

TP6000i MOBILE RADIO

- FOR VOICE & DATA COMMUNICATION



The TP6000i is a standard TP6000i mobile transceiver with the waterproof BE905 Control unit. The control unit can be mounted directly on the radio or by distance from the radio unit via an RS232 controller interface.

The control unit is a watertight unit and features a large graphical display, alphanumerical keypad with function keys.

The TP6000i radio comes as three models:

- Standard analog radio.
- Standard analog radio with digital voice encryption (for analog & digital communication).
- Standard analog radio with digital voice encryption and with built in GPS for tracking.

When using the TP Radio you are able to see in the display if the incoming signal is in analog, digital or in digital voice encryption mode.

Digital voice encryption is the answer, providing the highest level of voice security and the advantage of digital voice.

Despite the small dimensions, the TP6000i transceiver is designed for 50 % operation duty cycle.

The TP6000i transceiver is remote controlled by the BE905 control unit which makes the equipment fit easily into even the most crowded dashboard.

The BE905 control unit is also easily fit on a motorcycle as the control unit is waterproof.



HIGHLIGHT

- FULL RF BANDWIDTH
68 - 88 MHz
135 - 174 MHz
350 - 410 MHz
400 - 470 MHz
- 8 DIGIT DIGITAL SCRAMBLER (ANALOG / DIGITAL / DIGITAL SCRAMBLER MODE)
- 1,200 / 2,400 BPS FFSK DATA (9,600 / 19,200 BPS GMSK DATA AS OPTION)
- TEMP. RANGE -25 °C TIL +55 °C
- DATA AND TONE AT THE SAME TIME
- DTMF, FFSK, CCIR, ZVEI, EEA & CTCSS SIGNALING,
- CHANNEL DEPENDENT TX POWER, CHANNEL DEPENDENT CTCSS, CHANNEL SCANNING, 127 CHANNELS
- CONNECTION OF PRINTER TO THE RADIO
- SMS MESSAGE, ID MODE, ETC
- INDIVIDUAL CALL, GROUP CALL, ALL CALL, EMERGENCY/ALARM CALL, MESSAGE CALL, DATA CALL AND STUN AND WAKE-UP CALL
- PROGRAMMABLE FROM KEYPAD OR PC
- TRACKING VIA GPS LOCATION



PROFESSIONAL RADIO COMMUNICATION

The TP6000i series of mobile radios are designed for two way voice and data communication on the VHF and UHF PMR frequency bands. The TP6000i is a unique product as the design combines an outstanding mechanical robustness with state of the art technology and user friendliness. TP6000i is designed for compatibility with all the latest PMR signalling standards and formats and it is compatible with all the conventional signalling systems. The basic version of the TP6000i includes soft - and hardware for 127 channels DTMF encoder, FFSK encoder & decoder (without protocol).

Specifications:

