

JSC "Sarapulsky Radiozavod "



Complex of HF and FM radio communication means

R-168 «AKVEDUK»



«P-168-25V -2» VEHICULAR RADIO SET

The P-168-5VH-2 vehicular multichannel FM radio set with two independent receive and transmit paths provides open and secure radio communication at mounting on wheeled and tracked vehicles.

BEST PRACTICE AND HERITAGE





## Constant communication!

*JSC «Sarapulsky Radiozavod» is a unique page in the history of the Russian radio industry.*

For more than hundred years our enterprise works for increasing the defense potential of the country. During this time the enterprise gained popularity as manufacturer of the high-quality radio equipment for commercial purpose and for special appointment.

Today experience and united work of the staff allow designing and producing of radio facilities, which do not have analogs in Russia, with whole new level of data processing, delivery and protection. Effective systems and complexes of communication are demanded not only in the Russian Defense Ministry, but also in other institutions.

Products of new generations for us are guarantee of execution of difficult tactical tasks in providing safety of the country and protecting the lives of staff of special squads.

In the work we rely on responsible partners and always are open for mutually profitable business relationship.



Генеральный директор  
АО «Сарапульский радиозавод»  
К.Р. Абдрахманов





## «R- 163-25U» MOBILE RADIO SET

AKVEDUK



### Purpose

The FM R-168-25U mobile radio set provides radio communication in the radio networks of the regiment-squadron-company tactical command level.

#### Types of Operation:

- FM telephony;
- secure voice telephony;
- data transmission.

#### Modes of Operation:

- fixed frequency (simplex, two-frequency simplex);
- frequency hopping (simplex);
- adaptive communication (simplex, two-frequency simplex);
- scanning reception at 8 preset frequencies;
- operation with a noise suppressor;
- repeating
- manual and automated recording of radio data from the radio data input device with an optical interface (UVRD-O) or from an external computer (frequency and address change);
- emergency cancellation of radio data;
- transmission and reception of circular, address and voice-frequency calls;
- operation on 8 pre-prepared channels;
- control from an external computer via the RS-232C joint;
- voice informant of operator actions;
- dialog mode;
- computer-aided performance monitoring.

### Basic Specifications:

- frequency range, MHz	30...107.975
- frequency spacing, kHz	25
- receiver sensitivity, $\mu$ V	1.0
- attenuation of spurious receive channels, dB	80
- transmitter output power, W	1.0; 8.0; 40.0
- attenuation of harmonic components of the transmitter frequency, dB	50
- communication range, km:	
* antenna R-168BSHDA:	
analog data, at preset frequency operation in all operating modes	up to 20
digital data, in all operating modes	up to 17
* antenna R-168SHDAM:	
analog data, at preset frequency operation in all operating modes	up to 40
digital data, in all operating modes	up to 35
- frequency instability	$\pm 2.0 \times 10^{-6}$
- time to failure, hours	4000
- operating temperature range, °C	minus 40...+55
- dimensions (width, depth, height), mm:	
transceiver	394x207x222
- weight, kg:	
transceiver	27
operating set of the radio set	60



MOBILE RADIO SET



# "R- 163-100U" MOBILE RADIO SET



## Purpose

The mobile FM R-168-100U radio set provides radio communication in the radio networks of the regiment-squadron-company tactical command level.

### Types of Operation:

- FM telephony;
- secure voice telephony
- data transmission.

### Modes of Operation:

- fixed frequency (simplex, two-frequency simplex);
- frequency hopping (simplex);
- adaptive communication (simplex, two-frequency simplex);
- scanning reception at 8 preset frequencies;
- operation with a noise suppressor;
- repeating
- manual and automated recording of radio data from the radio data input device with an optical interface (UVRD-O) or from an external computer (frequency and address change);
- emergency cancellation of radio data;
- transmission and reception of circular address and voice-frequency calls;
- operation on 8 preprepared channels;
- control from an external computer via the RS-232C joint;
- voice informant of operator actions;
- dialog mode;
- computer-aided performance monitoring.



