GSM MODEM FOR LAPTOP PCs
WITH USB PORT

GSM 714 Eng.

• **Uses GSM 900/1800 MHz digital communication networks.**
• **RF dual band antenna incorporated.**
• **Supplied with :**
  – 1 USB cable
  – CDROM with driver

CE

WARNING: do not use this Modem for fixed central Remote Management control stations, but only for temporary stations with a laptop PC.
Exposed to electrical disturbances, USB ports may unconfigure and block Remote Management, requiring reconfiguration.

1. APPLICATION

GSM 714 modem can be used in the central control station for data transmission in TELECOSTER telemanagement systems.

2. FUNCTIONS

GSM 714 is a GSM dual band modem (900/1800MHz) with a transmission speed adjustable from 1200 to 9600 bps in non-transparent mode (with error correction). It supports AT + controls in conformity with ETSI GSM 07.07 standard.It incorporates a self-diagnosing function that indicates the presence of GSM signal.The digital interface conforms to USB specification 1.0.

3. REFERENCE STANDARDS

GSM modem conforms to current legislation relating to Directive R&TTE99/5/CE and, in particular, to the following regulations :
  – Health & Safety (Art. 3.1a): EN60950:2000.
  – EMC (Art. 3.1b): EN 301 489-7 v1. 2.1 (08/2002).
  – RF spectrum efficiency (Art. 3.2): 3GPP TS 51.010-1, v.5.1.0 (12/2002)
  – EN 301 511.v9.0.2 (final draft).

4. TECHNICAL DATA

• **Electrical & mechanical:**

Power supply :	via USB interface	Transmission speed	1,200…9,600 bps
Protection	IP 40	Transmission standard	V.22bis, V.32, V.110
Construction standards	See point 3	Transmission mode	full duplex
Ambient temperature:		Interface speed	standard USB 1.0
operating	– 20 ÷ + 55 °C	Data Terminal Equipment interface	USB Mini-B
storage	– 25 ÷ + 70 °C	Data Terminal Ready management	OFF status of DTR prevents
Dimensions	65 x 80 x 18 mm (L x P x H)		tr transmission/reception by modem
Weight	53 g	Traffic control	RTS/CTS
		RF power output (max)	2W per GSM900
• Transmission data :			1W per GSM1800
Data format	asynchronous start-stop	RF antenna	incorporated
Character format	7/8 bit data, 1/2 stop bit, parity odd/even/none		

5. CONNECTIONS

5.1 USB connector

USB cable supplied for connecting modem to PC.
WARNING: connect the modem directly to the PC port; do not use USB port duplicators or USB hub.

6. SIM CARDS

6.1 Purchase of SIM card.

You are advised to purchase the SIM card from your chosen GSM network service provider for business networks.
When purchasing, it is essential to request a card enabled for the transmission and reception of DATA with the following
communication modes: AUTOBAUDING; ASYNCHRONOUS; NOT TRANSPARENT (correction data enabled).

6.2 Inserting SIM card in GSM 714

Before inserting the SIM card in the modem it is essential to disable the PIN code of the card and any operator ser-
vices that might interfere with the telemanagement (e.g. answering service, call forwarding).
To do this, use a GSM cellular telephone and insert the SIM card in it; then, following the instructions received from
this telephone, disable the PIN code. To disable the answering service, etc, ask the telephone operator.

The operations required to install the SIM card in GSM 714 are as follows:

