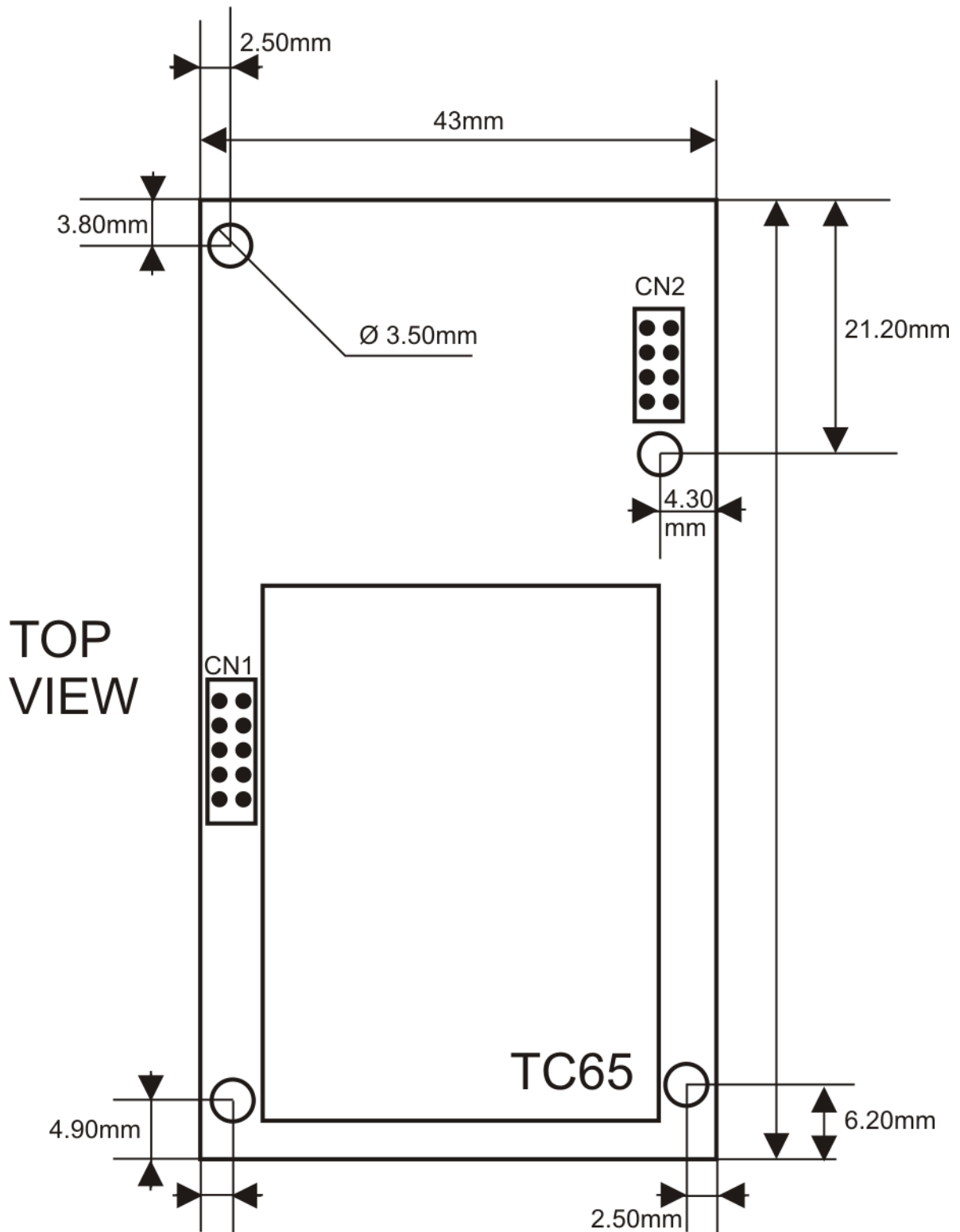


HCPPMM2 Hardware Description

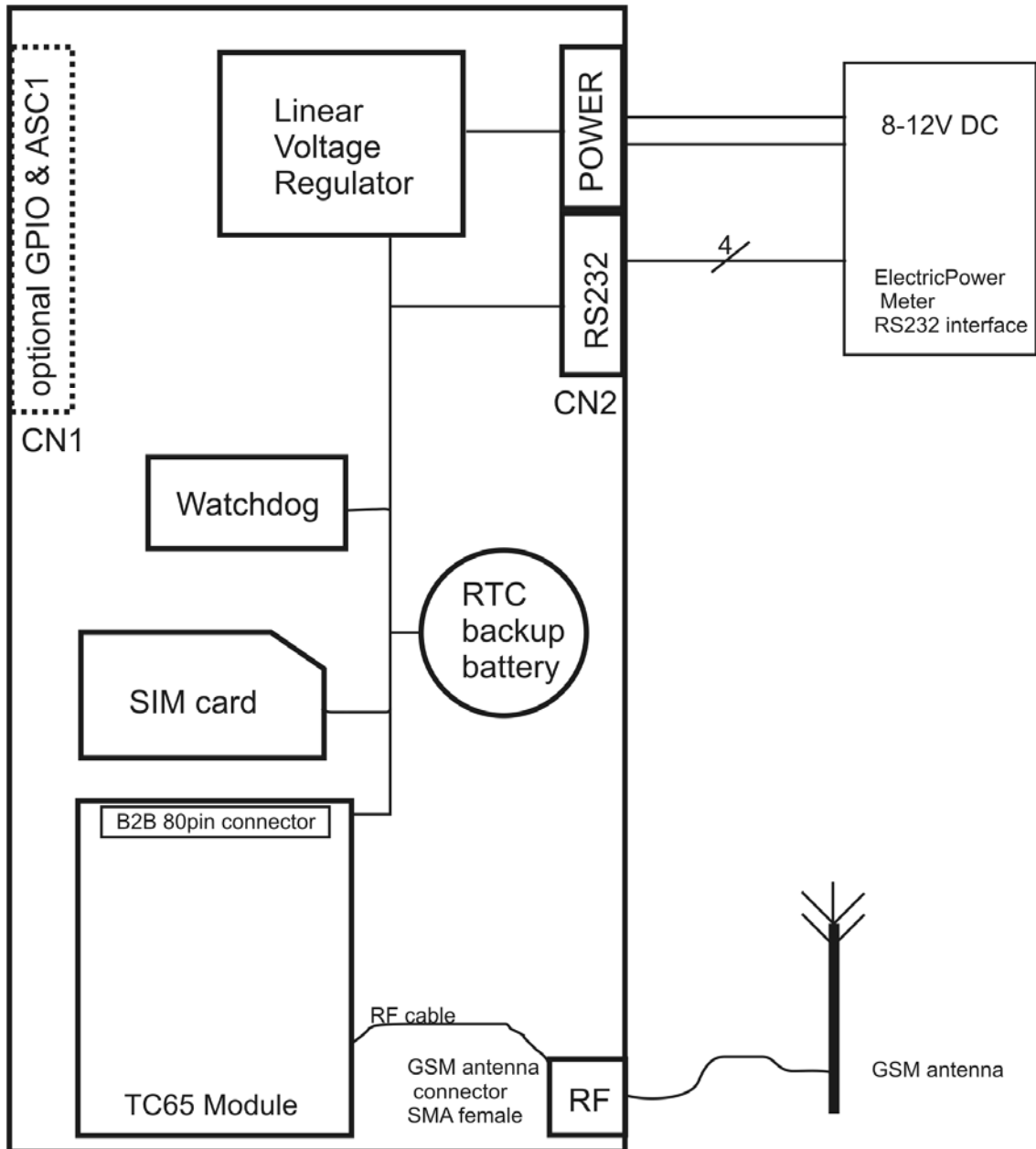
Contents

1. Board dimensions
2. Block diagram
3. Connectors pin-out
4. Power supply ratings
5. RS232 interface characteristics
6. I/O description
7. Watchdog circuit

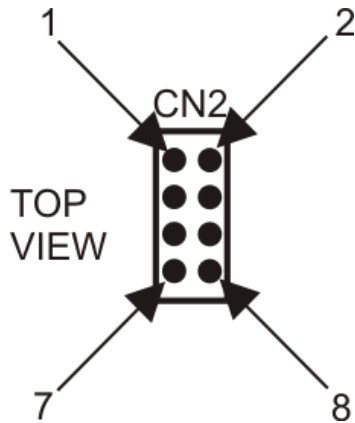
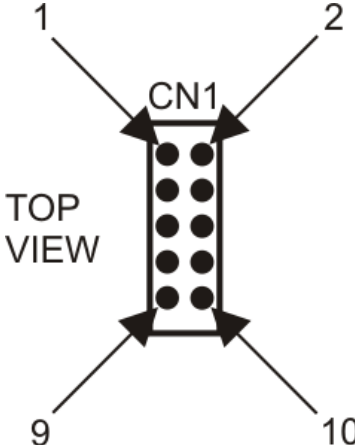
1. Board Dimensions



2. Block diagram



3. Connectors pin-out

 <p>Diagram showing the top view of connector CN2. It is a 2x4 pin connector with 8 pins. The pins are numbered 1 through 8. Pin 1 is at the top-left, pin 2 at the top-right, pin 7 at the bottom-left, and pin 8 at the bottom-right. The text 'TOP VIEW' is on the left and 'CN2' is above the connector.</p>	<ol style="list-style-type: none">1. VCC2. VCC3. TXD (output RS232 interface)4. GPIO5/DTR (output)5. RXD (input RS232 interface)6. GPIO6/RTS (output)7. GND8. GND
 <p>Diagram showing the top view of connector CN1. It is a 2x5 pin connector with 10 pins. The pins are numbered 1 through 10. Pin 1 is at the top-left, pin 2 at the top-right, pin 9 at the bottom-left, and pin 10 at the bottom-right. The text 'TOP VIEW' is on the left and 'CN1' is above the connector.</p>	<ol style="list-style-type: none">1. VCC2. TXD13. RXD14. CTS15. RTS16. IN17. OUT28. IN29. OUT110. GND

4. Power supply ratings

Parameter	Description	Min	Typ	Max	Unit
Vpower	Supply voltage	+8	+9	+12	V
Ipower	Supply current			800mA	mA
Pmax	Supply power			6.4	W

5. RS232 interface characteristic

Parameter	Description	Conditions	Min	Typ	Max	Unit
V _{OUT}	Transmitter Output Voltage for /TXD	@ 5kOhm load	±5	±5.4		V
R _{OUT}	Transmitter Output Resistance /TXD		300	50k		Ohm
V _{IN}	Input voltage range /RXD		-25		25	V
R _{IN}	Input resistance of /RXD		3	5	7	kOhm
V _{RIHYS}	Input Hysteresis			0.5		V
V _{ilow}	Input Threshold Low		0.6	1.1		V
V _{Ihigh}	Input Threshold High			1.5	2.4	V
Baudrate		Autobauding	1200		468000	bps
		Fixed bit rate	300		468000	bps

6. Watchdog circuit

PMM2 GPRS Terminal has hardware watchdog circuit on board.

Watchdog circuit is connected to TC65 GPIO8.

Watchdog interval is 120s, that is, application must send positive impulse of 100mS width every 120 seconds. If that not happens the watchdog circuit will restart TC65 module.