



# TMate FIELD

## Test mobile networks in a smart way and save installation costs

**MARKETS**

-  Energy
-  Industry

**USE CASES**

- Smart Metering
- Smart Grid
- E-Mobility
- Industry 4.0
- Internet of Things (IoT)

### CHALLENGES WITH SMART METER ROLLOUTS

Related to rollout projects in the field of smart metering, more and more devices are connected to the internet via mobile networks. Continuous availability and a reliable data transfer rate are critical success factors for many projects. Therefore, a detailed test of the available mobile networks is recommended in order to obtain valid data and select the proper components for the installation.

Many conventional solutions are often not flexible regarding the modems and antennas used. Ideally, when conducting a measurement of a mobile network all available network operators shall be considered and the modems and antennas used for the test should be the ones which are to be utilized later. Moreover, currently existing products primarily measure the reception level (signal strength). However, this doesn't allow a statement regarding the reliability of data transfer to be made. As a result, installations often have to be aborted or carried out several times until the desired results are achieved.

### SOLUTION

With TMate FIELD, ENQT offers a compact handheld device for mobile networks (2G / 3G / 4G), convincing due to its easy operation and plausible measurement results. In addition to parameters such as signal strength and data transmission rate, substantial network information is obtained. Thus, this device offers far more than currently existing measurement solutions and facilitates a holistic evaluation of network quality. Expensive and time-consuming abortions of installations can be avoided this way.



**Overview:** TMate Field consists of a robust, splash-proof housing, a touch display, a modem, intelligent software, an integrated rechargeable battery and a power supply. The antenna interfaces allow an easy connection of several external antennas in order to test both the desired model and the ideal antenna position (e.g. in the meter cabinet). TMate Field thus enables a valid assessment of whether and where a mobile connection can be realized.

**Measurement method:** The intelligent software connects to the three largest German mobile networks (O2, Telekom and Vodafone). If required, additional network operators can be configured. Several tests are carried out for each network, including the query of network information such as Cell-ID, Location Area Code (LAC) and signal strength. Additionally available bandwidth is determined by speed test.

**Data provision:** The recorded measurement data is provided either via a web portal (**TMate CLOUD**) or as CSV export, enabling an easy evaluation by Excel or similar software. An interface to existing systems can also be developed if required.



## YOUR BENEFITS

- Avoid unnecessary customer visits
- Reliable evaluation of the mobile network quality
- Network analysis with multi-technology support 2G / 3G / 4G
- Optimal test results thanks to flexible use of SMA antennas
- Easy to use for installers / technicians
- Possibility of adjustment to your individual requirements



## TECHNICAL DATA

- Robust housing
- Color touch TFT display
- Integrated modem for 2G / 3G / 4G
- 2 SMA antenna connections
- Power supply: Lithium battery (6.000 mAh), external power supply
- Optional: WLAN, car charger, transport case

Contact us for  
your proposal



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ENQT offers innovative technology solutions and comprehensive consulting services related to Internet of Things and Industry 4.0 for different industries. Our goal is to assist you to quickly capture diverse data at any location, as well as to safely transfer and easily provide it for evaluation. Our offering combines innovative sensor technologies and intelligent software for data analysis with reliable know-how about industry-specific processes and challenges.

No matter if you wish to optimize your business processes or products, offer additional services or develop new business models, ENQT is your competent, reliable partner supporting you to achieve sustainable competitive advantages in the course of digitization.