



SHORT INSTRUCTION

Starting up TCG data modules
with **MACHINES**.cloud



1 Check the scope of delivery¹

TC3G



TC3Gi



Breakout cables



Cable harness
adapter



Power supply

Optional:



TC3Ge



2G/3G/4G



Wi-Fi/Bluetooth



GPS/GLONASS

Connect the antennas to the SMA plugs on the TC3Ge.

TCG-4



TCG-4i



Breakout cables



Cable harness
adapter



Power supply

Optional:



TCG-4e



2G/3G/4G



Wi-Fi/Bluetooth



GPS/GLONASS

Connect the antennas to the SMA plugs on the TCG-4e.

¹ Only with standard loan kit

2 Insert SIM card

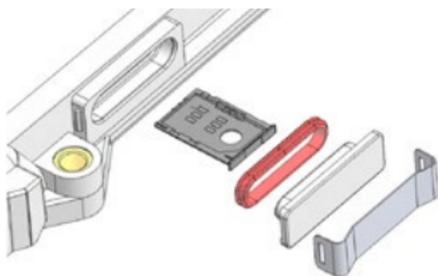
into a TC3G

1. Press the yellow button beside the card tray
2. Pull out the SIM card tray
3. Place the SIM card into the tray (for micro SIM cards or smaller cards a corresponding adapter is required)
4. Slide the SIM card tray back in carefully



into a TCG-4

1. Remove the metal clip with a flat screwdriver
2. Remove the SIM card slot cover
3. Press the yellow button next to the SIM card holder and pull out the SIM card tray
4. Place the SIM card into the tray (for micro SIM cards or smaller cards a corresponding adapter is required)
5. Slide the SIM card tray back in carefully
6. Reassemble the SIM card slot cover and metal clip



3 Starting up TCG

1. Supply the TCG with power:
 - a. Set the power supply to **12 V**
 - b. Connect the TCG to the breakout cables
 - c. Connect the breakout cables to the cable harness adapter
 - d. Connect the power supply unit to the cable harness adapter
 - e. ATTENTION: Select the correct power supply output connectors
 - f. ATTENTION: Check the polarity of the power supply output connectors
2. Switch on the cable harness adapter
3. Wait for the status LED of the TCG



ATTENTION: For (optimal) GPS and GSM reception, the TCG must be positioned outside buildings

4 Status detection by LED light

Yellow	Ready for use ► no Internet access; GPS not active or no GPS reception	TCG has booted and none of the other states are active
Blue	No Internet access; GPS active	After booting the TCG, it may take a few minutes for a GPS signal to be received or for Internet access to be established
Pink	Internet access available; GPS not active or no GPS reception	
Green	Internet access available; GPS active	
Flashing	Data traffic via CAN	The flashing can occur with all colors
Red flashing	Error signal (see operating instructions)	A restart of the TCG is recommended

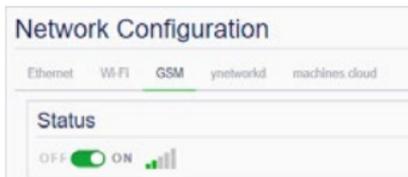
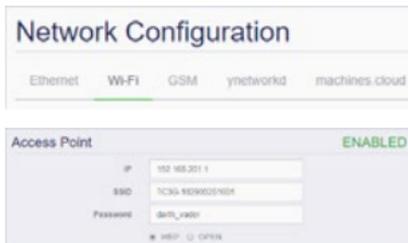
5 Establish a connection with MACHINES.insight

1. Connect your smartphone, tablet or PC to the TCG Wi-Fi network
2. Example network names:
TC1-"serial number", TC3G-"serial number" or TCG4-"serial number"
3. Password of the loan variant: see label on the TCG
4. Password of the standard variant:
TC1: "darth_vader", TC3G: "darth_vader" or TCG-4: "digitalization!"
5. Open address "192.168.201.1" in your browser
6. Click on "Login" in the left menu bar
7. Login data: ► Username: admin
► Password: admin
8. From machines.insight version 1.0.0: After first login, set a new password with 16 characters minimum, one lowercase letter, one uppercase letter and one number

6 Configure MACHINES.insight

TC3G

1. Select "System" in the left menu bar
2. Switch to "Wi-Fi" within "Network Configuration"
3. The right field "Access Point" must be activated
4. Change the password for Wi-Fi access
5. Click on "Save"
6. Switch to "machines.cloud" within the "Network Configuration"
7. Switch the "Activate connector" to "ON"
8. Click on "Save"
9. Switch to "GSM" within "Network Configuration"
10. Does the SIM card already have a PIN? ► Set the PIN switch in the GSM window to "Yes" and enter the PIN
11. Set "Status" to "ON"
12. Click on "Save" and restart the TCG (switch off/on the cable harness adapter)



Attention: With M2M SIM cards further configurations are necessary, see ► 7

TCG-4

1. Select "System" in the left menu bar

2. Switch to "Wi-Fi" within "Network Configuration"

3. The right field "Access Point" must be activated

4. For security reasons, change the Wi-Fi password

5. Click on "Save changes on device!"

6. Switch to "GSM" within "Network Configuration"

7. Set "Status" to "ON"

8. Does the SIM card have a PIN?

Set the PIN switch in the GSM window to "ON" and enter a PIN.

