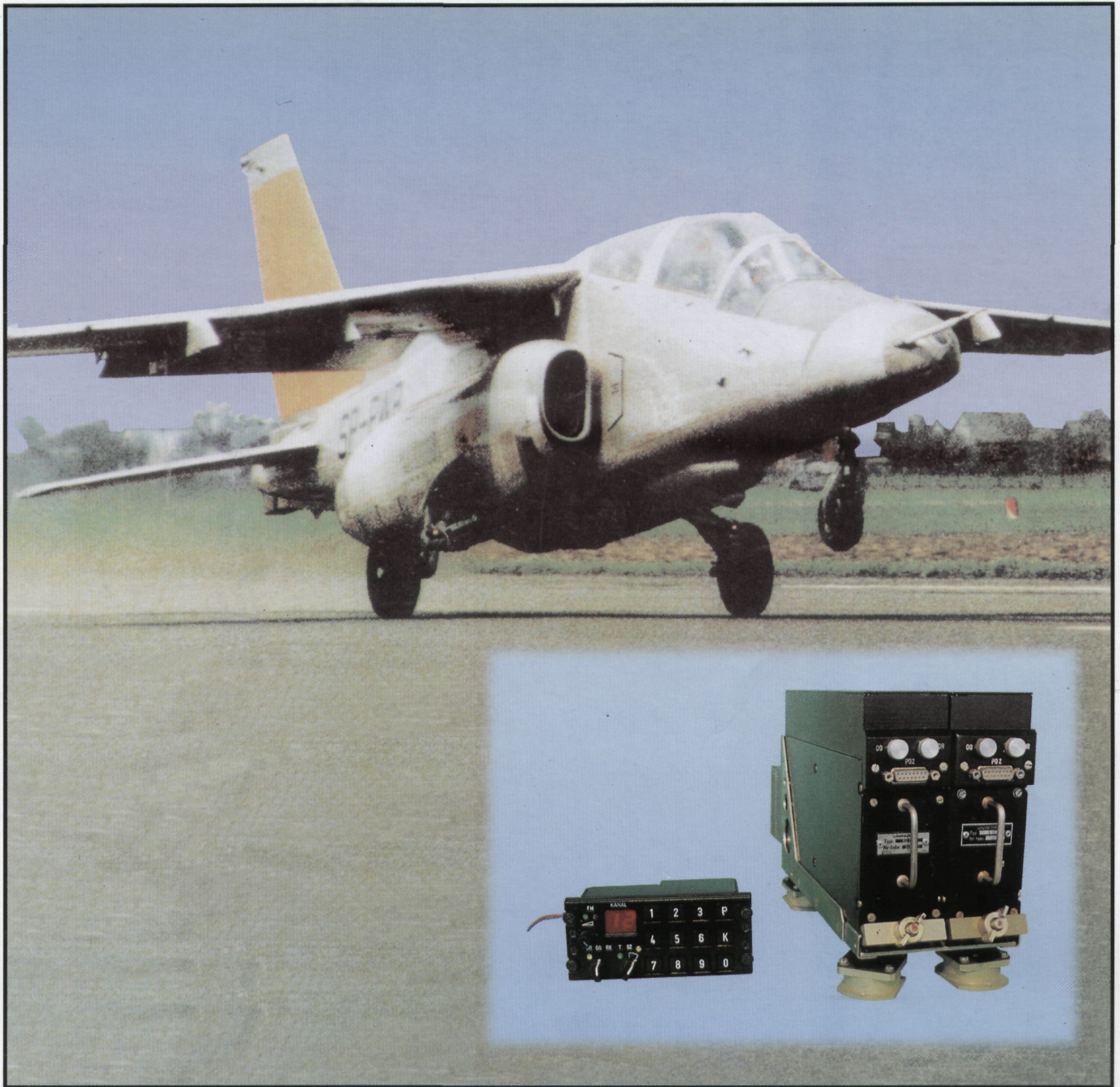


## AIRBORNE VHF/UHF COMM TRANSCEIVER RS 6113-2



The RS 6113-2 is a 16W VHF/UHF transmitter/receiver from the family of the new generation VHF/UHF modular airborne equipment developed by UNIMOR. This remote control transceiver is designed to meet operational and logistic requirements of modern aviation in the extended VHF AM band (110 - 149.975MHz), VHF FM band (110 - 159.975 MHz) and the UHF AM band (220 - 399.975MHz).

20 preset channels are selected by push-button keyboard (control unit PR 6163). Channel number display dimmed automatically according to the cockpit ambient light level. Dual control of a single panel radio RS 6113-2 is made possible with the use of PR 6163 with a "Take-Command Switch". A separated guard receiver provides an emergency signal reception on the frequency of 121.5 MHz or 243 MHz. The integrated built-in test allows either pre-or in-flight test of the main function set. The RS 6113-2 was designed with a view to obtain maintenance being kept on the simplest level. 100% plug-in modules can be replaced without a need of specific test-bench or extensive re-adjustment. This results with high operational dependability obtained with the RS 6113-2.