General	UHF I	UHF II	VHF 2m	VHF 4m	Transmitter	
Frequency Range	350-410 MHz	400-470 MHz	135-174 MHz	68-88 MHz	Output power	Programmable in 4 steps 5 - 25 W
Number of channels	127	127	127	127	Spurious emission antenna and cabinet	< 0.25 µW or - 37 dBm
Channel spacing	12.5, or 20, 25 KHz				Max. Deviation	+/- 5 KHz / 25 KHz channel
Frequency error	± 2 ppm				Modulation distortion	< 5 % @ +/- 3.0 KHz
RF-bandwidth	60 MHz	70 MHz	38 MHz	20 MHz	Signal / noise ratio	45 dB
Mode of operation	Simplex / Semi-duplex (two frequencysimplex)				AF freq. Response	300 - 3000 Hz + 6 dB octave
Antenna impedance	50 Ohm				Power supply	13.2 V Nominal.
Temperature range	-25° to + 55°C				Current drain	@TX 25 W = > 6.5 A
Dimensions (transceiver only)	H. 155, W. 155, D. 37 mm				Stand-by	>200 mA
Weight (transceiver only)	800g				Signalling	
Receiver					CCIR, ZVEI, EEA & EIA.	Encoder & decoder for up to 3 sequences of 8 tones, programmable tone length, length of first tone & pre-amp. Individual Call, Group Call, All Call, Emergency Call, Text Message Call, Radio Stun Call, Radio Wake-up Call.
1. Intermediate freq.		45 MHz			CTCSS / DCS	Encoder & Decoder. Each channel can be programmed with different CTCSS tones.
2. Intermediate freq.		450 KHz			DTMF	Encoder.
Sensitivity @ 20 dB (25 KHz ch. spac.)	0.6 µV typ.	0.6 µV typ.	0.6 µV typ.	0.6 µV typ.	FFSK	Encoder & decoder: 1,200 & 2,400 bps.
SINAD EMF (12 dB)	0.35 µV typ.	0.35 µV typ.	0.35 µV typ.	0.35 µV typ.	Data (Option)	GMSK modulator & demodulator for up to 9,600 / 19,200 bps.
AF output power		4 W			Scanning	Up to 127 channels.
AF distortion		< 10 %				Priority channel scan (star mode) or sequential scan mode. Scanning stop on: carrier detect or carrier and tone (or data) detect.
AF freq. Response		300 - 3000 Hz - 6 dB / Octave			Option	8 digit Digital Scrambler
Signal / noise ratio		> 45 dB				
Co-channel rejection		- 8 dB				
Adjacent channel selec.		> 73 dB				
Spurious rejection		> 75 dB				
Intermodulation sel.		> 70 dB				
Blocking		> 100 dB				
Spurious conducted		> - 60 dBm				
Spurious radiated		> -70 dBm				
Squelch level		Programmable				

These specifications are in conformity with the European R&TTE Directive 1999/5/EC and meets the harmonized Standards EN 300 086, EN 300 113 & EN 300 489. CE approved according to the European EMC Directive 2004/108/EC

FEATURES:

(TP6000i IN COMBINATION WITH BE901)

FULL KEYPAD:

THE KEYPAD ENABLES DTMF DIALLING, CHANNEL SELECTION AND COMPOSITION OF ALPHANUMERIC MESSAGES ETC.

GRAPHIC DISPLAY:

CLEAR DISPLAY OF E.G. CHANNEL NAMES AND COMPOSED OR RECEIVED TEXT MESSAGES.

BAR GRAPH INDICATOR FOR BATTERY CHARGE STATUS OR RSSI.

CHANNEL SCANNING:

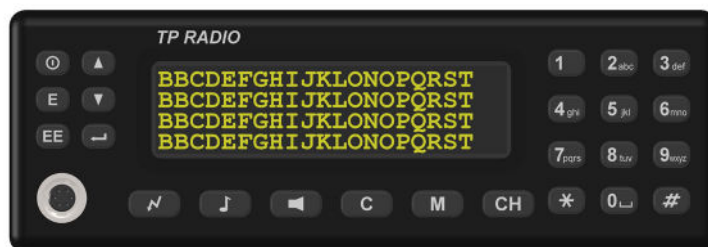
UP TO 127 CHANNELS. PRIORITY CHANNEL SCAN OR SEQUENTIAL SCAN MODE.

DATA OPTION:

BY ADDING A MODULE, THE TP6000i IS CONVERTED INTO A PROPER 9.6 / 19.2 KBPS DATA RADIO.

DIGITAL SCRAMBLER:

THE TP6000i IS AVAILABLE AS ANALOG OR ANALOG/DIGITAL MODE BY A 8 DIGIT DIGITAL SCRAMBLER FOR SECURE COMMUNICATION.



*Menus that are accessible from the keypad: DTMF, Abbreviated Number List, Data Telegram, TX Power, Programming, Setup & Service.

Sub-Menus to Programming menu: Channel (number, name, frequency, deviation, squelch & ID).

Sub-Menus to Setup menu: Alert tone, bar graph function, light automatic on / off, internal / external speaker - microphone & general version info.



TP RADIO

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