## Basic Specifications:

- frequency range, MHz	30...107.975
- frequency spacing, kHz	25
- receiver sensitivity, $\mu V$	1.0
- attenuation of spurious receive channels, dB, min	80
- output power of the transmitter, W	1.0; 8.0; 40.0; 120
- attenuation of harmonic components of the transmitter frequency, dB	50
- communication range, km: antenna R-168BSHDA:	
*analog data, at preset frequency operation in all operating modes	up to 30
digital data, in all operating modes	up to 25
- antenna R-168SHDAM:	
analog data, at preset frequency operation in all operating modes	up to 60
digital data, in all operating modes	up to 55
- frequency instability, max	$\pm 2.0 \times 10^{-6}$
- time to failure, hours, min	3000
- operating temperature range, $^{\circ}C$	minus 40...+55
- dimensions (width, depth, height), mm:	
receiver-exciter	210x207x222
transmitter	290x355x280
- weight of the operating set, kg, max	61







# "R-168-UP" MOBILE RADIO RECEIVER

AKVEDUK



## Purpose

The vehicular FM R-168UP radio receiver provides open and secure radio communication in the radio networks of the tactical control link when installed in objects on a wheeled or armored base with board mains of 27V.

### Types of Operation:

- FM telephony;
- telephony with technical voice securing at the rate of 16 Kbps;
- data reception with technical securing at the rate from 1.2 to 16 Kbps.

### Modes of Operation:

- frequency hopping;
- scanning reception at 8 preset frequencies;
- operation as part of a repeater;
- operation with a noise suppressor;
- operation with a pulse jamming suppressor;
- manual and automated storing of radio data;
- receiving circular, address and voice-frequency calls;
- operation on 8 pre-prepared channels;
- operation control from remote control or from a combined control panel;
- operation control from an external computer of the object via the RS-232C joint;
- computer-aided performance monitoring.



## Basic Specifications:

- frequency range, MHz	30...107.975
- frequency spacing, kHz	25
- receiver sensitivity, $\mu$ V, better than	1.0
- attenuation of spurious receive channels, dB, min	80
- frequency response to blocking at $\pm 10\%$ , dB / $\mu$ V offset, min	150
- frequency instability, max	$\pm 2.0 \times 10^{-6}$
- time to failure, hours, min	4500
- operating temperature range, $^{\circ}$ C	minus 50...+60
- dimensions, mm	210x207x222
- receiver unit weight, kg, max	15

MOBILE RADIO RECEIVER





# "R-168-25U-2" VEHICULAR RADIO SET



AKVEDUK



## Purpose

The mobile FM R-168-25U-2 radio set provides radio communication in the radio networks of the regiment-squadron-company tactical command level.

### Types of Operation:

- FM telephony;
- secure voice telephony
- data transmission.

### Modes of Operation:

- fixed frequency (simplex, two-frequency simplex);
- frequency hopping (simplex);
- adaptive communication (simplex, two-frequency simplex);
- scanning reception at 8 preset frequencies;
- operation with a noise suppressor;
- repeating
- manual and automated recording of radio data from the radio data input device with an optical interface (UVRD-O) or from an external computer (frequency and address change);
- emergency cancellation of radio data;
- transmission and reception of circular, address and voice-frequency calls;
- operation on 8 pre-prepared channels;
- control from an external computer via the RS-232C joint;
- voice informant of operator actions;
- dialog mode;
- computer-aided performance monitoring.



## Basic Specifications:

- frequency range, MHz	30...107.975
- frequency spacing, kHz	25
- receiver sensitivity, $\mu$ V, max	1.4
- attenuation of spurious receive channels, dB, min	80
- transmitter output power, W, min	0.25; 1.5; 4.0; 8.0; 40.0
- attenuation of harmonic components of the transmitter frequency, dB	50
- communication range, km:	
*on the R-168BSHDA antenna:	
analog data, at preset frequency operation in all operating modes	up to 20
digital data, in all operating modes	up to 17
*on the antenna R-168SHDAM:	
analog data, at preset frequency operation in all operating modes	up to 40
digital data, in all operating modes	up to 35
- frequency instability	$\pm 1.0 \times 10^{-6}$
- time to failure, hour	4500
- operating temperature range, °C	minus 40...+55
- dimensions (width, depth, height), mm:	
transceiver	205x175x95
unit VUFUS-25 (unit VUFUS-100)	428x248x239 (428x248x239)
BV-25 fan unit	397x203x60
- weight, kg:	
transceiver	3
unit VUFUS-25 (unit VUFUS-100)	9(18)
BV-25 fan unit	1.7

