



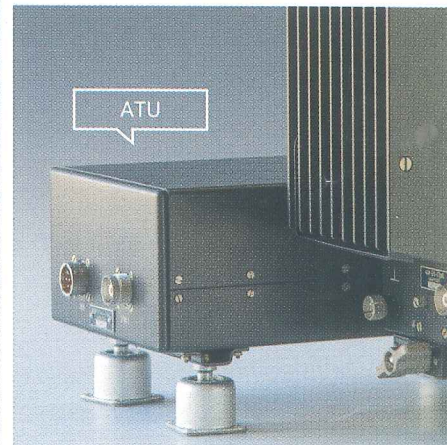
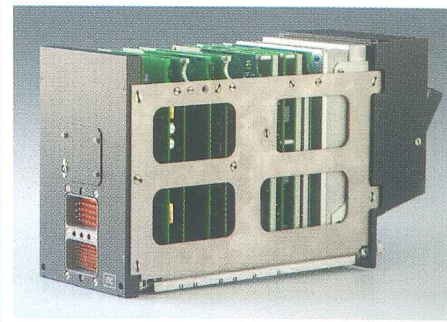
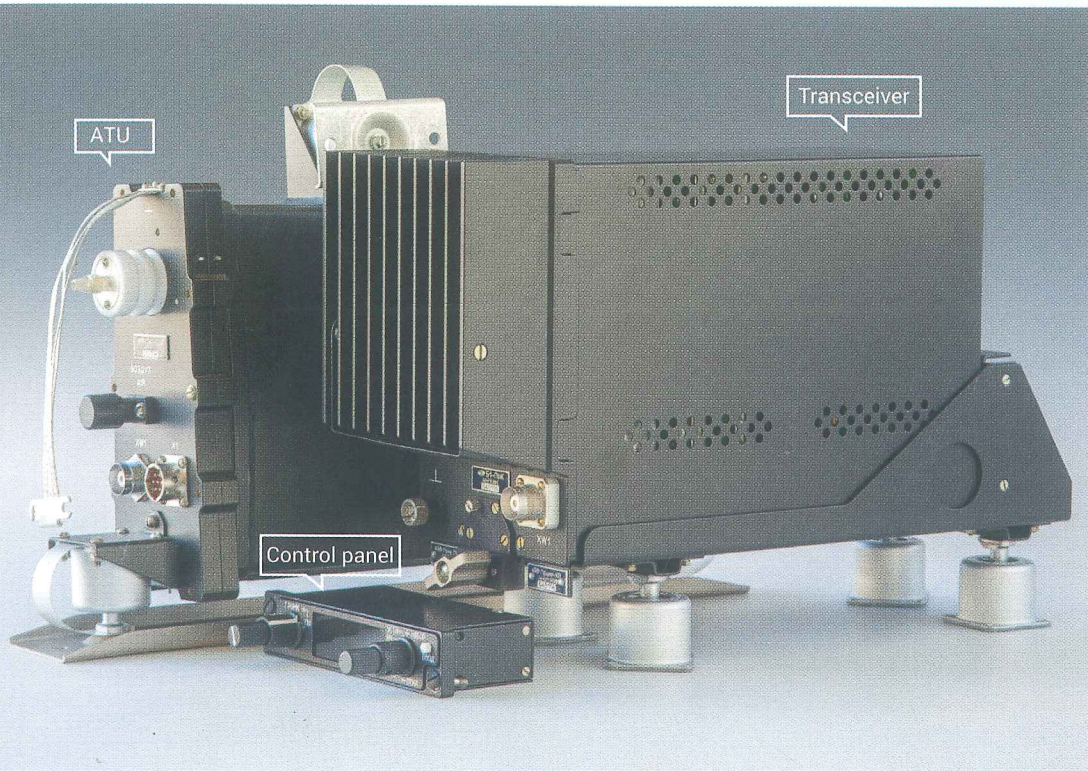
ELCOM GROUP

PRIMA



Airborne HF radio

HF radio set is intended for telephone and data transmission communication on fixed HF range frequencies between aircrafts and ground communication units. This radio set can be installed at any type of the aircraft due to its different versions availability. The radio set doesn't require forced cooling.



The radio set composition:

Radio set consists of:

- transceiver – B1 PrK (B1A-PrK or B1B-PrK) unit, installed at PrK or B10A-PrK mount;
- antenna tuning unit is one of the units:
- B5A1-PrK (non hermetic, for capacitance antennas);
- B5A2-PrK (hermetic, for inductance antennas);
- B5B2-PrK (non hermetic, for inductance antennas).

The following control panels can be the component of the radio set:

- B7-PrK unit (with white highlight);
- B7B-PrK unit (with red highlight);
- B7G-PrK unit (with green highlight);
- B7D-PrK unit (with green highlight);

PRIMECOM

SPECIFICATIONS:

| Parameter | Value |
|--|--|
| Freequency range, MHz | 2,000 – 29.9999 |
| Frequency spacing, Hz | 100 |
| Frequency relative accuracy | $5 \cdot 10^{-7}$ |
| Emission class | J3E, H3E/A3E, R3E, F1B, G1B, J7D |
| (for versions with ALE modes) | M-PSK, QAM with data rate 75...9600 bit/s |
| Emission power (peak), W | 100 |
| Receiver sensitivity, μ V: (for versions with ALE mode), μ V, max: | |
| J3E, R3E, F1B, G1B | 1 |
| A3E | 4 |
| (M-PSK, QAM) | (0,5) |
| The number of programmable channels | 40 |
| Duty cycle (Tx/Rx), min | 1/3 |
| Data rate in vocoder communication modem mode, bit/s | 1200 |
| Average tuning time, s | 1 |
| Operating altitude , m: | |
| radio set with B5A1-PrK or B5B2-PrK unit | 10000 |
| radio set with B5A2-PrK | 28000 |
| Power supply, DC,V: | |
| radio set with B1-PrK (B1A-PrK) unit | 24 – 29.4 |
| radio set with B1B-PrK unit | 22.14 – 29.7 |
| Power consumption , W | 390 |
| Selective calling mode (SELCAL) | available |
| Automatic link establishment (ALE) | in versions with B1D-PrK, B1E-PrK units |
| Interfaces (for versions with ALE mode): | |
| control | RS-422, RS-232, ГОСТ 18977, (Ethernet, CAN) |
| information | C1-ТЧ, C2, C1-ФЛ, (RS-422, Ethernet) |
| Operating temperature, °C: | |
| high | + 60 |
| low | - 55 |
| Dimensions (for versions with ALE mode) (WxHxD), mm: | |
| B1 ... -PrK (on PrK mount) | 133x255x397 (131x211x393) |
| B5A2-PrK | 92x280x440 |
| B5B2-PrK, B5B2K-PrK | 152x110x283 |
| B5A1-PrK | 156x140x330 |
| B7 ... -PrK | 146x32x116 |
| Weight (for versions with ALE mode), kg: | |
| B1 ... -PrK | 5.9 (7.1) |
| B5A2-PrK | 3.7 |
| B5B2-PrK | 2.5 |
| B5A1-PrK | 3 |
| B7 ... -PrK | 0.35 |
| PrK mount | 1 |
| Meantime between failures, h | 5000 |

This publication is not to be regarded as a complete system specification, or to be used as a contract document. We reserve the right to change the design or specifications without prior notice.

