

# VHF/UHF FM PORTABLE TRANSCEIVERS

## PRS 600 series



- ☞ Microprocessor Controlled
- ☞ Synthesized, Wide-Band
- ☞ Up to 400 Channels
- ☞ Selective Call Features
- ☞ Sub-Audio Tones (CTCSS)
- ☞ **Field Programmable**
- ☞ Robust Waterproof Case

**DESCRIPTION**

The PRS 600 series of VHF/UHF FM portable transceivers is intended for today and tomorrow's Professional Mobile Radiocommunications (PMR).

The basic equipment is a fully synthesized transceiver, supported by powerful microprocessor, providing a large variety of options.

The Surface Mounting Technology (SMT) is applied throughout entire equipment manufacturing process. Complex and sophisticated electronics are housed in a rugged light aluminum alloy case, dust and waterproof.

Different sizes and capacity of the 9,6 V rechargeable NiCad batteries support the transmitter ability to increase RF output power without additional RF amplifier.

Broadband design concept provides meaningful switchable bandwidths for both transmitter and receiver, without performance degradation.

Selective calling and related features are accomplished as a variety of hardware options, supported by the appropriate software. "Select-five" ton-sequential protocol CCIR-257-1 (00ms or 70ms) is applied.

Sub-audio signaling (CTCSS) chip is provided and may be used for Repeater pass-through, different on each channel.

Field reprogrammability of the transceiver's operational parameters (channel frequencies, sel call and identity number, sub-audio frequencies, transmit time limiting) is performed by cloning from one transceiver to THE other-one. The initial parameters are program-med by PC, using the furnished transceiver-to-PC cable-interface and the end-user program (floppy-disk) .

There are two basic version of the transceiver:

- **PRS 600** is the generic version with up to 12 (out of 400) selectable Channels; automatic Identification, Emergency, Sel Call with auto-matic Acknowledgement and the High/Low transmitter power control.

- **PRS 600T** is provided by a 16-button keyboard and a LCD bright special icons display, featuring in excess:

- Selection up to 400 successive radiochannels (25 kHz)
- Cross-calling within the network
- Calling activity monitoring on the selected channel (Busy)
- Selected RF power (H/L)
- Loudspeaker status (locked/non-locked)

Large number of accessories are provided in order to satisfy specific customer's needs:

- Heliflex antenna
- Extended mike/speaker
- Rechargeable 9,6 V NiCad batteries: 700 mAh; 1,0 Ah
- Practical leather case
- Single-battery fast charger
- Multiple-battery fast charger



*Keyboard version of the family  
**PRS-600T***

**TECHNICAL SPECIFICATIONS**

<b>GENERAL</b>			
Operating meter band (m)	0.7	2	4
Frequency range (MHz)	430 - 470	146 - 174	68 - 88
Number of selectable channels (S+SD)	PRS-600:1-2; PRS-600T: up to 400		
System rated channel spacing (kHz)	25		
Channel step (kHz)	12.5		
Operating mode	S; SD; S + SD		
Class of emission	16G3E		
Operating temperature range (°C)	- 25°C to +55°C		
Frequency stability (ppm)	± 2.5 (TCXO)	± 5	± 8
Supply voltage	9.6VDC, negative ground		
Dimensions HxWxD; Weight	Battery 0.7Ah	194x63x35 mm; 570 g	
	Battery 1.0Ah	211x63x35 mm; 670 g	
<b>TRANSMITTER</b>			
Output RF power (W)	1.5 or 4, programmable on each channel		
Spurious signals (µW)	≤ 0.25		
Maximum system rated deviation (kHz)	± 5		
Audio-frequency response (300-3000Hz)	+3dB /-3dB resp. +6dB /oct		
Total harmonic distortion (%)	< 5		
Microphone, built-in	electret; disconnected when using MiZ-6		
<b>RECEIVER</b>			
Type	Double heterodyne		
Sensitivity for 12dB SINAD (µV)	Better than 0.5		
Adjacent channel selectivity (dB)	>70		
Intermodulation rejection (dB)	>70		
Spurious response rejection (dB)	>70		
Audio-frequency response (300-3000Hz)	+3dB/-3dB resp. -6dB/oct		
Maximum output audio level (W)	0.3		
Total harmonic distortion (%)	< 5		
Loudspeaker, built-in	25Ohm; 0.35W; disconnected when using MiZ-6		
<b>SELECTIVE CALL AND SIGNALING</b>			
"Select-five" - sequential	CCIR Rec. 257-1 (100ms or 70ms)		
Continuous sub audio tone	CTCSS; programmable on each channel		

- May be changed without notice -



Single battery charger JPB-600 with inserted PRS-600



PRS-600 with carrying case and belt



Extended speaker-microphone MiZ-6; Batteries : 1Ah and 700mAh



PRS-600 with antenna AH-6 and MiZ-6