VEHICULAR RADIO SET







# RADIO SET "R-168-25U-2" OF THE FOURTH VERSION

AKVEDUK



## Purpose

This digital multichannel FM radio set is designed to provide open or secured (with the help of external equipment for secure communication) 24-hour radio communication in conditions of medium-cross terrain, at any time of year, when installed in wheeled or tracked mobile objects.

### Types of Operation:

- FM telephony;
- telephony with technical voice securing at the rate of 16 Kbps;
- reception and transmission of data with technical securing at the rate from 1.2 to 16 Kbps;

### Modes of Operation:

- simplex;
- two - frequency simplex;
- frequency hopping;
- adaptive automated communication;
- scanning reception at 8 preset frequencies;
- repeating
- operation with a noise suppressor;
- manual and automated storing of radio data from the radio data input device with optical interface (UVRD-O) or from an external computer (frequency and address change);
- transmission and reception of circular, address and voice-frequency calls;
- operation on 8 pre-prepared channels;
- operation control from an external computer of an object via the RS-232C joint;
- computer-aided performance monitoring.



## Basic Specifications:

- frequency range, MHz	30...108 and 390...440
- frequency spacing, kHz	25
- receiver sensitivity, $\mu$ V, better than	1.4
- attenuation of spurious receive channels, dB, min	110
- output power of the transmitter, W, min:	
- range I	40
- range II	30
- communication range, km, min, with output power of 40 W:	
- in range I on the antenna R-168BSHDA	20
- on the antenna R-168SHDAM	40
- in range II:	
- with increased power	15
- at rated power	8
- frequency instability, max	$\pm 4.5 \times 10^{-6}$
- time to failure, hour, min	4500
- operating temperature range, °C	minus 40... +55
- dimensions, mm	
- VUFUS unit	428x248x239
- weight of the operating set, kg, max	30

RADIO SET OF THE FOURTH VERSION





# MOBILE RADIO SET "R-168-100U-2"



## Purpose

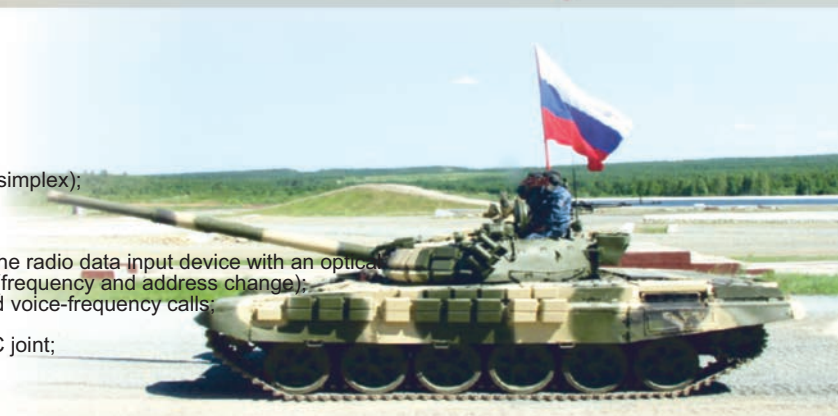
The mobile FM R-168-100U-2 radio set provides radio communication in the radio networks of the regiment-squadron-company tactical command level.

### Types of Operation:

- FM telephony;
- secure voice telephony;
- data transmission.

