

Network Tester 2

MANUAL

ENQT
ENGINEERING QUALITY



Do you have questions about our products?

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About Network Tester 2

The Network Tester 2 (hereinafter referred to as NT2) is a high-end measuring device for mobile networks to support your digitization project.

The following instructions will introduce you to the functions of the NT2.

Differentiation NT2 / NT2plus / NT2max

The illustrations in this manual refer to the NT2plus and NT2max.

The NT2 is not illustrated in this document.

General notes

Please note:

- › Please use only the supplied charging cable and the supplied and approved accessories to charge the NT2!
- › The supplied input pen is recommended for input! The display also reacts to direct touch inputs, is optimized for handling with the input pen!

Quick Start Guide & Safety Instructions

CAUTION:

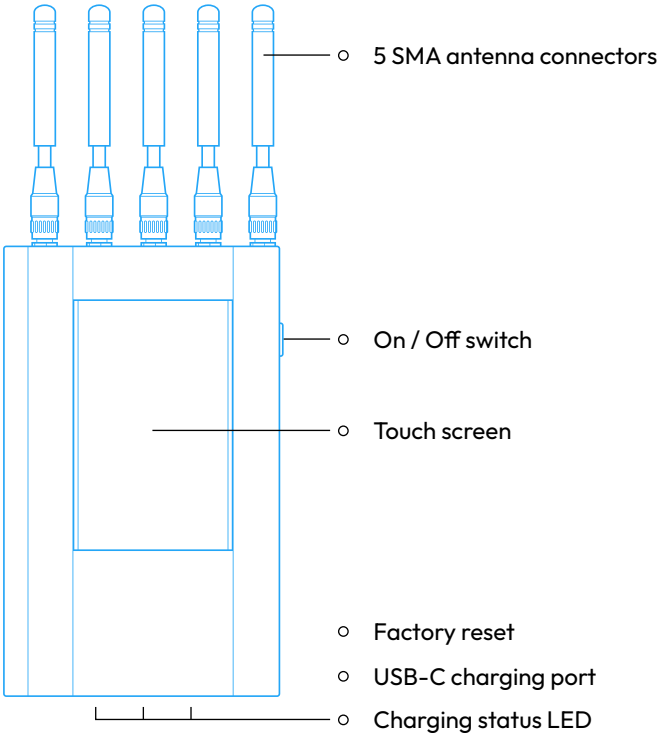
Do not screw the antennas too tight, otherwise there is a risk of damaging the device.

Safety instructions:

! Do not use the device during thunderstorms.

! Use only antennas suitable for GSM communication.

! Do not use the device with external antenna amplifiers.



Models Network Tester 2

Model overview / device selection

Model	450 MHz	NB1/NB2	M1	2G	3G	LTE-FDD	LTE-TDD	5G	2.4/5 GHz	6 GHz	BLE
NT2 WIFI									✓		✓
NT2 LTE				✓	✓	✓	✓		optional		optional
NT2 IoT		✓	✓	✓					optional		optional
NT2 450	✓ *			✓		✓			optional		optional
NT2 5G					✓	✓	✓	✓	optional		optional
NT2 Ultra		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

*own 450connect SIM required

Service packages Network Tester 2

	Standard	Plus	Max
Free short training	✓	✓	✓
Premium Support		✓	✓
Speed measurement*			✓
Latency measurement			✓
Regular updates		✓	✓
Access to measurement data portal			✓
Warranty	12 months	24 months	24 months
Minimum contract period		24 months	24 months
Price per year	0 €	119 €	699 €

*with max. 20mBit

Network Tester 2 WIFI



Model

NB1/NB2

M1

2G

3G

LTE-FDD

LTE-TDD

5G

2.4GHz

5GHz

6GHz

BLE

Purchase price

Supported bands

-

-

-

-

-

-

-

WIFI

✓

✓

-

✓

989 €

Network Tester 2 LTE



Model

NB1/NB2

M1

2G

3G

LTE-FDD

LTE-TDD

5G

2.4GHz

5GHz

6GHz

BLE

Purchase price

Supported bands

-

-

B2/3/5/8

B1/2/4/5/6/8/19

B1/2/3/4/5/7/8/12/13/18/19/20/25/26/28

B38/39/40/41

-

WIFI

License Option

License Option

-

License Option

1089 €

Network Tester 2 IoT



Model

NB1/NB2

M1

2G

3G

LTE-FDD

LTE-TDD

5G

2.4GHz

5GHz

6GHz

BLE

Purchase price

Supported bands

B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B25/B28/B66/B71/B72/B85

B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B25/B26/B27/B28/B66/B72/B85

850/900/1800/1900MHz

-

-

-

-

WIFI

License Option

License Option

-

License Option

1089 €

Network Tester 2 450



Model

NB1/NB2

M1

2G

3G

LTE-FDD

LTE-TDD

5G

2.4GHz

5GHz

6GHz

BLE

Purchase price

Supported bands

-

-

B3/8

-

B1/3/5/7/8/20/28/31/72

-

-

WIFI

License Option

License Option

-

License Option

1289 €

Network Tester 2 5G



Model

NB1/NB2

M1

2G

3G

LTE-FDD

LTE-TDD

5G

2.4GHz

5GHz

6GHz

BLE

Purchase price

Supported bands

-
-
-
B1/2/4/5/8/19
B1/2/3/4/5/7/8/12/13/14/17/18/19/20/25/26/28/29/30/32/66/71
B34/38/39/40/41/42/43/48; LAA: B46
n1/2/3/5/7/8/12/13/14/18/20/25/26/28/29/30/38/40/41/48/66/70/71/75/76/77/78/79