ATTENTION: With M2M SIM cards further configurations are necessary, see ► 7

9. Click on "Save changes on device!"

10. Switch to "ynetworkd" within "Network Configuration"

11. "Status" has to be "ON" and "GSM" must be "enable"

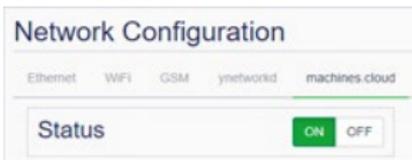
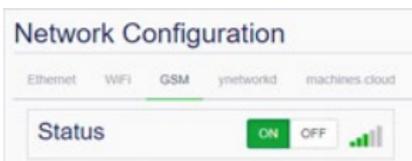
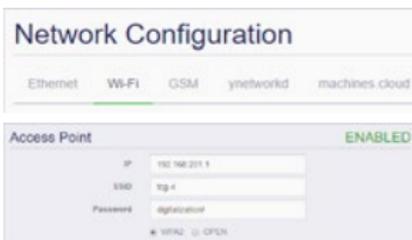
12. Click on "Save changes on device!"

13. Switch to "machines.cloud" within "Network Configuration"

14. "Status" has to be "ON"

15. Click on "Save changes on device!"

16. Restart the TCG (Click on "Restart device!" or switch off/on the switch on the cable harness adapter)



7 Configure a M2M SIM card (only necessary for M2M SIM cards)

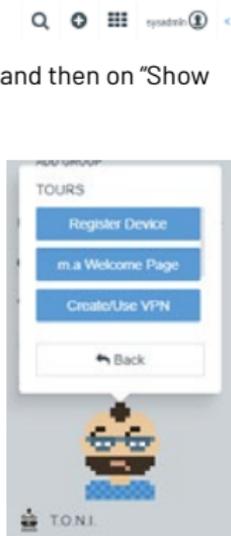
1. Login as "admin" in **MACHINES.insight** (see ► **5**)
2. Navigate to "System" ► "Network Configuration" ► "GSM"
3. Select the "Custom Configuration" field on the right
4. Enter M2M parameters (source: SIM card provider)
5. Click on "Save" or "Save changes on device!" and restart the TCG (Click on "Restart device!" or switch off/on the switch on the cable harness adapter)

The screenshot shows the 'Network Configuration' page for GSM. The status bar at the top indicates GSM is active. The 'SIM Configuration' section is labeled 'DETECTED' and contains fields for APN, Carrier, MCC, MNC, User, and Pass. The 'Custom Configuration' section is labeled 'ENABLED' and contains fields for APN (7), Carrier (T-Mobile internet), MCC (262), MNC (01), User (M2M), and Pass (88). Below these sections are fields for IMEI and PIN, with a 'PIN' toggle switch set to 'YES'. A yellow warning banner at the bottom states: 'Don't forget to save your changes to the device! Changes will take effect after a restart of the device!' with a 'Save' button.

The screenshot shows the 'Network Configuration' page for GSM. The status bar at the top indicates GSM is OFF. The 'SIM Configuration' section is labeled 'NOT DETECTED' and contains fields for APN, Carrier, MCC, MNC, User, and Pass. The 'Custom Configuration' section is labeled 'ENABLED' and contains fields for APN (7), Carrier (T-Mobile internet), MCC (262), MNC (01), User (M2M), and Pass (88). Below these sections are fields for IMEI and PIN, with a 'PIN' toggle switch set to 'OFF'. A yellow warning banner at the bottom states: 'Your configuration has changed, don't forget to save them!' with buttons for 'Save changes on device!' and 'Restart device!'.

8 Registration in MACHINES.cloud and first steps

1. Open the e-mail from noreply@machines.cloud with the link to the cloud (recommended browser: Google Chrome)
2. Click on the link and change your password on the web page
3. Log in with the new access data
 - ▶ User name: tenantname_admin
4. Top right click on "<<"
5. In the area of "Help & Support" click on "T.O.N.I."² and then on "Show Tours"
6. The following tours are available:
 - a. Register Device
 - b. m.a Welcome Page
 - c. Create / Use VPN
 - d. Track Evaluation
 - e. Data Explorer
 - f. Codesys Gateway





Further Information

Video Tutorials:

German: youtu.be/UT14E_I39sE



English: youtu.be/dJcDs7t28yw



All Manuals and Tutorials here:

stw-digitalization.com

Passwort: connectivity

T.O.N.I. Tours:

- ▶ Available in **MACHINES.cloud** and **MACHINES.access**
- ▶ Top right click on "<<"

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