### Modes of Operation:

- fixed frequency (simplex, two-frequency simplex);
- frequency hopping (simplex);
- adaptive communication (simplex, two-frequency simplex);
- scanning reception at 8 preset frequencies;
- operation with a noise suppressor;
- repeating
- manual and automated storing of radio data from the radio data input device with an optical interface (UVRD-O) or from an external computer (frequency and address change);
- transmission and reception of circular, address and voice-frequency calls;
- operation on 8 preprepared channels;
- control from an external computer via the RS-232C joint;
- voice informant of operator actions;
- dialog mode;
- computer-aided performance monitoring.



## Basic Specifications:

- frequency range, MHz	30...107.975
- frequency spacing, kHz	25
- receiver sensitivity, $\mu$ V	1.4
- attenuation of spurious reception channels, dB	80
- output power of the transmitter, W	0.25; 1.5; 4.0; 8.0; 40.0; 100.0
- attenuation of harmonic components of the transmitter frequency, dB	50
- communication range, km:	
antenna R-168BSHDA:	
analog data, at preset frequency operation in all operating modes	up to 30
digital data, in all operating modes	up to 25
antenna R-168SHDAM:	
analog data, at preset frequency operation in all operating modes	up to 60
digital data, in all operating modes	up to 55
- frequency instability	$\pm 1.0 \times 10^{-6}$
- time to failure, hour	4500
- operating temperature range, $^{\circ}$ C	minus 40...+55
- dimensions (width, depth, height), mm	
transceiver	205x175x95
unit VUFUS-25 (unit VUFUS-100)	428x248x239(428x248x239)
UM-100 unit	394x213x241
BV-25 fan unit	397x203x60
- weight, kg:	
transceiver	3
unit VUFUS-25 (unit VUFUS-100)	19(18)
UM-100 unit	20
BV-25 fan unit	1.7

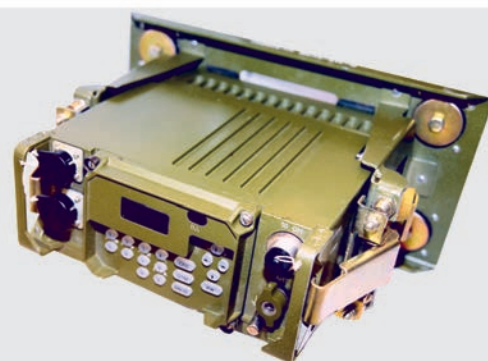






# MOBILE RADIO SET R-168-5UT-2

AKVEDUK



## Purpose

The mobile FM R-168-5UT-2 radio set provides radio communication in the radio networks of the regiment-squadron-company tactical command level.

### Type of operations:

- FM telephony;
- secure voice telephony
- data transmission.

### Modes of Operation:

- fixed frequency (simplex, two-frequency simplex);
- frequency hopping (simplex);
- adaptive communication (simplex, two-frequency simplex);
- scanning reception at 8 preset frequencies;
- operation with a noise suppressor;
- repeating
- manual and automated recording of radio data from the radio data input device with an optical interface (UVRD-O) or from an external computer (frequency and address change);
- emergency cancellation of radio data;
- transmission and reception of circular, address and voice-frequency calls;
- operation on 8 preprepared channels;
- effective reception;
- remote control from a remote telephone;
- control from an external computer via the RS-232C joint;
- voice informant of operator actions;
- dialog mode;
- computer-aided performance monitoring.



## Basic Specifications:

- frequency range, MHz	30...107.975
- frequency spacing, kHz	25
- receiver sensitivity, mcV	0.8
- attenuation of spurious receive channels, dB	80
- output power of the transmitter, W	0.25; 2.0; 8.0
- attenuation of harmonic components of the transmitter frequency, dB	40
- communication range, km	
- TSHDA antenna:	up to 12
analog data, at preset frequency operation in all operating modes	up to 10
digital data, in all operating modes	$\pm 1.0 \times 10^6$
- frequency instability	4500
- time to failure, hour	minus 40...+55
- operating temperature range, °C	
- dimensions (width, depth, height), mm	
without shock absorbers	210x95x175
with shock absorbers	394x213x241
- weight, kg:	
transceiver	3
operating set	20.5



MOBILE RADIO SET

# "R-168-100KA" MOBILE RADIO SET



## Purpose

The vehicular SW R-168-100KA radio receiver provides open and secure radio communication in the radio networks of the tactical control link when installed in objects on a wheeled or armored base with board mains of 27V.

