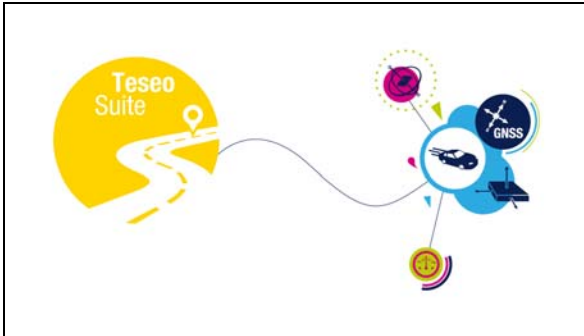# TESEO-SUITE

PC GUI software to control, configure and performance analyze of Teseo GNSS family

Data brief

Description

ST TESEO-SUITE is a powerful PC Tool able to manage all the capabilities of ST Teseo GNSS solution. It is able to manage more ST Teseo GNSS solutions in parallel.

On each ST TESEO GNSS solution the Teseo Suite is able to read, modify and save the configuration.

NMEA sentences logging and analysis supported. NMEA message-list configurable per port.

Features

- Multiple GNSS tracer
- Multiple protocol support
- GNSS firmware configuration tool
- GNSS flashing tool
- Dead reckoning panel
- NMEA diagnostic tool
- Satellites signal monitoring viewer
- Map viewer
- Log viewer

1 Introduction

TESEO-SUITE is the official ST software capable to manage, configure and evaluate the performances of all ST GNSS solutions including the new third generation of TESEO devices: STA8089xx and STA8090xx families.

This Graphical User Interface can control more than one GNSS receiver simultaneously allowing an easy performance comparison.

It includes, among different features, a powerful NMEA diagnosis tool which allows customers to speed-up their development.

2 SW resources

2.1 Flashing support: X-Loader

TESEO-SUITE provides a specific tool to upgrade the ST Teseo family solution: X-Loader[a].

X-Loader is able to erase, write and verify the whole internal flash present in the ST Teseo solution.

Through the X-Loader user can select all the internal parameter to correctly flash the ST GNSS solution.

X-Loader is able to flash ST GNSS solution with empty flash because it's flash:
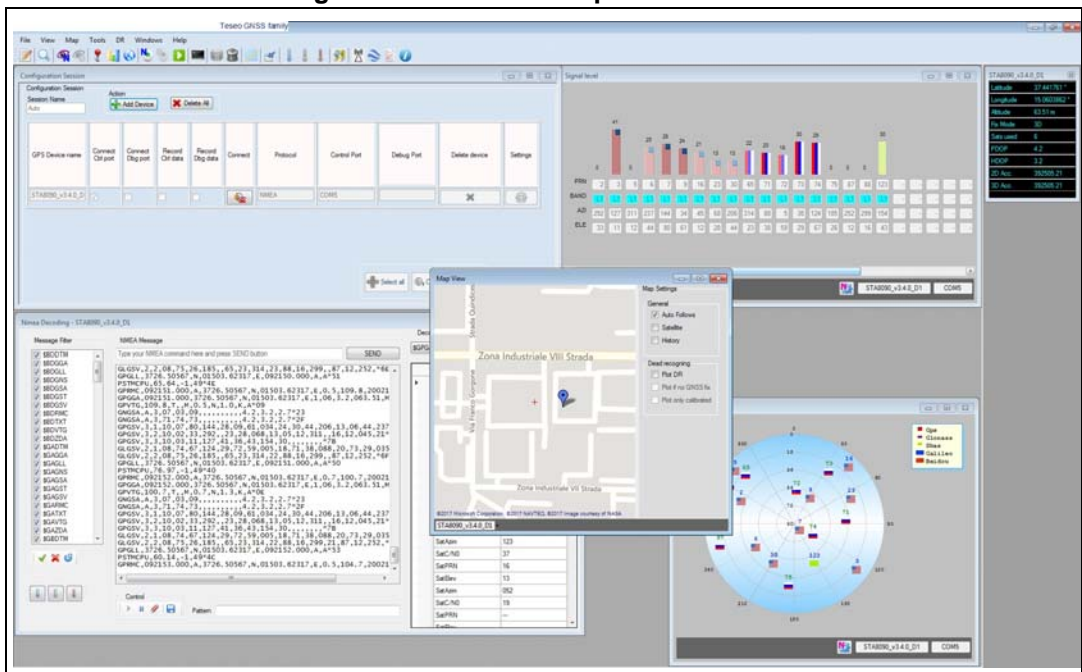
• Boot section;
• GNSS section;

BootPins configuration access is needed.

2.2 Upgrade support: FW upgrade

For ST GNSS Teseo solution as a valid running firmware, TS provides a tool, FW Upgrade, which upgrades only the GNSS firmware section leaving the Boot section as it is.

BootPins configuration access does not need.

Figure 1. TESEO-SUITE panels overview

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a. TESEO-SUITE Pro version only

2.3 Firmware Configuration panel

TESEO-SUITE provides a specific panel[a] where all the possible configuration parameters can be read and modified by the user.

A new configuration panel can be created from scratch or it can read from a connected running ST GNSS solution.

When the new configuration is finalized it can be saved on a file or stored directly on the ST GNSS Teseo solution.

2.4 Satellite signals viewer

In the same panel all the tracked satellite are showed and for each satellite the following parameter are reported:

- Constellation
- PRN
- CN0
- Band
- Azimuth

2.5 Map viewer

When a ST GNSS TESEO solution is connected and a position solution is provided, ST TESEO-SUITE is able to provide a panel where the position is showed against a real street map.

Open Street-Map web services access is needed.

2.6 ST AGPS viewer

Dedicated viewer is available to monitor and stimulate the ST-AGPS subsystem. Full control is for Autonomous, Predicted and Real-Time AGPS.

2.7 Dead Reckoning viewer

Dead Reckoning panel[a] is available to monitor and stimulate dead reckoning subsystem. Gyroscopic, Accelerometer and Odometer ST sensors are supported.

2.8 Testing and scripting

Proprietary scripting language is available for testing[a].

3   System requirements

3.1   Supported operating systems

TESEO-SUITE supports the following operating system:

- Microsoft Windows XP
- Microsoft Windows 7

3.2   Internet access

Open Street-Map Web services access is needed only to render the position on-line map view.

4   TESEO-SUITE Pro

TESEO-SUITE Pro permission right access can be requested sending email to
st-teseo-suite-support@st.com.

5 Revision history

Table 1. Document revision history

Date	Revision	Changes
03-Mar-2017	1	Initial release.

IMPORTANT NOTICE – PLEASE READ CAREFULLY