WiFi

License Option
License Option
-
License Option

1689 €

Network Tester 2 PRO



Model

NB1/NB2

M1

2G

3G

LTE-FDD

LTE-TDD

5G

2.4GHz

5GHz

6GHz

BLE

Purchase price

Supported bands

B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B25/B28/B66/B71/B72/B85

B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B25/B26/B27/B28/B66/B72/B85

850/900/1800/1900MHz

B1/2/4/5/8/19

B1/2/3/4/5/7/8/12/13/14/17/18/19/20/25/26/28/29/30/32/66/71

B34/38/39/40/41/42/43/48; LAA: B46

n1/2/3/5/7/8/12/13/14/18/20/25/26/28/29/30/38/40/41/48/66/70/71/75/76/77/78/79

WIFI

✓

✓

✓

✓

2489 €

Functions of the Network Tester 2

Overview of functions

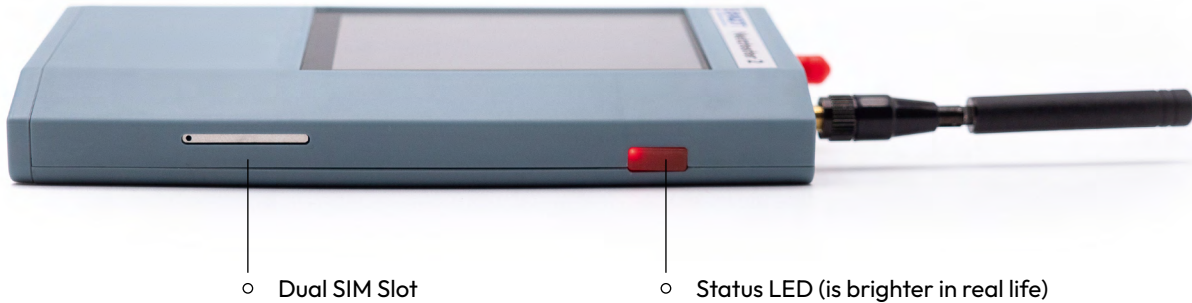
ENQT's NT2 has various functions depending on the equipment, which are listed in more detail below.

The individual functions are explained in more detail in this chapter. Which version you have is indicated on the top left of the meter above the display. If you still have a previous version, the NT2 corresponds to the TMate Field Live and the NT2max to the TMate Field Complete.

	NT2	NT2plus	NT2max
2G/3G/4G	✓	✓	✓
Meter test	✓	✓	✓
LiveSignal	✓	✓	✓
Language support	✓	✓	✓
Simple video tutorials	✓	✓	✓
Provider configuration	✓	✓	✓
Survey+ (interval measurement)	✓	✓	✓

Switching the device on / off

Make sure that the NT2 is sufficiently charged. The NT2 is switched on via the power button on the side of the device. A status led indicates the current device status.



Start screen / Status screen

The start screen can vary for the different devices. The NT2max uploads measured data directly to the measurement data portal. Therefore, these instruments do not have an “Export” selection on the start screen.



1 - Start screen

Here you can see the current charge status as well as the synchronization status. In addition, you can reach from here by clicking on:

- > [the ENQT logo](#): the status screen.
- > [on COUNTER TEST](#): the counter input screen and then the possibility of full net measurement.
- > [on SIGNAL](#): the possibility to measure live the attenuation of a provider & standard.
- > [on PROVIDER](#): the possibility to make settings regarding the providers to be tested.
- > [on EXPORT](#): the possibility to export your measurement data from the device via WLAN. (NT2 and NT2plus)
- > [on WiFi Scan](#): a WLAN scan of the environment, all access points that are active are detected.
- > [on Bluetooth Scan](#): a Bluetooth Low Energy Scan (BLE) of the environment, all active BLE devices are captured
- > [on Profile](#): this switches the measurement profile, e.g. to switch the measurement between IoT and 5G functions.



2 - Status screen

By clicking on the ENQT logo, they reach the status screen.

The following data can be checked here:


- > Serial number of the device
- > Software version
- > Modem ID
- > IMEI
- > IMSI
- > Battery voltage
- > Charge voltage
- > System time & date
- > Cloud Sync Status
- > General status
- > Last error message

Counter test / measurement






1 - Start screen

Clicking on “COUNTER TEST” will take you to the counter input screen.

Zählernummer 

1	2	3	4
5	6	7	8
9	0		
1234 5678 90	ABCD EFGH IJKL	MNOP QRST UVWX	YZ - ... ?/()

2 - Meter test

Here you can enter the number of the meter at the test location.
Alphanumeric entries are also possible in order to enter meter point designations to be entered.

Confirm your entry by pressing the right input key.

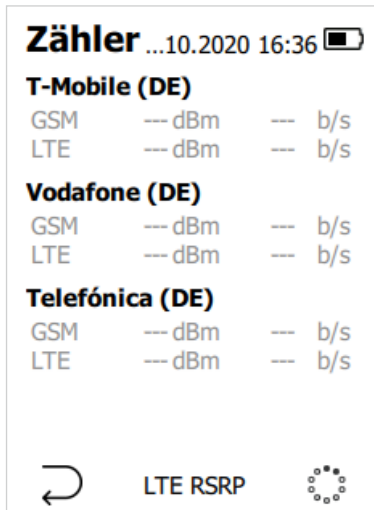


2.1 - Additional measuring functions

By clicking on the middle input key you will get to additional measuring options.

Here you can set a band scan or a measuring interval to perform several measurements in succession.