### Types of Operation:

- phone with single sideband modulation
- secure voice telephony
- telegraph CHT-200, CHT- 500;
- peak telegraph.

### Modes of Operation:

- simplex;
- two - frequency simplex;
- frequency hopping;
- automated adaptive communication;
- scanning reception at 8 preset frequencies;
- manual and automated storing of radio data;
- transmission and reception of circular, address and voice-frequency calls;
- operation on 8 preprepared channels;
- listening silence
- operation control from remote control or from a combined control panel;
- operation control from an external computer of an object via the R<sup>s</sup>-232C joint;
- computer-aided performance monitoring.



## Basic Specifications:

- frequency range, MHz	1.5.....29.9999
- frequency spacing, kHz	0.1
- receiver sensitivity, $\mu$ V	
in telephone modes of operation	2.0
in telegraph modes of operation	1.5
- frequency response on spurious receive channels, dB / $\mu$ V, min	90
- output power of transmitter (2 gradations), W, min	10.0; 100.0
- attenuation of the harmonic components of the transmitter frequency, dB, min	60
- frequency response to blocking at $\pm 10\%$ offset, dB / $\mu$ V, min	130
- coefficient of nonlinear distortion of the telephone channel, %, max	12
- communication range, km, min:	
antenna ASH-4	25...60
dipole antenna (on the mast R-168MK)	350
- frequency instability, max time to failure, hour, min	$\pm 3.0 \times 10^{-7}$
- time to failure, hour, min	3 000
- operating temperature range, $^{\circ}$ C	minus 50...+60
- dimensions, mm:	
transceiver	410x260x285
ACU-100KA	446x295x250
power supply unit	175x263x285
- weight of the operating set, kg, max	
transceiver	28
ACU-100KA	19
power supply unit	9







# "R-168UP-100KB(T)" MOBILE RADIO SET

AKVEDUK



## Purpose

The vehicular HF R-168-100KB(T) radio receiver provides open and secure radio communication in the radio networks of the tactical control link when installed in objects on a wheeled or armored base with board mains of 27V.

### Types of Operation:

- phone with single sideband modulation
- secure voice telephony
- telegraph CHT-200, CHT- 500;
- peak telegraph.

### Modes of Operation:

- simplex;
- two - frequency simplex;
- frequency hopping;
- adaptive automated communication;
- scanning reception at 8 preset frequencies;
- manual and automated storing of radio data;
- transmission and reception of circular, address and voice-frequency calls;
- operation on 8 preprepared channels;
- listening silence
- operation control from remote control or SPU;
- operation control from an external computer of an object via the RS-232C joint;
- computer-aided performance monitoring.



## Basic Specifications:

- frequency range, MHz	1.5...29.9999
- frequency spacing, kHz	0.1
- receiver sensitivity, $\mu$ V, better than	
- in telephone modes of operation	2.0
- in telegraph modes of operation	1.5
- frequency response on spurious receive channels, dB / $\mu$ V, not less	90
- output power of the transmitter (2 gradations), W, min	10.0; 50.0
- attenuation of harmonic components of the frequency of the transmitter, dB, not less	60
- frequency response to blocking at $\pm 10\%$ , dB / $\mu$ V offset, min	130
- communication range, km, min:	
- at motion, on ASH-4 antenna	20...50
- at stop, on dipole antenna (mounted on the mast R-168MK)	350
- frequency instability, max	$\pm 3.0 \times 10^{-7}$
- time to failure, hour, min	4 000
- operating temperature range, $^{\circ}$ C	minus 50...+60
- dimensions, mm:	
- transceiver	410x300x285
- UPS-100KB	230x225x90
- power supply unit	175x263x285
- weight, kg, max:	
- transceiver	30.0
- UPS-100KB	3.3
- power supply unit	9



MOBILE RADIO SET

# "R-168-0.5US" HANDHELD RADIO SET



SNIPER



## Purpose

Mobile FM radio set R-168-0.5 US band provides open voice or secured radio communication on one of 8 prepared channels, both within autonomous groups and between neighboring groups of subscribers of special units.

