

Prima-MV

Airborne intergated VHF radio set
for telephone radio communication

Prima-MV radio set is intended for providing telephone radio communication on the fxd frequencies of VHF range between aircraft and ground control unit.



Transceiver

Control panel



Prima-MV radio provides simultaneously functions of 4 devices:

- transceiver;
- intercommunication system (ICS) (up to 3 users);
- voice warning system (VWS) (up to 32 messages);
- marker receiver.

The radio set provides:

- preliminary VHF radio communication channels programming;
- monitoring of the emergency channel in VHF range; audio and light indication of the signal on the emergency channel frequency (121.5 MHz);
- voice messages generation according to the signals from information and control aircraft transducers;
- reception of the airborne marker beacons radio signals from additional antenna input; audio and light indication of the radio signals;
- voice information transmission to cockpit voice recorder;
- voice information transmission to external loudspeaker;
- controlling all the functions from its own or external control panel (CP).

The radio set provides the following telephone communication:

- external two-way simplex radio communication for one pilot (with listening to the conversations by other pilot);
- external two-way simplex radio communication for one pilot via additional radio set;
- internal radio communication in ICS mode (conference-call) between two pilots and one passenger with volume control;
- listening by each pilot:
 - navigation systems signals with volume control;
 - the signals from the special signals transducers with volume control;
 - voice messages, generated in the radio set;
 - marker radio beacons from embedded marker receiver

Specifications:

Parameter	Value
Frequency range, MHz	118-136.991
Frequency spacing, kHz	25/8.33
Guard receiver frequency, MHz	121.5
Output for external equipment connection SELCAL	available
Frequency relative error	$5 \cdot 10^{-6}$
Emission class	A3E
Transmitter carrier power (nominal/low), W	10/4
Receiver sensitivity, μ V	1.5
The number of the preprogrammed radio channels	40
The quantity of the connected to the radio set:	
headsets of the pilots/passengers	2/1
radio navigation devices (NAV)	2
special signals transducers (SST)	4
channels for cockpit voice recorder	2
external loudspeakers	1
additional radio sets	1
Frequency range for internal communication, Hz	300-4000
The quantity of the connected information/control VWS transducers	24/8
The quantity of the generated voice messages	до 32
Power supply, V	27
Power consumption (Tx/Rx), max, W	10/50
Dimensions (with control panel), mm	146x64x232
Weight (with control panel), kg, maximum	1.4
Mean time between failures, hours	5000