If you want to cancel the process, press the left enter key on the device.



3 - Measurement

The measurement for the previously entered counter number is started. You will see live the progress for the respective provider & mobile standard. Numerous technical data are recorded during the measurement. You can choose between RSRQ, RSRP and RSSI display. The used band is displayed directly. (NT2, NT2plus and NT2max)

You can cancel this process at any time by pressing the left enter key to cancel it.

If you want to customize the list of providers and/or standards to be measured, you can select this from the start screen under the "Provider" item.

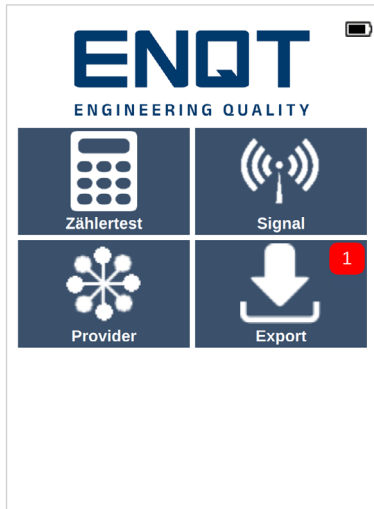
Zähler		11.04.2023 09:40	
T-Mobile (DE)	LTE 3	-80 dBm	16,6Mb/s
Vodafone (DE)	LTE 1	-94 dBm	25,5Mb/s
Telefónica (DE)	LTE 1	-86 dBm	28,4Mb/s
RSRP			

4 - Measurement result

When the measurement is complete, you can view the data directly. By pressing the right Enter key, you confirm the measurement. The data is now available for export. (NT2plus and NT2max)

ATTENTION: The data for this specific measurement can then only be displayed there and no longer directly on the device (NT2). For NT2plus and NT2max the measurement data are still visible in the history.

By clicking on the band with a blue background, a lot of detailed information can be called up for the respective measurement, e.g. on frequencies used, bandwidths and neighboring cells. (NT2plus and NT2max)



5 - Data export

As soon as you have confirmed the measurement, you return to the start screen.

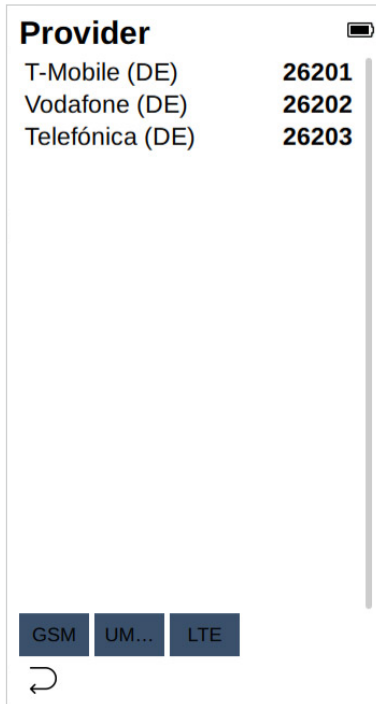
A small symbol will now appear at the top of the display when “EXPORT” is selected. This indicates that a measurement from the instrument is ready for export. The number indicates how many new measurements are currently available. (NT2 and NT2plus)

Signal



1- Start screen

From the start screen, click on “SIGNAL” to access the feature to measure the current attenuation of the signal for a provider & standard live.

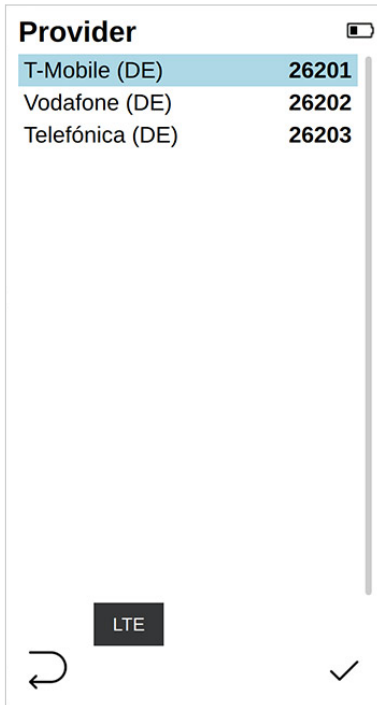


2 - Signal

After clicking on Signal, you have the option to select the desired provider.

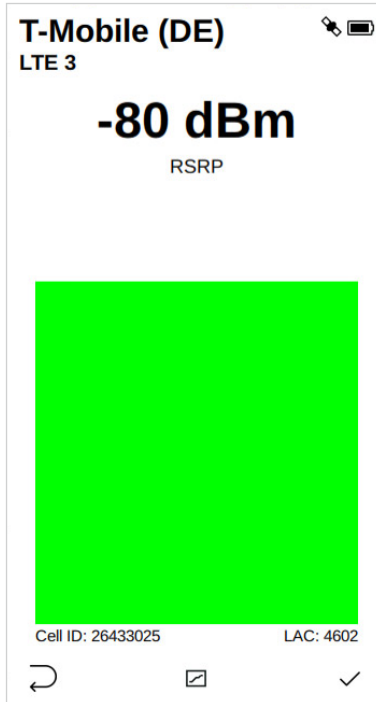
Click on a desired provider and then click on the desired standard below, for live signal measurement of attenuation. You can cancel the process by clicking on the arrow at the bottom left.

Then you will return to the start screen.



3 - Provider selection

Once you have selected the provider and the standard, you can start the measurement by pressing the Enter key at the bottom right.



4 - Live display

The bar rises and changes color from red to yellow to green, the better the currently measured attenuation turns out.

