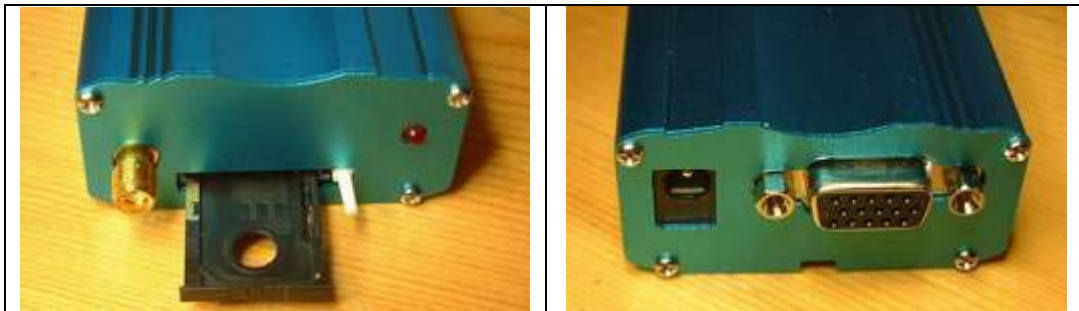


THE GSM/GPRS Modem USER'S Guide ME_TC35i\MC35i Terminal

Contents



1 Introduction

- 1.1 Scope of this manual
- 1.2 Electrical characteristics
- 1.3 Mechanical characteristics
- 1.4 Features
 - 1.4.1 Telephony
 - 1.4.2 Short Message Service
 - 1.4.3 Data
 - 1.4.4 GSM Supplementary Service
 - 1.4.5 Others
- 1.5 Interfaces

2 Hardware Description

- 2.1 Overview
- 2.2 The connector
- 2.3 Signal descriptions
 - 2.3.1 Power supply
 - 2.3.2 Serial link
- 2.4 Overview
- 2.5 Functional description

1 Introduction

The **ME_TC35i\MC35i Terminal** is designed to provide a quick and easy solution to systems that need to access GSM/GPRS network/functionality. The modem is full type approved and ready to use. It employs the proven GSM technology from SIEMENS.

1.1 Scope of this manual

This document describes the hardware interface and the technical specification of the ME_TC351\MC351 TERMINAL. For information about controlling the modem via the AT commands, refer to the ' AT command manual'.

1.2 Electrical characteristics

- Dual band GSM modem E-GSM 900/1800 or E-GSM 900/1900
- Class 4: 2W for GSM 900
- Class 1: 1W for GSM 1800/1900
- Voice, SMS, Fax and data
- Tricodect: Full Rate, Enhanced Full Rate and Half Rate
- 3V SIM interface
- Power supply: 5V @ 2A
- 300mA average current consumption
- 9mA in idle mode
- Operating temperature: -20°C to + 50°C
- Storage temperature: -35°C to +85°C

1.3 Mechanical characteristics

- Small size: 100mm(L) x 53mm(W) x 25mm(H)
- Mounting: 2 screw holes

1.4 Features

1.4.1 Telephony

- Telephony (TCH/FS) and Emergency calls
- Full Rate, Enhanced Full Rate and Half Rate
- DTMF functions

1.4.2 Short Message Service

- Point to Point MT and MO
- SMS Cell Broadcast

1.4.3 Data

- Data circuit asynchronous, transparent and non-transparent up to 14.4kbps
- Automatic fax group 3 (Class 1 and 2)
- Alternate speech and fax
- MNP2, V.42bis

GPRS packet data features

- GPRS class 8 / Class B
- Coding schemes CS1 to CS4
- Compliant with SMG31bis

1.4.4 GSM Supplementary Service

- Call Forwarding
- Call Barring
- Multi Party
- Call Waiting and Call Hold
- Calling Line Identity
- Advice of Charge
- USSD

- Closed User Group
- Explicit Call Transfer

1.4.5 Others

- ME + SIM phone book management
- Fixed Dialling Number
- SIM Toolkit Class 2
- SIM, network and service provider locks
- Real Time Clock
- Alarm management
- UCS2 character set management

1.5 Interfaces

- Single Antenna Interface
- 3V only internal SIM interface
- RS232 Interface

2 Hardware Description

2.1 Overview

The **ME_TC35I\MC35I TERMINAL** includes a SIEMENS TC35i or MC35i module, a SIM card holder , a DB15-pin header and a RF connector.

2.2 The connector

Signal description

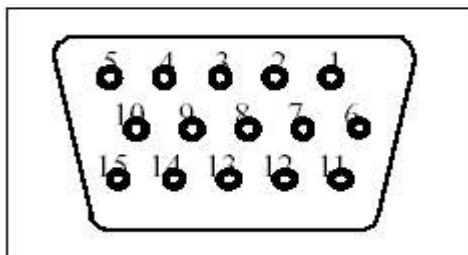
2.2.1 Power supply:

Power supply design is an important factor. The GSM modem transmits in burst sequences, therefore the power supply must be able to deliver high current peaks in short period of time.

Supply voltage = 5V ~12VDC , the center pin is positive.

Supply current = 2 amperes.

2.2.2 Serial link



	Type		Type		Type
1	DCD	6	RX	11	CTS
2	TX	7	DSR	12	RTS
3	NC	8	DTR	13	RI
4	MICROPHONE+	9	GND	14	RESET
5	MICROPHONE-	10	SPEAKER+	15	SPEAKER-