– **Ensure that the modem is switched off, then disconnect the USB cable. You must NOT insert or remove
  the SIM card while the modem is switched on.**
– Using something pointed, press the yellow button to extract the card holder.
– Insert the SIM card in the holder making sure that it is the right way round.
– Push in the card holder until it clicks into place.
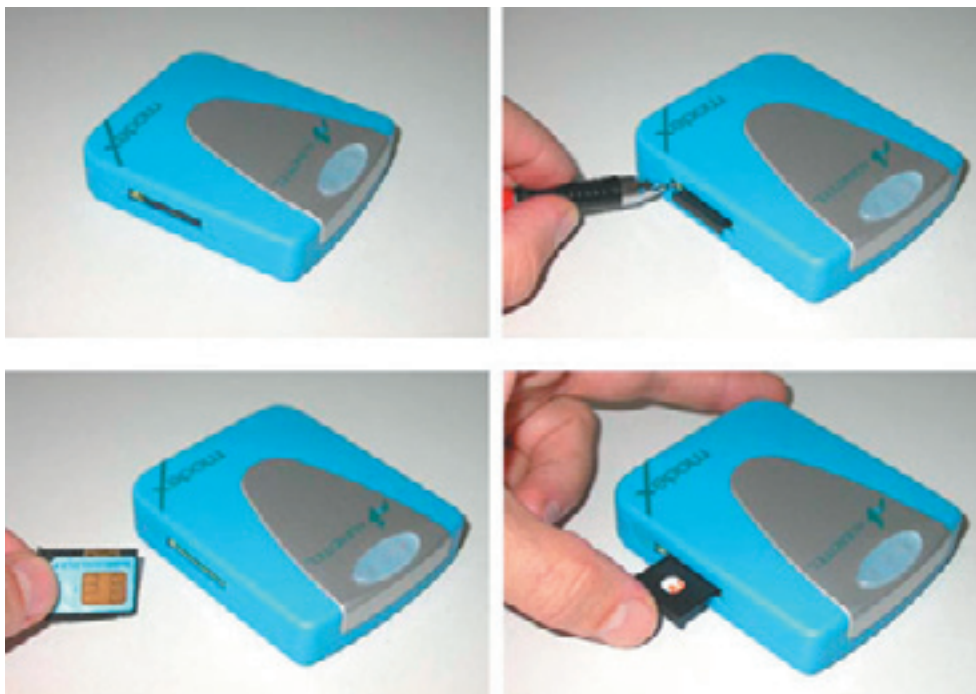
6.3 GSM network signal strength indicator

The red LED indicates the status of the radio module :
– always off   : modem not powered;
– rapid flashing   : SIM card not inserted or searching for signal;
– brief flash   : signal present, modem not transmitting;
– always lit   : modem transmitting or connected to telephone line.

The green LED indicates the status of the USB line :
– always off   : no USB/serial activity;
– flashing   : passage of data on USB/serial line;

To know exactly the signal quality you must:
– using a communication program or SWC 701 telemanagement program, send instruction "AT + CSQ" to the modem;
– read the reply coming from GSM 714 :
- from 14 to 31   = signal should be sufficient..
- from 0 to 13 and +99 = signal unlikely to be sufficient.
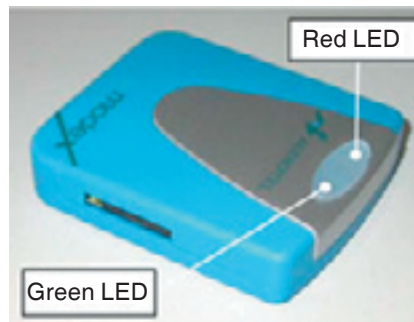
6.4 Installation of modem by means of CDROM on a PC on which already installed SWC701 software

WARNING:
•Do not use USB via hub but connect the modem directly to the USB output of the PC
• If modem is connected to a portable PC you are advised not to activate the energy-saving option because when PC re-started the modem may not re-start. In this event, reboot the system.
• During the installation procedure, connect the modem to the PC **ONLY** when requested and not before.

Installation procedure:

• Install the SIM card as at point 6.2.
• Insert the CDROM, press INSTALL and follow the procedure.
• **Only when requested**, connect the modem to the PC via the USB cable supplied.
• Re-boot the PC.
• Once the PC has finished booting, identify the COM port associated with GMS 714 modem by means of the system properties window (6.5) from the Windows™ control panel.
  The number of the COM port is found in the list of the ports (COM and LFT) under the heading "USB Serial Port (COMX)".
  "X" is the number of the COM port associated with GSM 714 modem: make a note of this number .
  If, for example, you find "USB Serial Port (COM3)" in the list, this means that the virtual serial port COM3 is the one which must be used to converse with modem GSM714.
• Run software SWC701 (version later than v. 0.90.1983), go to "Settings" (6.6) and configure the GSM714 modem at the COM port previously identified.