The traffic light is defined for example for the RSSI measurement as follows:

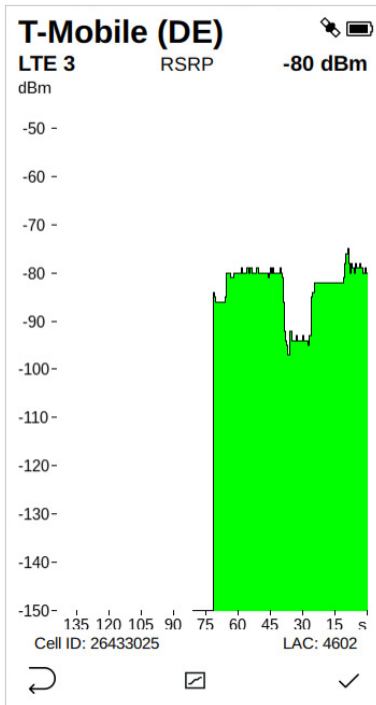


Depending on the technology and device configuration, the attenuation (RSSI), the signal quality (RSRP) or the reference signal (RSRQ) is displayed here.

In addition, the currently used cell is displayed with Cell ID and LAC.

Press the left Enter key to return to the previous selection.

Confirm the measurement with the right enter key, you will return to the start screen.



5 - Live display bar graph

Pressing the middle Enter key or the progress symbol on the touchscreen takes you to a bar graph.

This is a visualization of the attenuation values measured over time. (NT2, NT2plus and NT2max)

Provider - Selection and editing





1- Start screen

From the start screen, click on “PROVIDER” to access the feature to customize the list of providers & standards to be tested.

Testauswahl

Dämpfung Geschw.

<input checked="" type="checkbox"/> T-Mobile (DE)		
GSM	<input type="checkbox"/>	<input type="checkbox"/>
UMTS	<input type="checkbox"/>	<input type="checkbox"/>
LTE	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Vodafone (DE)		
GSM	<input type="checkbox"/>	<input type="checkbox"/>
UMTS	<input type="checkbox"/>	<input type="checkbox"/>
LTE	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Telefónica (DE)		
GSM	<input type="checkbox"/>	<input type="checkbox"/>
UMTS	<input type="checkbox"/>	<input type="checkbox"/>
LTE	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

 Standard 

2 - Test Selection / Adjustment of Bands and Frequencies

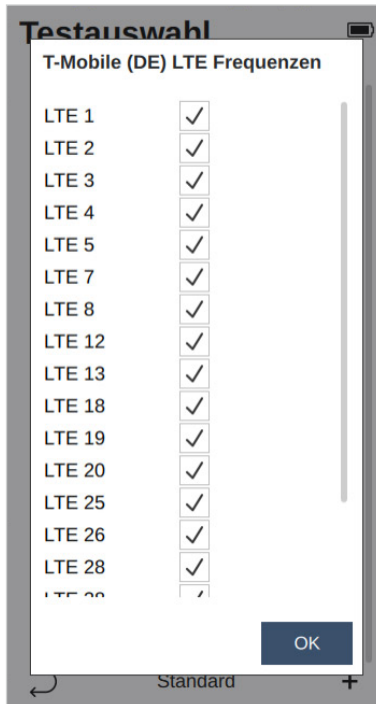
By clicking on “X” you remove a provider from the list. Otherwise you can enable/disable the individual standards or the attenuation measurement or the data speed measurement.

By clicking on the respective standard (GSM / UMTS / LTE) you can make settings for them regarding bands and frequencies.

Pressing the left Enter key takes you back to the start screen.

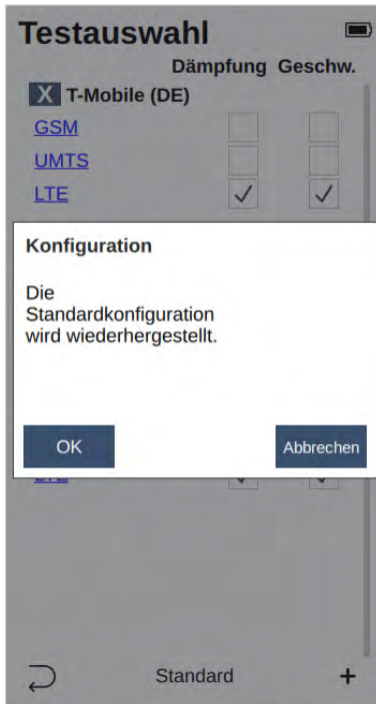
By pressing the middle enter key you set the default configuration.

By pressing the right Enter key, you can add a provider to the list.



2.1 - Ex. settings LTE Telekom

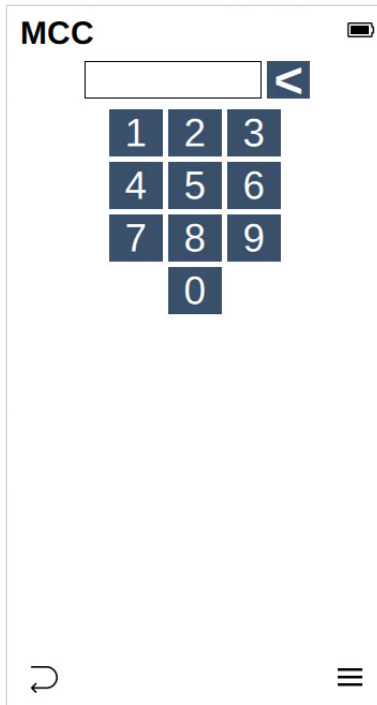
In the displayed list, you can select the bands to be tested in the LTE network and confirm them with OK.



