

# M20 & M20T Starter Pack

#### Part No. M20T-SP

This starter pack is a simple and fast way to get up and running with the M20 or the M20T. The pack includes:

M20 Terminal GSM module
Power and interface lead
Power supply
Interface module with audio connections
9-pin serial cable
Antenna (AS.920)
Magnetic mount for antenna (MD)
4 metre long RF cable
Software and documentation on CD

The interface module allows simple connection of the power supply, includes an 'ignition' push button, and terminations for audio connections.

All you need to add is a network connected SIM (Phase II) and a PC. As the M20 Terminal is based around the M20 module, this pack is also suitable for those wishing to familiarise with the M20 before starting hardware development.

All data, application notes and further information is on the CD, included in the Starter Pack.



Fig 1. Components included in Starter Pack.

## Parts list for M20/M20T starter pack

Item	Qty	Description	TDC reference
1	1	M20T GSM Modem	M20T
2	1	Power supply, AC240V in, 12V 500mA out	G15
3	1	Power and connection board	AR5000
4	1	RF cable FME plug to FME jack RG58 4 metres length	B720
5	1	Power cable RJ11 6 pin 1-1 connection	B80
6	1	9 pin serial cable 9M – 9F 230mm long	B10
7	1	GPS & Wireless utilities CD	GPS-CD
8	1	3dB gain whip antenna	AS920
9	1	Magnetic mounting base	MD
10	1	Quick start instructions/M20T Starter Pack Data	M20T-SP
11	1	White carton	-
12	1	Foam inserts	-
13	1	Box labels	-
14	1	4 way terminal block	RS 403-897
15	1	2 way terminal block	RS 403-875

### Starter Pack - Quick Start

- Assemble the magnetic base, whip antenna and RF lead
- 2) Connect the RF lead to the M20T
- Connect the power lead (identifiable by the 6pole RJ11 connectors) to the M20T (adjacent to the serial connector) and the power/connection PCB
- 4) Connect serial cable to your PC

- 5) Insert data enabled SIM (must be a 3.3V phase 2 SIM) into holder on M20T
- Connect mains adapter to mains and power/connection PCB
- 7) Use Hyperterminal (or other suitable terminal package), set data rate to 19200bps, no handshaking, 8 data and 1 stop bit
- 8) Press button on power/connection PCB to switch on M20T

9) Type AT followed by the Enter key, modem should respond 'OK'

The M20T is now ready to send and receive data calls. Your network operator should have given you another mobile number for receiving data calls. If you do not have this, you will be able to dial out, but not receive incoming data calls.



Fig 2. Components shown ready for operation with PC

**Troubleshooting** 

If no response is received from the M20T, check power and that your terminal provides DTR on the serial port.

If the M20T will not make calls check that your SIM is a Phase 2 type SIM. Most SIM cards issued since the beginning of 1998 are Phase 2 types, and are normally recognised by an extra three characters comprising of a letter and two digits at the end of the number printed on the SIM (e.g. G47). If in doubt, please contact your service provider who will be able to confirm the SIM type or issue you with a new card.

### **Ordering information**

Part number	Description		
M20T-SP	M20T Starter Pack		

© 1999 Telecom Design Communications Ltd.

Information provided by Telecom Design Communications Ltd. is believed to be accurate and reliable. However, no responsibility is assumed by Telecom Design Communications Ltd. for its use, nor any infringement of patents or other rights of third parties which may result from its use. Telecom Design Communications Ltd. reserves the right to change circuitry at any time without notice. This document is subject to change without notice.

E&OE

Telecom Design Communications Ltd Stroudley Road Basingstoke Hampshire RG24 8FN

Phone: +44 (0)1256 332800 Fax: +44 (0)1256 332810 E-mail: sales@tdc.co.uk

www.tdc.co.uk