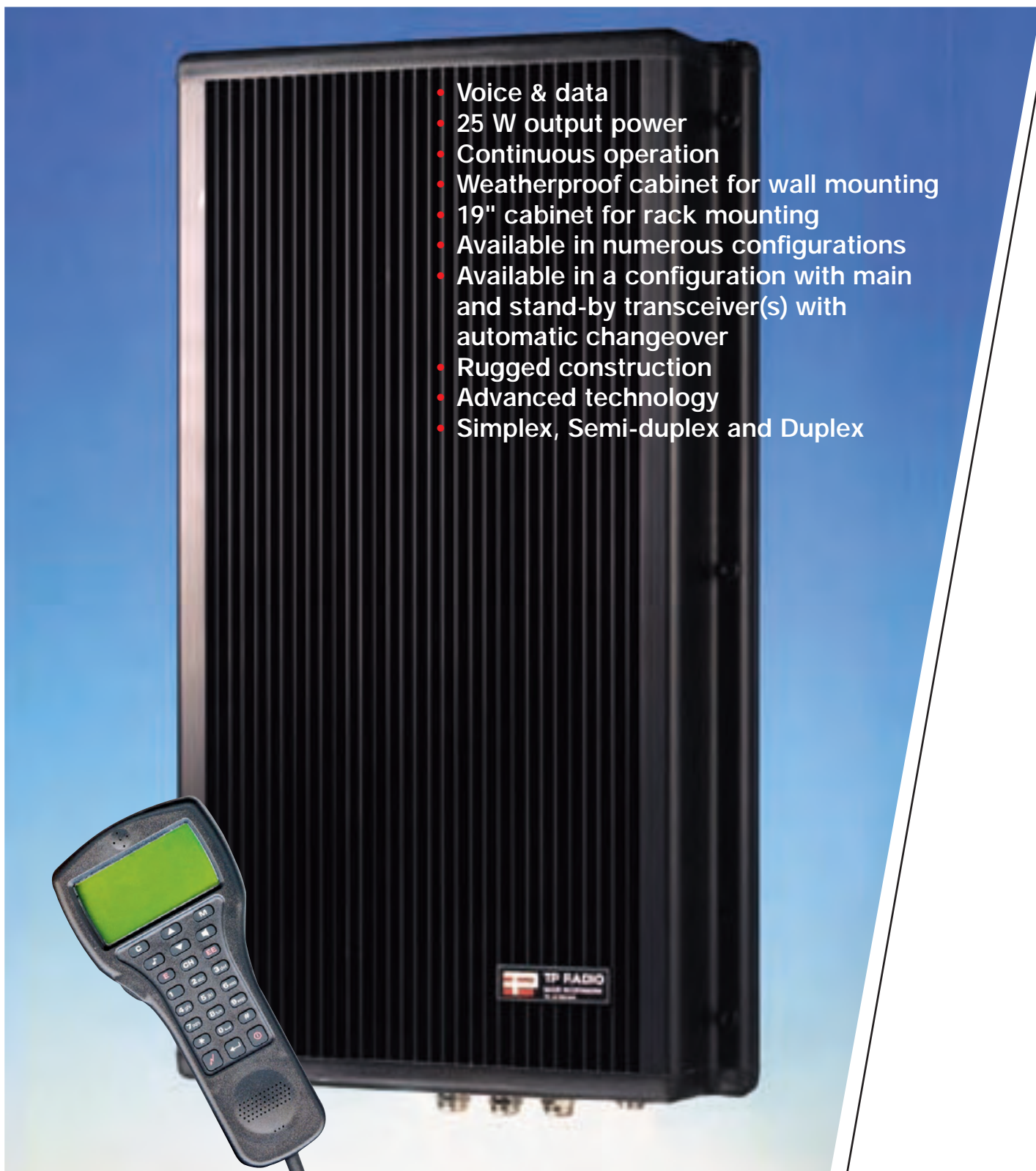


# BS2000 Base Station & Repeater

- for voice & data communication



- Voice & data
- 25 W output power
- Continuous operation
- Weatherproof cabinet for wall mounting
- 19" cabinet for rack mounting
- Available in numerous configurations
- Available in a configuration with main and stand-by transceiver(s) with automatic changeover
- Rugged construction
- Advanced technology
- Simplex, Semi-duplex and Duplex

## BE901

Extended Local Control Unit

- Remote control (max. 100 m)
- Display, keypad and function keys
- Display of calling party ID
- Simplex and Duplex

The BS2000 series of base stations and repeaters are designed for continuous operation under harsh climatic conditions and are available for all PMR frequency bands. The BS2000 is available for remote control via an AC telephone line.

**TP RADIO**  
37, Agenavej  
DK 2670 Greve  
Denmark  
Phone: +45 4390 6048  
Fax: +45 4390 5207  
E-mail: [sales@tpradio.dk](mailto:sales@tpradio.dk)  
Web: [www.tpradio.dk](http://www.tpradio.dk)

# BS2000 Base Station & Repeater

The BS2000 base stations and repeaters are designed for two-way voice and data communication in the UHF and the VHF PMR frequency bands.