### Types of Operation:

- FM telephony;
- telephony with technical voice securing at the rate of 16 Kbps;

### Modes of Operation:

- simplex;
- two - frequency simplex;
- operation with a noise suppressor;
- operation on 8 preset frequencies;
- automated recording of radio data;
- scanning reception on 4 preset frequencies;
- effective reception;
- transmission and reception of voice-frequency call;
- speech informant (channel number and operating mode);
- low battery indication.



## Basic Specifications:

- frequency range, MHz	94....100
- frequency spacing, kHz	25
- receiver sensitivity, $\mu$ V, max	0.6
- attenuation of spurious receive channels, dB, min	70
- transmitter output power, W, min	1.0
- attenuation of the spurious components of the transmitter frequency, dB, min	40
- time of continuous operation from a 6NKHZ-0.94 type battery with the time ratio of reception: transmission: efficient reception of 1:1:18, hours, min	20
- communication range, km	up to 5
- frequency instability, max	$\pm 5.0 \times 10^{-6}$
- time to failure, hours, min	10 000
- operating temperature range, $^{\circ}$ C	minus 30....+55
- dimensions of the transceiver with battery, mm	58x128x37
- weight of the transceiver with battery, g, max	390

HANDHELD RADIO SET







# "R-168-5UN-2" MAN PACK RADIO SET

AKVEDUK



## Purpose

The mobile FM R-168-25UN-2 radio set provides radio communication in the radio networks of the regiment-squadron-company tactical command level.

### Types of Operation:

- FM telephony;
- frequency-modulated telephone with cryptographic data protection;
- data transmission.

### Modes of Operation:

- fixed frequency (simplex, two-frequency simplex);
- frequency hopping (simplex);
- adaptive communication (simplex, two-frequency simplex);
- scanning reception at 8 preset frequencies;
- operation with a noise suppressor;
- repeating
- manual and automated storing of radio data from the radio data input device with an optical interface (UVRD-O)
- or from an external computer (frequency and address change);
- emergency cancellation of radio data;
- transmission and reception of circular, address and voice-frequency calls;
- operation on 8 preprepared channels;
- effective reception;
- remote control from a remote telephone;
- control from an external computer via the RS-232C joint;
- voice informant of operator actions;
- dialog mode;
- computer-aided performance monitoring.



## Basic Specifications:

- frequency range, MHz	30...107.975
- frequency spacing, kHz	25
- receiver sensitivity, $\mu$ V	0.8
- attenuation of spurious receive channels, dB	80
- transmitter output power, W	0.25; 2.0; 8.0
- attenuation of harmonic components of the frequency of the transmitter, dB	40
- communication range, km, when using:	
- fishbone-type antenna array:	
analog data, at preset frequency operation in all operating modes	up to 20
digital data, in all operating modes	up to 16
- antennas ASH-1.5:	
analog data, at preset frequency operation in all operating modes	up to 10
digital data, in all operating modes	up to 8
- frequency instability, max	$\pm 1.0 \times 10^{-6}$
- frequency instability time to failure, hours	7000
- operating temperature range, °C	minus 40...+55
- dimensions of the transceiver (width, depth, height), mm weight, kg:	210x95x175
transceiver	3
operating set	9.5



MAN PACK RADIO SET



## FILTER UNIT R-168BAF-25U



The filter unit R-168BAF-25U is designed to ensure the joint operation of two FM radio means of R-168-5U, R-168-25U and R-168UP in any combination on one common antenna.