3 - Restore default

If you pressed the middle Enter key in the previous step, you will see the warning message for resetting the provider configuration.

With OK you confirm this, with CANCEL the current configuration remains.



4 - Add provider

If you pressed “+” in the previous step, you will see this input mask.

If you know the MCC (country code) of the desired provider, you can enter it here.

By pressing the right enter key you will get to the MCC overview.

You can cancel the process by pressing the left enter key.

If you have deleted a provider by mistake, you can add it again this way.

(NT2, NT2plus and NT2max)

Land	
Abkhazia	289
Afghanistan	412
Albania	276
Algeria	603
American Samoa	544
Andorra	213
Angola	631
Anguilla	365
Antigua and Barbuda	344
Argentina Republic	722
Armenia	283
Aruba	363
Australia	505
Austria	232
Azerbaijan	400
Bahamas	364
Bahrain	426
Bangladesh	470
Barbados	342
↩	

5 - MCC Overview

First find the country code of the provider you want to add. Highlight it by clicking on the entry and then confirm with the right Enter key.

The NT supports all providers in the EU, worldwide on request.

You can cancel the process by pressing the left enter key.

Australia	
Telstra Corp. Ltd.	50501
Singtel Optus	50502
Vodafone (AU)	50503
Department of Defe...	50504
The Ozitel Network ...	50505
H3G Ltd.	50506
Vodafone (AU)	50507
Railcorp/Vodafone	50508
Airnet Commercial A...	50509
Telstra Corp. Ltd.	50511
H3G Ltd.	50512
Railcorp/Vodafone	50513
AAPT Ltd.	50514
Victorian Rail Track ...	50516
Lycamobile Pty Ltd	50519
Advanced Comm Te...	50524
Dialogue Communic...	50526
Telstra Corp. Ltd.	50571
Telstra Corp. Ltd.	50572
↩	⋮

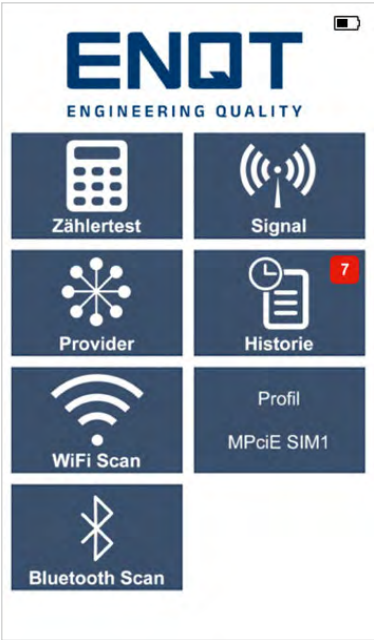
6 - Provider selection

Select the appropriate provider by clicking on it and confirm the operation by pressing the right Enter key.

The provider has now been added to the list for measurements, etc.

You can cancel the operation by pressing the left Enter key.

Data export NT2 and NT2plus



1- Export

From the start screen, click on “Export” to reach the feature to export your measurement data from the handheld device.



2- Hotspot

After pressing “Export” your NT2 will automatically open a hotspot. Connect to a desired WLAN-enabled device using the displayed SSID (network name) and PSK (enter password / hyphens as well). Then enter the specified URL (IP address) in the browser.

As soon as you have successfully established the connection and entered the URL at your end device in the browser, you will see the following screen, which provides various options for you in addition to the ID of your device:

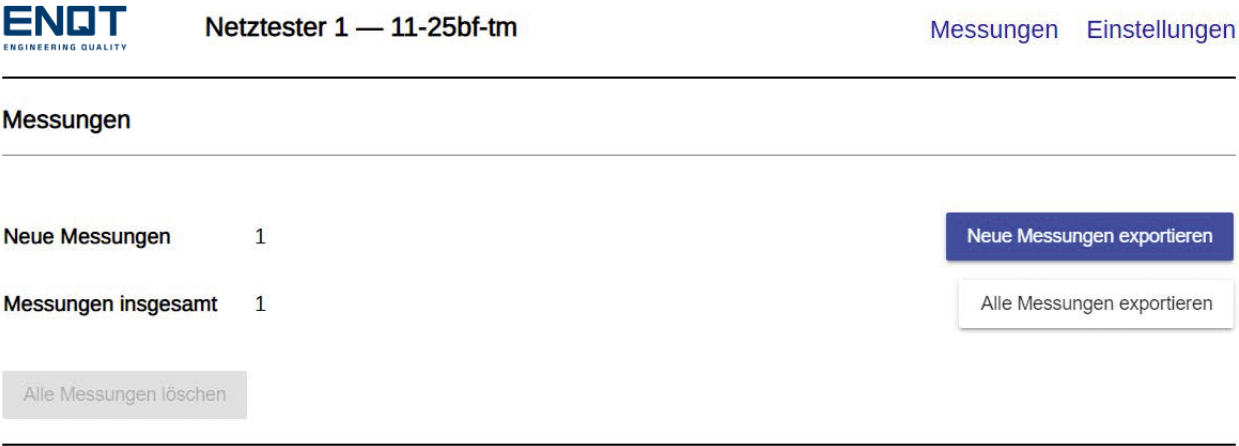


Figure 1: NT2 Export Browser View

You start in the Measurements section. Here you will see the currently available new measurements as well as the total number of measurements. You now have the option to export only the new measurements, or all existing ones collected.

You can also delete the saved measurement data at this point.