The design of the BS2000 is modular and the cabinets are designed to house different transceivers, modules, I/O interfaces and control units, making the BS2000 very versatile.

The BK001 - 002 - 003 & BK004 BS2000 cabinets serve as a weatherproof enclosure where as the BK005 is a 2 HU, 19" rack cabinet. All cabinet types provide an effective heat sink allowing the BS2000 to operate on a 100 % duty cycle.

The BS2000 can be configured to fit a customers exact requirements in terms of: Frequency Band, Mode of Operation, Signalling System, Data or Voice or a combination of both, Supply Voltage / UPS and Output Power.

The BS2000 is available in a version with duplicated transceivers, which enables a hot and standby configuration with automatic switch-over to the standby transceiver(s) in case the main transceiver(s) turns faulty.

To facilitate the site service, the BK001 through BK004 cabinets are constructed in such a way that it can be opened in an 180° angle leaving all the parts freely accessible. The BS2000 cabinets meet the IP54 standard for ingress of dust and water.

The BS2000 can be configured as a stand-alone repeater or as local or remote controlled base station with or without repeat function.

The range of I/O Interfaces, Control Panels and Control Units for the BS2000 is extensive and available in almost every imaginable configuration.

In order to ensure the highest quality and reliability of the products, each TP Radio transceiver is exposed to an extensive final test procedure, which includes exposing the transceiver to a temperature cycle ranging from - 25 °C to + 55 °C, before leaving the factory.

## TECHNICAL SPECIFICATIONS

General	UHF*	VHF	VHF LOW			
Frequency range	422-470MHz	146-174MHz	68-88MHz	Adj. channel sel.	better than 73dB	(65db at 12.5 kHz)
Number of channels	up to 32, option 127			Spurious reject.	better than 75dB	
Channel spacing	12.5 - 20 or 25KHz			Intermod. atten.	70dB	
Frequency error	+/- 2KHz	+/- 1KHz	+/- 1KHz	Blocking	96dB	
RF-bandwidth	48MHz	28MHz	20MHz	Spurious conducted	less than - 60dBm	
Mode of operation	Simplex/Semi-duplex/Duplex (with filter)			Spurious radiated	less than - 70dBm	
Antenna impedance	50 Ohm			Squelch	internal adjustable level	
Temperature range:						
Specifications	- 25°C to +55°C			<b>Power Supply</b>		
Operating	- 30°C to +70°C			110/120 or 220/240 VAC 50/60 Hz, or 13.2VDC - max. 8 Amps at 25W TX power.		
Dimensions	W320 x D125 x H530 mm			Emergency or back-up power supply according to customer specifications.		
Weight	Fully equipped BS2000 approx.: 14 Kg					
				The total power consumption is dependent of the modules used.		
<b>Transmitter</b>				<b>Signalling</b>		
Output power	5 - 25W *1 (20W after duplex filter) internal adjustable			Standard systems CCIR / ZVEI / EEA / CTCSS and DTMF.		
Adj. Channel power	78 dB below carrier			Data transmission: FFSK 1,200, 2,400 and 4,800 bps. GMSK: 9,600, 19,200 and 26,400 bps. on 25 KHz channel spacing.		
Intermod. attenuation	40dB (70dB with circulator)					
Spurious conducted	less than - 40dBm					
Spurious radiated	less than - 45dBm					
Max.deviation	+/- 2.5 +/- 4 +/- 5KHz					
Mod. distortion	less than 2% at +/- 3KHz					
Signal/noise ratio	42dB	45dB	45dB			
AF-response	300 - 3000Hz + 6dB/octave					
<b>Receiver</b>						
1. Intermediate freq.	45MHz			* UHF available from 335 MHz.		
2. Intermediate freq.	450KHz			*1 Transmitter RF output power higher than 25 W, is available for specific frequency bands on request.		
Sensitivity:						
at 20 dB SINAD	0.40µV	0.35µV	0.5µV			
AF output Power	3W at 10% dist. into 8 Ohm			TP Radio products are subject to continuous developments.		
AF freq. response	300 - 3,000Hz - 6dB/octave			TP Radio reserve the right to change specifications without notice.		
Signal/Noise ratio	45dB	48dB	48dB	All the values specified are typical.		
Co-channel Reject.	- 3dB					

The specifications above are in conformity with the (European Telecommunications Standards) ETS 300 086, ETS 300 113, ETS 300 219 and ETS 300 279 for Private Mobile Radio (PMR). The BS2000 is CE approved according to EC directive 89/336/EEC.



Agenavej 37 • DK-2670 Greve • Denmark  
Phone: +45 4390 6048  
Telefax: +45 4390 5207  
E-Mail: [sales@tpradio.dk](mailto:sales@tpradio.dk)  
Web: [www.tpradio.dk](http://www.tpradio.dk)

Dealer: