GSM / GPRS Plug-In Modem

Order Codes:
IL-NT-GPRS, CM2ILN2GXBX

Quick Guide

Table of contents

1 Document information

1.1 Clarification of notation

Note: *This type of paragraph calls readers attention to a notice or related theme.*

IMPORTANT: This type of paragraph highlights a procedure, adjustment etc., which can cause a damage or improper function of the equipment if not performed correctly and may not be clear at first sight.

Example: This type of paragraph contains information that is used to illustrate how a specific function works.

1.2 About this guide

A short Guide how to start using IL-NT GPRS module.

1.3 Legal notice

This End User's Guide/Manual as part of the Documentation is an inseparable part of ComAp's Product and may be used exclusively according to the conditions defined in the "END USER or Distributor LICENSE AGREEMENT CONDITIONS – COMAP CONTROL SYSTEMS SOFTWARE" (License Agreement) and/or in the "ComAp a.s. Global terms and conditions for sale of Products and provision of Services" (Terms) and/or in the "Standardní podmínky projektů komplexního řešení ke smlouvě o dílo, Standard Conditions for Supply of Complete Solutions" (Conditions) as applicable.

ComAp's License Agreement is governed by the Czech Civil Code 89/2012 Col., by the Authorship Act 121/2000 Col., by international treaties and by other relevant legal documents regulating protection of the intellectual properties (TRIPS).

The End User and/or ComAp's Distributor shall only be permitted to use this End User's Guide/Manual with ComAp Control System Registered Products. The Documentation is not intended and applicable for any other purpose.

Official version of the ComAp's End User's Guide/Manual is the version published in English. ComAp reserves the right to update this End User's Guide/Manual at any time. ComAp does not assume any responsibility for its use outside of the scope of the Terms or the Conditions and the License Agreement.

Licensed End User is entitled to make only necessary number of copies of the End User's Guide/Manual. Any translation of this End User's Guide/Manual without the prior written consent of ComAp is expressly prohibited!

Even if the prior written consent from ComAp is acquired, ComAp does not take any responsibility for the content, trustworthiness and quality of any such translation. ComAp will deem a translation equal to this End User's Guide/Manual only if it agrees to verify such translation. The terms and conditions of such verification must be agreed in the written form and in advance.

For more details relating to the Ownership, Extent of Permitted Reproductions Term of Use of the Documentation and to the Confidentiality rules please review and comply with the ComAp's License Agreement, Terms and Conditions available on www.comap-control.com.

Security Risk Disclaimer

Pay attention to the following recommendations and measures to increase the level of security of ComAp products and services.

Please note that possible cyber-attacks cannot be fully avoided by the below mentioned recommendations and set of measures already performed by ComAp, but by following them the cyber-attacks can be considerably reduced and thereby to reduce the risk of damage. ComAp does not take any responsibility for the actions of persons responsible for cyber-attacks, nor for any damage caused by the cyber-attack. However, ComAp is prepared to provide technical support to resolve problems arising from such actions, including but not limited to restoring settings prior to the cyber-attacks, backing up data, recommending other preventive measures against any further attacks.

Warning: Some forms of technical support may be provided against payment. There is no legal or factual entitlement for technical services provided in connection to resolving problems arising from cyber-attack or other unauthorized accesses to ComAp's Products or Services.

1.4 Document history

Revision number	Date	Author
2	25.9.2019	Michal Jacko
1	2.5.2015	Michal Jacko

2 Available versions of Plug-In module

Nowadays there are two hardware types of GPRS Plug-In module:

▶ Order Code: IL-NT-GPRS

- Older module GPRS SIM900

- This module is intended mainly for IBF-CU-Mobile and InteliPro.

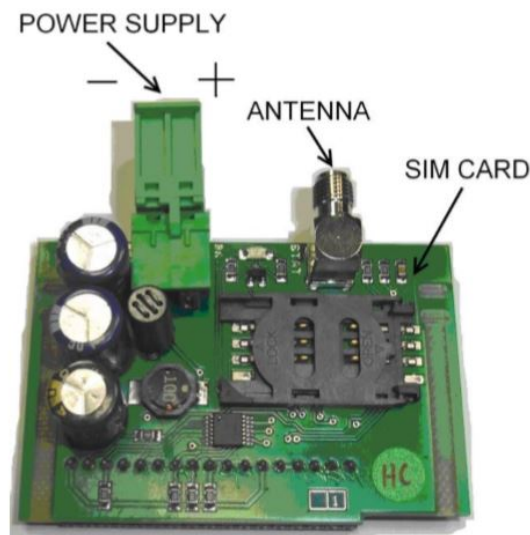   *Note: This module also works with InteliLite NT, InteliCompact NT, InteliDrive Lite and their clones but if you need to order a new one, please use the newer/updated version (see below).*

▶ Order Code: CM2ILN2GXBX

- Updated version of Plug-In module with newer SIM800

- Plug-In communication module for InteliLite-NT, InteliCompact-NT, MainsCompact-NT, InteliATS-NT, InteliDrive-FLX Lite, InteliDrive EM, InteliDrive Marine.

3 Installation

> **IMPORTANT: Any manipulation with plug-in module shall be done with disconnected power supply to both controller and module. Power supply shall be switched on also is same time to both module and controller. Fail to follow these instructions (power supply active only in controller or only in module) can lead to module or controller failure!**

1. You will need one of supported ComAp controllers (IL-NT/IC-NT/ID-Lite), IL-NT GPRS, antenna, SIM card with GPRS service and optionally IL-NT RS232 or IL-NT S-USB module. Firmware supporting IL-NT GPRS module is IL-NT 2.0 or IL-NT-WSUP or selected customer branches (contact support@comap-control.com for details). It is available here.

2. Contact SIM card operator for getting GPRS APN (APN = Access Point Name) name, username and password.

    > **Example:** APN Name = internet.t-mobile.cz, UserName = [blank], Password = [blank].

3. Make sure SIM card does not require PIN code. If it does, it is possible to disable it in any common network unlocked mobile telephone.

4. Power up the ComAp controller.

5. Enter correct APN Name, APN UserName and APN UserPass in controller's Setpoint group **Comms Settings**. Set COM1 Mode = DIRECT. Comms settings as every Setpoint group are accessible by PAGE button from any measurement screen on controller. Setpoints can be set on controller's front panel keyboard or by LiteEdit 4.5 and higher.

6. Switch off ComAp controller.

7. Place the SIM card into slot on IL-NT-GPRS card, plug in the IL-NT GPRS card into communication slot on back side of ComAp controller.

8. Connect the antenna to designated SMA connector.

9. Connect power supply to IL-NT GPRS module. It supports 8-36V DC voltage.

10. Power up the system (Controller and module together).

11. Wait for approx 2-4 minutes for first connection of the system to AirGate. AirGate will generate automatically the AirGate ID value. Then navigate to last of measurement screens where you will find signal strength bar and AirGate ID identifier.

Once this AirGate ID is displayed, connection via AirGate was successful. This value will be needed for LiteEdit or WebSupervisor connection. Kindly make a note for future reference.
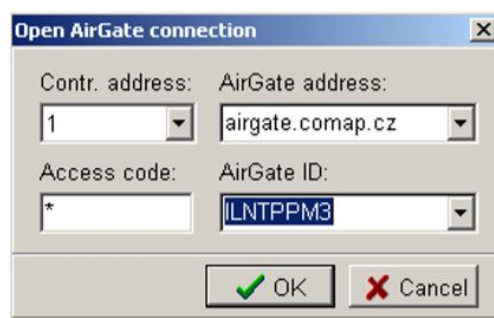