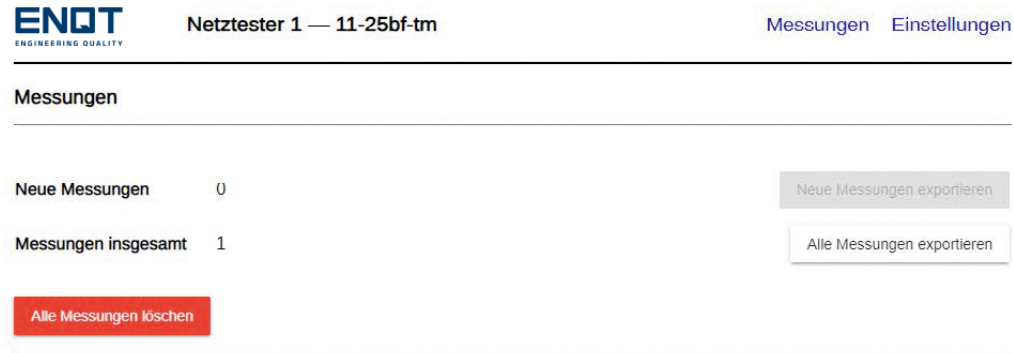



Figure 2: NT2 Export Browser View 2

However, this only works if you have successfully exported the measurement data at least once (security function). The measured values are output as a .csv file.

In addition to the measurements, you also have the option of viewing further information about your terminal device. This can be very helpful especially in case of a fault clearance. Furthermore, you can synchronize the system time with that of your end device, view the current firmware version and download the error log.


Netztester 1 — 11-25bf-tm
Messungen [Einstellungen](#)

Einstellungen

Geräteinformationen

Modell	Netztester 1
Seriennummer	11-25bf-tm
Modem	Huawei Technologies Co., Ltd. ME909s-120 V2
Version	11.617.24.00.00
IMEI	868986040306400
IMSI	234500027078510
ICCID	8944501205200785103
Technologien	GSM, UMTS, LTE
Freier Speicher	5.350 MB
Akku	51%

Firmware Hochladen

Softwareversion	0.9.42
OS Version	115

Lizenz und Fernkonfiguration Hochladen

Lizenznummer	c6ca374d
Erstellt am	14.12.20
Optionen	Messungskonfiguration, Leernummer, Auslandsprovider, Live-Bluetooth, Live-WLAN, LTE Signalmessgrößenumschaltung, Bandanzeige, Livediagramm, Mitteltastenschelltest, Wiederholungsmessungen, Farbiger Zahlertest

Gerätezeit Vom Browser übernehmen

Datum	18.01.21
Zeit	15:41

Protokoll Herunterladen

Figure 3: NT2 Export Browser View 3

Data export NT2max

The NT2max sends the measured data of the meter measurement directly to the measurement data portal provided by ENQT. You can access this via <https://tmate.de/login>. With your access data you can download all past measurements as often as you like. The data output as .csv files can be read out in e.g. MS Excel.

Übersicht

4224 Heute neue Messungen

-83.9 dBm Mittlerer RSRP

Filter: 13.06.2023 - 13.06.2023

Datum	Geräte-ID	Geräte-Name	Zählernummer	Stationsnummer	Betreiber	Technologie	RSI	RSRP	RSRQ
13.06.2023 13:13:19	1s-1b10-sp	1s-1b10-sp	SP00007	SP00007	Tauwärfen (DE)	LTE	-56	-86	-12
13.06.2023 13:13:10	1s-1b10-sp	1s-1b10-sp	SP00007	SP00007	Vodafone (DE)	LTE	-60	-86	-15
13.06.2023 13:13:02	1s-1b10-sp	1s-1b10-sp	SP00007	SP00007	T-Mobile (DE)	LTE	-37	-83	-7
13.06.2023 13:12:42	1s-1b10-sp	1s-1b10-sp	SP00007	SP00007	Tauwärfen (DE)	LTE	-56	-81	-9
13.06.2023 13:12:33	1s-1b10-sp	1s-1b10-sp	SP00007	SP00007	Vodafone (DE)	LTE	-52	-76	-8
13.06.2023 13:12:25	1s-1b10-sp	1s-1b10-sp	SP00007	SP00007	T-Mobile (DE)	LTE	-57	-86	-11
13.06.2023 13:12:06	1s-1b10-sp	1s-1b10-sp	SP00007	SP00007	Tauwärfen (DE)	LTE	-42	-68	-7
13.06.2023 13:11:56	1s-1b10-sp	1s-1b10-sp	SP00007	SP00007	Vodafone (DE)	LTE	-51	-64	-12
13.06.2023 13:11:45	1s-1b10-sp	1s-1b10-sp	SP00007	SP00007	T-Mobile (DE)	LTE	-57	-52	-8
13.06.2023 13:11:28	1s-1b10-sp	1s-1b10-sp	SP00007	SP00007	Tauwärfen (DE)	LTE	-46	-73	-9
13.06.2023 13:11:19	1s-1b10-sp	1s-1b10-sp	SP00007	SP00007	Vodafone (DE)	LTE	-52	-73	-6
13.06.2023 13:11:11	1s-1b10-sp	1s-1b10-sp	SP00007	SP00007	T-Mobile (DE)	LTE	-59	-86	-7
13.06.2023 13:10:51	1s-1b10-sp	1s-1b10-sp	SP00007	SP00007	Tauwärfen (DE)	LTE			
13.06.2023 13:10:42	1s-1b10-sp	1s-1b10-sp	SP00007	SP00007	Vodafone (DE)	LTE	-57	-86	-7
13.06.2023 13:10:34	1s-1b10-sp	1s-1b10-sp	SP00007	SP00007	T-Mobile (DE)	LTE	-56	-81	-6
13.06.2023 13:10:14	1s-1b10-sp	1s-1b10-sp	SP00007	SP00007	Tauwärfen (DE)	LTE	-59	-67	-9
13.06.2023 13:10:05	1s-1b10-sp	1s-1b10-sp	SP00007	SP00007	Vodafone (DE)	LTE	-60	-86	-7
13.06.2023 13:09:47	1s-1b10-sp	1s-1b10-sp	SP00007	SP00007	T-Mobile (DE)	LTE	-61	-88	-8

Christopher - ENQT Administrator

Zähler-test

Geräte-ID: 1s-1b10-sp
 Geräte-Name: 1s-1b10-sp
 Datum: 13.06.2023 13:12:58 (UTC)
 Zählernummer: SP00007
 Stationsnummer: SP00007

Netzwerk: RSI RSRP RSRQ
 T-Mobile (DE) - LTE: -57 dBm -83 dBm -7 dB
 Telefónica (DE) - LTE: -56 dBm -86 dBm -12 dB
 Vodafone (DE) - LTE: -50 dBm -96 dBm -15 dB

3 / 3 Networks had service
 73% LTE - LocationScore
 T-Mobile (DE)
 LTE - Best network

LTE Antenne Standard
 Recommended Antenna
 Buy now

Figure 4: Measurement data on the T-Mate Cloud

Explanation of the measurement data

When exporting the .csv file, various data are shown, which require a more detailed explanation. The column “Value range” is only filled if required.

Value of the .csv file	Meaning	Value range
ARFCN	Frequency number used	-
BAND	Band used (2G)	-
BSIC	Base Station Identity Code (2G)	-
Cell_ID	Cell ID / Base station number	-
Client*	Assigned customer account	-
device_id	Hardware serial number of the device	-
DRX	Discontinuous Reception	-
EC/NO	RSCP/ RSSI	-

*Only available with TMate.de portal access.

frequency	Allowed frequency bands for the test (can be restricted on the device)	-
LAC	Location Area Code / Area of the base station	-
lte_sinr	Signal to interference & signal to noise ratio	-
MCC	Country code	-
measurement_date	Date and time of measurement	-
Meter_id	Meter number entered on the device	-
MNC	Calculated position of the base station (lat)	-
network_bts_location_lat*	Calculated position of base station (long)	-
network_bts_location_long*	Error codes	-
network_error	Used technology	-
network_technology	Network operator name	LTE/UMTS/GSM

*Only available with TMate.de portal access.

Operator	Network operator name	Ex. Telekom, Telefonica & Vodafone
PCI	Physical Cell Identifier	-
ping_avg*	Average packet delay	-
ping_max*	Maximum packet delay	-
ping_min*	Minimum packet delay	-
Ping_packet_loss*	Packets lost during runtime measurement	Ideal 0
PSC	Synchronization code	-
RSCP	Received Signal Code Power	0 to -124dBm
RSRP	Receive level reference signal	-150 dBm to -50dBm
RSRQ	Receive quality reference signal	-0dBm to -20dBm
RSSI	Signal attenuation	0 to -125dBm

*Only available with TMate.de portal access.

RXLEV	Network feedback of the terminal RSSI (can be converted to RSSI bands, larger = better reception).	-
RxQuality	Voice quality (2G) smaller=better	0 – 7
speed_download*	Download speed (bit/s)	Ideal: >1000000
speed_upload*	Upload speed (bit/s)	Ideal: >1000000
station_id*	Station number	-
TA	Terminal adapter	-
TAC	Tracking Area Code	-
URA	UTRAN Registration Area	-
wcdma_ecio	UMTS Signal Quality	0 to -20

*Only available with TMate.de portal access.

Broken down value ranges

The color coding corresponds to the visualization of the measuring device.

GSM (dBm)	LTE RSRP (dBm)
Up to -70	Up to -84
-71 to -85	-85 to -102
-86 to -100	-103 to -111
From -101	From -112

- **Excellent signal strength** - in the green value range, trouble-free installation is possible.
- **Good signal strength** - in the yellow value range, failures are not to be expected.
- **Moderate signal strength** - in the orange range, sporadic connection failures and limited bandwidths are to be expected.
- **Insufficient signal strength** - in the red range, regular disconnections or no connection can be expected.

FAQ

Which antennas can be used with the NT2?

All antennas with SMA connection can be connected. Other antennas can be connected via corresponding adapters (e.g. SMA to FAKRA).

Which antenna connector must be used if the antenna has only one connector?

The right antenna connector, this is intended for the main antenna.

Why can't I connect with a station antenna, but I can with the supplied antenna?

Please check the SMA connector of the antenna. Does the connector have a pin in the middle (Male-SMA)?

If the antenna connector does not have a pin in the middle, an adapter from Female-SMA to Male-SMA must be used (optionally available).

I get good attenuation values in the green range, why can I still not connect?

Possible causes:

- › The signal is disturbed, i.e. other subscribers are still transmitting on the same frequency.
- › The cellular base station is overloaded.
- › The cellular base station is currently disturbed.
- › There is a general network fault (Internet outage).

Please contact your network operator for more information about network disturbances and current maintenance work.

Which LTE bands are measured in?

The device supports all currently used LTE bands. The exact information about the band used can be found in the .csv file from the measurement data portal. If desired, you can configure the device so that only certain bands are measured.

How can the measurement data be retrieved?