6.5 "System properties" – Control Panel - Windows™
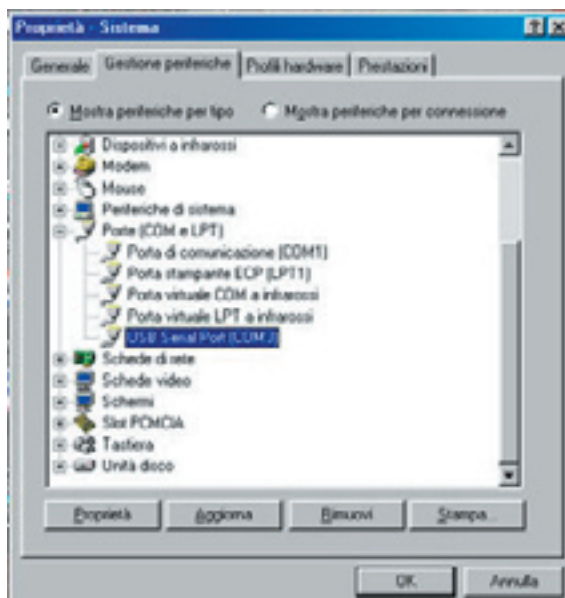
6.6 "Settings" – SWC 701 (Version later than 0.90.1983)
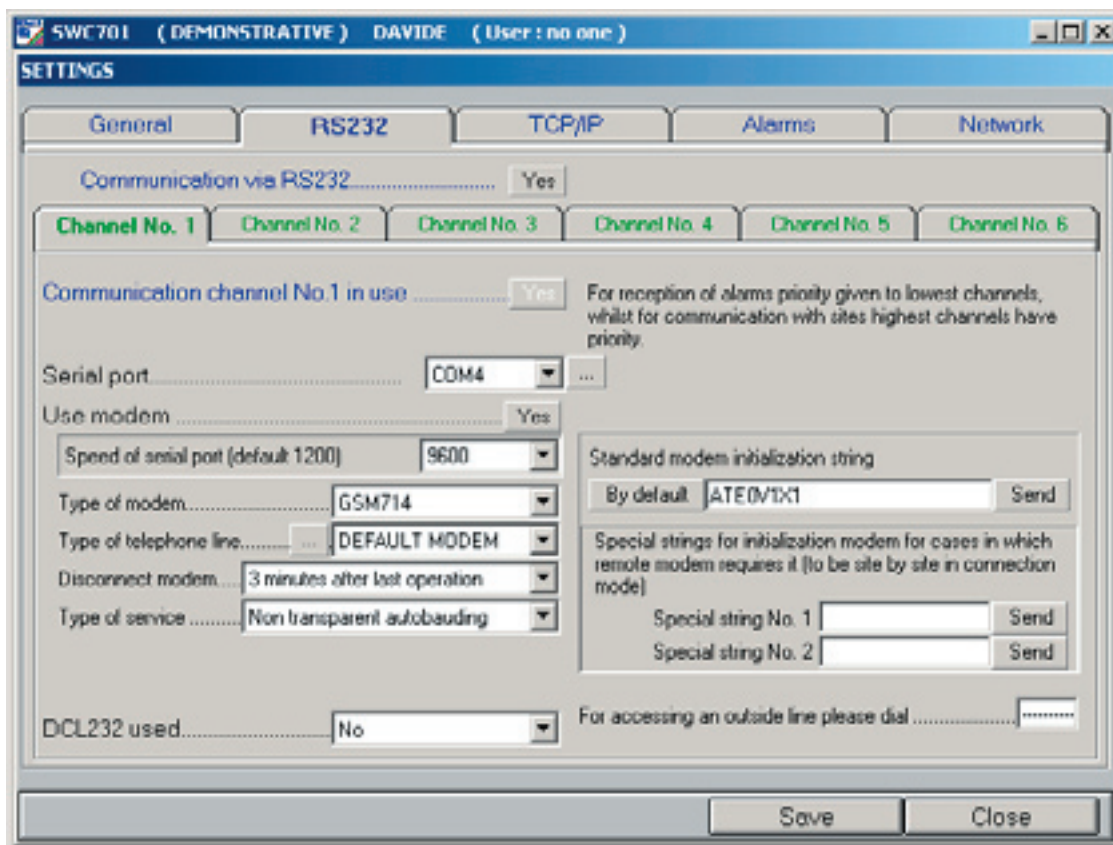
Modifiche scheda

Data	Revisione n.	Pagina	Paragrafo	Descrizione modifiche	Versione Firmware	Versione Software
12.01.10 AM	**01**	1	Note	Add note for the correct use of modem		

CⓘE   We reserve the right to make changes without notice