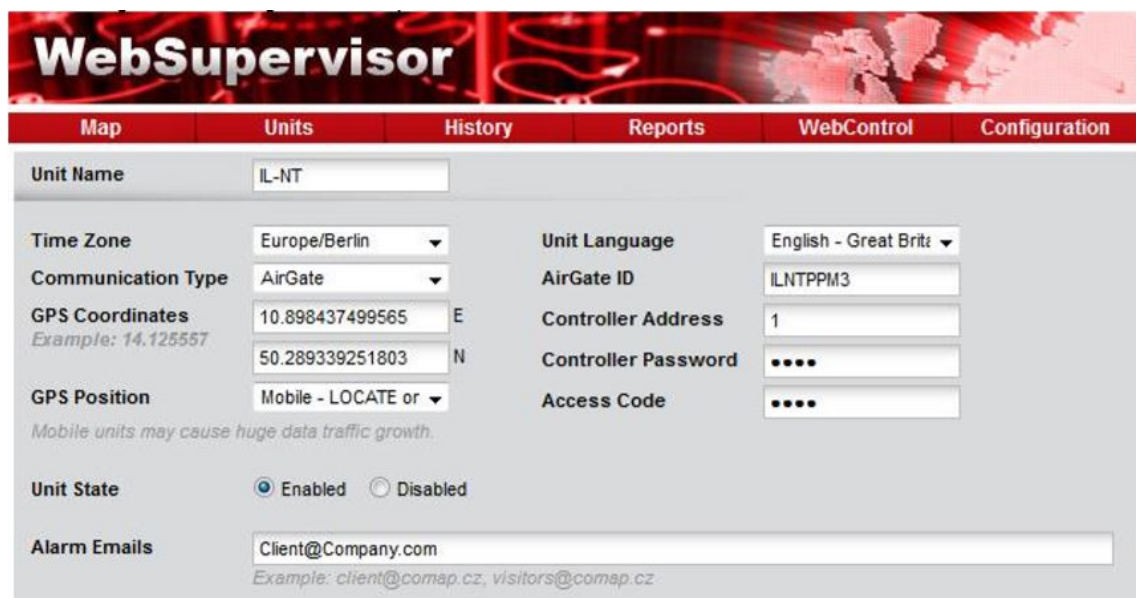Image 3.1 AirGate Connection dialog in LiteEdit

Image 3.2 Add new Gen-set dialog in WebSupervisor

Should you encounter any troubles with connection, check the faultcodes on the same screen and find detailed description in Diagnostic codes listed lower.

12. Open LiteEdit PC software or enter your WebSupervisor account at websupervisor.comap.cz.

Note: For opening a new WebSupervisor account kindly send e-mail to <u>admin.websupervisor@comap-control.com</u> *your Name, Login name, E-mail address and Timezone. We will create free account for you. Details at:* <u>www.comap-control.com</u>.

3.1 Communication is now ready for use

Note: To reduce the data traffic over GPRS network you can set in Setpoint group **Comms Settings** *the Setpoint AirGate IP = 80.95.108.26. This will save significant data amount needed for translation of AirGate server IP address. In case of changing the server IP address this settings has to be updated or returned to default „airgate.comap.cz".*

Note: From it's nature the GPRS connection can from time to time drop for a short time due to a number of reasons affecting the cellular network. However the system is designed in the way that controller will automaticaly reconnect back.

IMPORTANT: All manipulations with IL-NT GPRS module has to be done with DC power supply switched off. Module can be only powered on while plugged in the controller and together with controller!

4 Diagnostic Codes

Diagnostic code for IL-NT GPRS modem

Code	Description
0	OK. No error.
1	Not possible to hang up.
2	IL-NT GPRS is switched off.
3	IL-NT GPRS is switched on.
4	IL-NT GPRS – error in initialization.
5	IL-NT GPRS – not possible to set the APN.
6	IL-NT GPRS – not possible to connect to GPRS network.
7	IL-NT GPRS – not possible to retrieve IP address.
8	IL-NT GPRS – not accepted DNS IP address.
9	Error in modem detection.
10	Error in initialization of analog modem.
11	SIM card is locked (Possibly PIN code required, PIN needs to be deactivated) or unknown status of SIM locking.
12	No GSM signal.
13	Not possible to read the SIM card parameters.
14	GSM modem did not accepted particular initialization command, possibly caused by locked SIM card.
15	Unknown modem.
16	Bad answer to complement initialization string.
17	Not possible to read GSM signal strength.
18	CDMA modem not detected.
19	No CDMA network.
20	Unsuccessful registration to CDMA network.
23	Controller couldn't detect IL-NT GPRS module communication speed.
24	No power supply.

AirGate Diag – Diagnostic Code for AirGate connection

Code	Description
0	Waiting for connection to AirGate Server.
1	Controller registered, waiting for authorization.
2	Not possible to register, controller blacklisted.
3	Not possible to register, server has no more capacity.
4	Not possible to register, other reason.
5	Controller registered and authorized.