Currently, the retrieval is only possible via the measurement data portal. With the NT2, NT2plus and NT2max the measurement data can be exported via WLAN to a desired device as a .csv file.

On our homepage you will find many explanatory videos on the operation of our measuring instruments.



Country codes

Source: https://de.wikipedia.org/wiki/Mobile_Country_Code

2 – Europe

Identifier	Country				
202	Greece	234	United Kingdom	276	Albania
204	Netherlands	235	United Kingdom	278	Malta
206	Belgium	238	Denmark	280	Cyprus
208	France	240	Sweden	282	Georgia
212	Monaco	242	Norway	283	Armenia
213	Andorra	244	Finland	284	Bulgaria
214	Spain	246	Lithuania	286	Turkey
216	Hungary	247	Latvia	288	Faroe Islands
218	Bosnia and Herzegovina	248	Estonia	290	Greenland
219	Croatia	250	Russia	292	San Marino
220	Serbia	255	Ukraine	293	Slovenia
221	Kosovo	257	Belarus	294	Macedonia
222	Italy	259	Moldova	295	Liechtenstein
225	Vatican City	260	Poland	297	Montenegro
226	Romania	262	Germany		
228	Switzerland	266	Gibraltar		
230	Czech Republic	268	Portugal		
231	Slovakia	270	Luxembourg		
232	Austria	272	Ireland		
		274	Iceland		

3 – North America / Caribbean

This grouping is not congruent with the participants in the North American numbering plan.

Identifier	Country	Identifier	Country
302	Canada	348	British Virgin Islands
308	Saint Pierre and Miquelon	350	Bermuda
310	USA	352	Grenada
311	USA	354	Montserrat
312	USA	356	Saint Kitts and Nevis
313	USA	358	Saint Lucia
314	USA	360	Saint Vincent and the Grenadines
315	USA	362	Netherlands Antilles
316	USA	363	Aruba
330	Puerto Rico	364	Bahamas
332	American Virgin Islands	365	Anguilla
334	Mexico	366	Dominica
338	Jamaica	368	Cuba
340	Guadeloupe	370	Dominican Republic
340	Martinique	372	Haiti
342	Barbados	374	Trinidad and Tobago
344	Antigua and Barbuda	376	Turks and Caicos Islands
346	Cayman Islands		

4 – Asia

Identifier	Country
400	Azerbaijan
401	Kazakhstan
402	Bhutan
404	India
405	India
410	Pakistan
412	Afghanistan
413	Sri Lanka
414	Myanmar
415	Lebanon
416	Jordan
417	Syria
418	Iraq
419	Kuwait
420	Saudi Arabia
421	Yemen
422	Oman
424	United Arab Emirates
425	Israel
426	Bahrain
427	Qatar

428	Mongolia
429	Nepal
430	United Arab Emirates
431	United Arab Emirates
432	Iran
434	Uzbekistan
436	Tajikistan
437	Kyrgyzstan
438	Turkmenistan
440	Japan
441	Japan
450	South Korea
452	Vietnam
454	Hong Kong
455	Macao
456	Cambodia
457	Laos
460	China
461	China
466	Taiwan
467	North Korea
470	Bangladesh
472	Maldives

5 – Oceania

Identifier	Country
502	Malaysia
505	Australia
510	Indonesia
514	East Timor
515	Philippines
520	Thailand
525	Singapore
528	Brunei
530	New Zealand
534	Northern Mariana Islands
535	Guam
536	Nauru
537	Papua New Guinea
539	Tonga
540	Solomon Islands
541	Vanuatu
542	Fiji
543	Wallis and Futuna
544	American Samoa
545	Kiribati
546	New Caledonia
547	French Polynesia

548	Cook Islands
549	Samoa
550	Federated States of Micronesia
551	Marshall Islands
552	Palau

6 – Africa

Identifier	Country
602	Egypt
603	Algeria
604	Morocco
605	Tunisia
606	Libya
607	Gambia
608	Senegal
609	Mauritania
610	Mali
611	Guinea
612	Ivory Coast
613	Burkina Faso
614	Niger
615	Togo

616	Benin
617	Mauritius
618	Liberia
619	Sierra Leone
620	Ghana
621	Nigeria
622	Chad
623	Central African Republic
624	Cameroon
625	Cape Verde
626	São Tomé and Príncipe
627	Equatorial Guinea
628	Gabon
629	Republic of the Congo
630	Democratic Republic of Congo
631	Angola
632	Guinea-Bissau
633	Seychelles
634	Sudan
635	Rwanda
636	Ethiopia
637	Somalia
638	Djibouti
639	Kenya

640	Tanzania
641	Uganda
642	Burundi
643	Mozambique
645	Zambia
646	Madagascar
647	Réunion
648	Zimbabwe
649	Namibia
650	Malawi
651	Lesotho
652	Botswana
653	Swaziland
654	Comoros
655	South Africa
657	Eritrea

710	Nicaragua
712	Costa Rica
714	Panama
716	Peru
722	Argentina
724	Brazil
730	Chile
732	Colombia
734	Venezuela
736	Bolivia
738	Guyana
740	Ecuador
742	French Guiana
744	Paraguay
746	Suriname
748	Uruguay

7 – Central and South America

Identifier	Country
702	Belize
704	Guatemala
706	El Salvador
708	Honduras

Other

Identifier	Country
001	Test networks
901	Worldwide

Licenses & other information

Open Source Software

The device uses open source software, on request you will receive a corresponding license list and source code.

Disposal

The device must not be disposed of under any circumstances. Please send all devices to our current business address after expiration of the respective contracts and / or in case of defects.

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