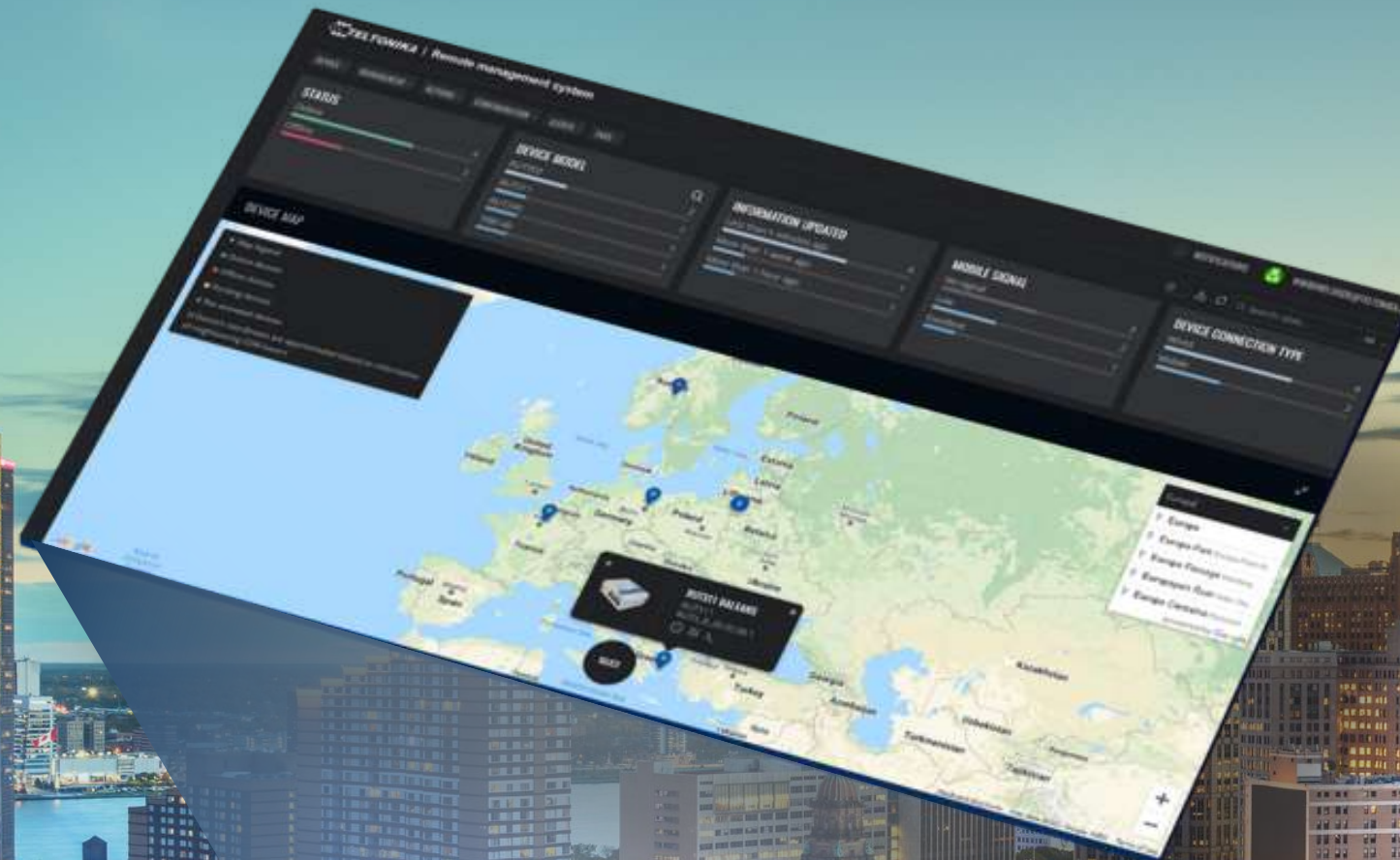
	OPEN STANDARD	PROPRIETARY
Flexibility	High	Low
Data integrity	Most likely high	Do you know?
Implementation	Threshold	Easy



# 4G/5G ROUTERS







Proprietary device monitoring systems



# Other options



SNMP



TR069



MQTT and others





<https://www.linkedin.com/in/seijmer/>