# AIRBORNE VHF/UHF COMM TRANSCEIVER RS 6113 - 2

## GENERAL:

### POWER SUPPLY

27 V DC  $\pm 10\%$   
(below 24 V transmitter output power reduction of 6 dB)

### POWER CONSUMPTION

reception – max. 30 W, transmission – max. 200 W

### FREQUENCY RANGE

main receiver – 110.00 – 159.975 MHz and 220.00 – 399.975 MHz,  
guard receiver – 121.5 and 243 MHz

### CHANNEL SPACING

25 KhZ

### NUMBER OF PRESET CHANNELS

up to 20 (non-volatile memory)  
100 channels optionally

### OPERATING TEMPERATURE

$-46^{\circ}\text{C}$  to  $+60^{\circ}\text{C}$

### OPERATING ALTITUDE

20 000 m

### ENVIRONMENTAL CONDITIONS

RTCA DO – 160

### WEIGHT

main block RS 6113-2 – 7,9 kg  
control unit PR 6163 – 0,65 kg  
shock mount – 2,5 kg

## RECEIVERS:

### SENSITIVITY

$2\ \mu\text{V}/6\ \text{dB}$  (S+N)/N

### SELECTIVITY

(in all env.cond.), main receiver RS 6107  $\pm 14\ \text{kHz}/6\ \text{dB}$   
 $\pm 43\ \text{kHz}/60\ \text{dB}$   
guard receiver  $\pm 12\ \text{kHz}/6\ \text{dB}$   
 $\pm 43\ \text{kHz}/60\ \text{dB}$

### AGC

$5\ \mu\text{V}$  – 100 mV/3 dB

### AUDIO OUTPUT

(AF compressor), 1 W into 8 ohm, 0,5 W into 1600/300 ohm

### AUDIO RESPONSE

300 – 3000 Hz/3 dB

### SUPERIOUS REJECTION

60 dB down (typ. 80 dB)

### DISTORTION

less than 10 %

## TRANSMITTER:

### OUTPUT POWER

at VHF output 16 W, at UHF output 15 W (carrier)  
at common VHF/UHF output 12 W (carrier)

### FREQUENCY ACCURACY

$\pm 2\ \text{kHz}$  (in all env. cond.)

### MODULATION FACTOR

(compressor) A3E – min. 85%/200 mV micro input level  
F3E dev. 2 – 7 kHz

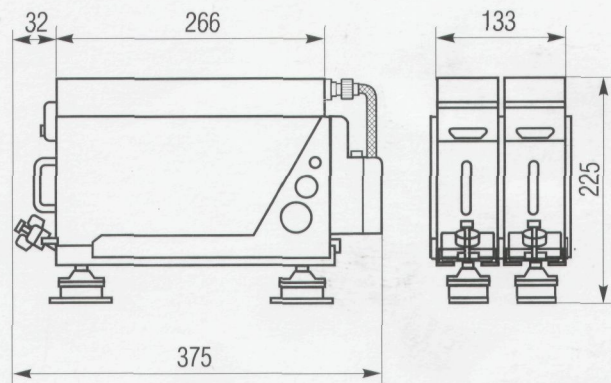
### DISTORTION

less than 10 %

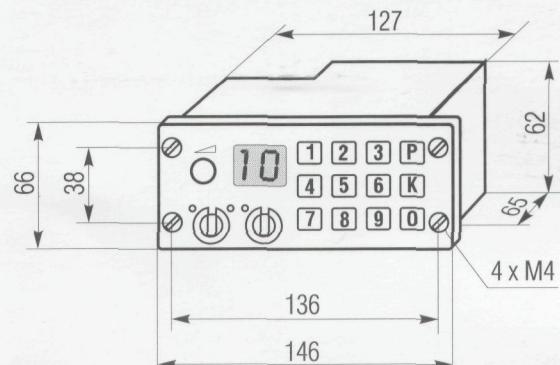
### ANTENNA MATCH

3 : 1 mismatch. Protection to withstand greater mismatch  
incl. open or short circuit

TRANSCEIVER RS 6113-2



CONTROL UNIT PR 6163-2



Gdańskie Zakłady Elektroniczne S.A. UNIMOR  
Zakład Urządzeń Profesjonalnych  
80 - 298 Gdańsk, ul. Budowlanych 38, Poland  
phone: +48(58) 47 - 82 - 44, 47 - 52 - 58  
fax +48(58) 475 - 487