

LLC

LLC "Innovation engineering centre "Kontur"  
(IEC "Kontur")

**RADIO-COMMUNICATION SERVICE TESTER**

**PCT-430**

**CERTIFICATE**

**ИТЦК468166.002ПС**

2005

## 1 GENERAL GUIDELINES

1.1 This certificate certifies the PCT-430 tester (hereafter referred to as “tester”) parameters and specifications guaranteed by the manufacturer.

1.2 The certificate contains the main technical characteristics of the tester and prescribes its operating rules.

1.3 The manufacturer provides after-sales service and repair of the tester.

1.4 Testers conform to the group 2 of GOST 22261-94 requirements for operation conditions.

1.5 Testers are manufactured in climatic version YXJ4.2 as per GOST 15150-69.

1.6 (13.2±2.4) V direct current power supply is required to feed the tester.

## 2 GENERAL INFORMATION ABOUT TESTER

2.1 Testers are intended for servicing and repairing communications radio stations with different purposes in the stationary and mobile laboratories (workshops).

2.2 Tester action

The tester is a measuring and calculating instrument with following parameters:

- clock frequency, MHz .....	10
- capacity, bit .....	8
- program memory capacity, Kbyte .....	128
- RAM capacity, Kbyte .....	4.

## 3 KEY SPECIFICATIONS

3.1 The specifications are shown in the table 1.

Table 1

Characteristic, unit of measurement	Parameter	Error limits
1 Output signal frequency range (high-frequency), MHz. Frequency tuning step is 1 KHz.	90 ÷ 210	$\delta_{rel} = \pm 3 \cdot 10^{-4} \%$
2 Output voltage setting range (high-frequency), dB. (0 dB = 1mW). Voltage installation discrecity is 1 KHz.	from -60 to -130	$\Delta_{abs} = \pm [3 + (U_{hf dev} / 40)]$ , dB.
3 Signal frequency deviation (high-frequency), KHz. Deviation setting step is 0.1 KHz.	0.2 ÷ 20	$\delta_{rel} = \pm [5 + 5 (D_f / D_{dev})] \%$ , where $D_f = 20$ KHz is upper value of frequency deviation setting range; $D_{dev}$ is a setpoint value of frequency deviation, KHz.
4 Output signal frequency range (low-frequency), KHz. Frequency tuning step is 1 KHz.	0.02 ÷ 20	±1 Hz
5 Output voltage setting range (low-frequency), V. Voltage setting step is 10 mV.	0,02 ÷ 2	$\Delta_{abs} = \pm (0,02 + 0,05 \cdot U_{lf dev})$ , V, where $U_{lf dev}$ is a setpoint value of output voltage, V.
6 Output voltage distortion factor (low-frequency), %.	No more than 1	—
7 Signal frequency measuring range	90 ÷ 210	$\delta_{rel} = \pm 3 \cdot 10^{-4} \%$ .

(high-frequency), MHz.		
8 Signal frequency deviation measuring range (high-frequency), KHz.	0.2 ÷ 20	$\delta_{abs} = \pm [5 + 5 (D_f / D_m)]$ , where $D_f = 20$ KHz is upper value of frequency deviation measuring range; $D_m$ is measured frequency deviation, KHz.
9 Output signal power measuring range (high-frequency), W.	0.2 ÷ 20	$\delta_{rel} = \pm [10 + (P_f / P_m)]$ , %, where $P_f = 20$ W is upper value of output signal power measuring range (high-frequency); $P_m$ is measured output signal power value (high-frequency), W.
10 Signal frequency measuring range (low-frequency), Hz.	20 ÷ $1 \cdot 10^5$	$\Delta_{abs} = \pm 1$ Hz
11 Alternating sinusoidal voltage measuring range in the frequency range from 0.02 to 20 KHz, V.	0.02 ÷ 15	$\delta_{rel} = \pm [3 + 2 (U_f / U_m)]$ , %, where $U_f = 15$ V is upper value of alternating voltage measuring range; $U_m$ is measured alternating voltage value, V.
12 Direct voltage measuring range, V.	0.02 ÷ 20	$\delta_{rel} = \pm [2 + 2 (U_f / U_m)]$ , %, where $U_f = 20$ V is upper value of direct voltage measuring range; $U_m$ is measured direct voltage range, V.
13 Alternating voltage distortion factor measuring range, %.	1 ÷ 100	In the range from 1 to 50 %: $\delta_{rel} = \pm [5 + 0,5 (DF_f / DF_m)]$ , %, where $DF_f = 50$ % is upper value of distortion factor measuring range, %; $DF_m$ is measured distortion factor value, %. In the range from 50 to 100 % distortion factor is not normalized.
14 Continuous running time is no more than 8 hours. 15 Tester power consumption is not more than 20 V·A. 16 Tester overall dimensions are not more than 270×160×270 mm. 17 Tester mass is not more than 8.0 kg. 18 MTBF is not less than 5000 hours. 19 mean lifetime is not less than 5 years. 20 Tester can be used in 2 hours after repairing.		

#### 4 COMPLETENESS

4.1 PCT-430 tester completeness is in the table 2.

Table 2

Name	Delivery document	Quantity
1 Radio-communication tester PCT-430	ИТЦК468166.002	
2 AC adapter, output: 15V, 1A	ИТЦК418542.005	1
3 Cable HF	ИТЦК418542.006	1
4 Cable LF	ИТЦК468976.005	1
5 Stowage box	ИТЦК468166.002ПС	1
6 Certificate	ИТЦК468166.002РЭ	1
7 maintenance manual	ИТЦК468166.002МП	1 copy

8 test procedure		1 copy 1 copy
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## 5 PACKING CERTIFICATE

Radio-communication service tester PCT-430 ИТЦК468166.002, works number \_\_\_\_\_, is packed in LLC IEC "Kontur" in accordance with circuit ИТЦК468976.002УЧ.

Packing Date \_\_\_\_\_

Packed by \_\_\_\_\_  
(signature, surname)

## 6 ACCEPTANCE CERTIFICATE

Radio-communication service tester PCT-430 ИТЦК468166.002, works number \_\_\_\_\_, satisfies the specification requirements ИТЦК468166.002ТУ.

Stamp here Release date \_\_\_\_\_

Responsible for acceptance \_\_\_\_\_  
(signature, surname)

State verification officer \_\_\_\_\_  
(signature, surname)

Date of primary check \_\_\_\_\_

## **7 WARRANTY**

7.1 Manufacturer guarantees that tester satisfies technical requirements ИТЦК468166.002ТУ.

7.2 Warranty period is 12 months after shipping.

7.3 Manufacturer guarantees to repair tester without compensation during warranty period. After warranty period manufacturer will repair tester by agreement.

Producer address: Post: 630055, Novosibirsk - 55,  
LLC "IEC "Kontur"

Sales department: Russkaya Street 39 office518.

tel.: (383) 333-24-46, 292-18-75.

E-mail: [kontour@bk.ru](mailto:kontour@bk.ru)

## **8 RECLAMATIONS**

8.1 In the case of tester fault during warranty period the customer needs to draw up a report and send it to the manufacturer.

8.2 The report must contain the following information:

- 1) product name
- 2) works number
- 3) release date
- 4) date of putting into operation
- 5) fault description.