R-

<i>Collaboration subranges, MHz:</i>	
<i>subrange I</i>	30...52 and 60...107.975
<i>subrange II</i>	30...80 and 92...108
<i>Attenuation in bandwidth, dB, max</i>	1.5
<i>The intrinsic standing wave ratio relative to the resistance of 50 ohms, max</i>	1.7
<i>Decoupling between radio means, dB, min</i>	20
<i>Time to failure, hour, min</i>	30 000
<i>operating temperature range, °C</i>	-50...+60
<i>Dimensions, mm</i>	120x200x288
<i>Weight, kg, max</i>	5.1

## FILTER UNIT R-168BAF-100U



The R-168BAF-100U filter unit is designed to ensure the joint operation of two FM radio means R-168-5UV, R-168-25U, R-168UP and R-168-100Y in any combination on one common antenna.

<i>Collaboration subranges, MHz:</i>	
<i>subrange I</i>	30...52 and 60...107.975
<i>subrange II</i>	30...80 and 92...108
<i>Operating attenuation in bandwidth, dB, max</i>	1.5
<i>The intrinsic standing wave ratio relative to the resistance of 50 ohms, max</i>	1.7
<i>Decoupling between radio means, dB, min</i>	20
<i>Time to failure, hour, min</i>	30 000
<i>Operating temperature range, °C</i>	-50...+60
<i>Dimensions, mm</i>	175x330x220
<i>Weight, kg, max</i>	8.5

## CONTROL PANEL R-168PU



Remote control unit R-168 PU is designed for remote control of one of the FM radio means: R-168UP, R-168-5UV, R-168-25U or R-168-100U.

<i>Remote control distance, m</i>	10
<i>Time to failure, hour, min</i>	15 000
<i>Operating temperature range, °C</i>	-50...+60
<i>Dimensions, mm</i>	125x217x56
<i>Weight, kg, max</i>	1.6

## CONTROL PANEL R-168SPU-2



The remote control panel R-168SPU-2 is designed for alternate remote control of two FM radio devices R-168UP, R-168-5UV, R-168-25U and R-168-100U in any combination or one FM and one of the following HF radio devices: R-168-5KV, R-168-100KA, R-168-100KB.

<i>Remote control distance, m</i>	10
<i>Time to failure, hours, min</i>	15 000
<i>Operating temperature range, °C</i>	-50...+60
<i>Dimensions, mm</i>	238x216x53
<i>Weight, kg, max</i>	2.5







## AUXILIARY DEVICES

### CONTROL PANEL R-168PK



The remote control panel R-168PK is designed for remote control of HF radio sets: R-168-5KV, R-168-100KA and R-168-100KB.

Remote control distance, m	10
Time to failure, hour, min	15 000
Operating temperature range, °C	-50...+60
Dimensions, mm	220x187x53
Weight, kg, max	1.6

### R-168 PPRD PANEL



The R-168PPRD panel is designed for manual dialing or correction of radio data for all types of mobile and portable radio sets of the R-168 complex and their storing in the R-168UVRDO device.

Current consumption from board mains, mA, max	100
Current consumption from the mains 220 V, mA, max	1100
Time of radio data storage from one battery, hours, min	400
Time to failure, hour, min	40 000
Operating temperature range, °C	-50...+60
Dimensions, mm	380x120x200
Weight, kg, max	7

### R-168UVRD-O DEVICE



The R-168 R-168UVRD-O device is intended for storing and input of radio data in portable and mobile radio sets via optical joint.

Current consumption from battery, mA, max	
- in operation mode	50
- in standby mode	2.0
RAM capacity, byte	32
Time of radio data storage from one battery, hours, min	400
Time to failure, hour, min	40000
Operating temperature range, °C	-50...+60
Dimensions, mm	160x68x35
Weight, kg, max	0.45

### ANTENNA R-168 SHDAM



The R-168 SHDAM mast wide-band antenna is designed for operation at stop and in motion jointly with mobile FM radio equipment of the R-168 complex.

Directional pattern	circular
Range gain, times, min	0.4...1.0
Standing wave ratio, max	3.5
Weight, kg, max	15

### ANTENNA R-168 BSHDA



The R-168BSHDA board wide-band antenna is designed for installation on mobile objects at operation with portable FM radio equipment of the R-168 complex.

Directional pattern - circular	круговая
Range gain, times, min	0.4...1.5
Standing wave ratio, max	3.5





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