



Rubidium frequency standard CH1-1014



Rubidium Frequency Standard CH1-1014 for use as a highly stable signal source in an apparatus measuring frequency and time, in navigation systems, telephone and radio in telecommunication networks.

The device has a built-binding frequency of 1 Hz pulse signal from the outside of the timeline or on the receiver GLONASS/GPS and tunable frequency synthesizer with the ability to adjust the frequency of the RS-232.

Specification

1. Output frequency, MHz.....	10
2. Output signal amplitude at a load of $50\ \Omega$, Vrms, at range.....	$1,0 \pm 0,2$
3. Accuracy at shipment, at range.....	$\pm 2 \cdot 10^{-11}$
4. Aging (after 72 hrs), at range..... at range.....	$\pm 2 \cdot 10^{-11}/\text{month}$ $\pm 2,4 \cdot 10^{-10}/\text{year}$
5. Relative error of frequency for 1 day when operating in the automatic frequency adjustment, at range.....	$\pm 5 \cdot 10^{-12}$
6. Frequency retrace (after 24 hrs on).....	$< 2 \cdot 10^{-11}$
7. Short-term stability (Allan variance) 1 s..... 10 s..... 100 s..... 1 day.....	$< 1,4 \cdot 10^{-11}$ $< 5 \cdot 10^{-12}$ $< 2 \cdot 10^{-12}$ $< 5 \cdot 10^{-12}$
8. Temperature shift (0 to $+50^{\circ}\text{C}$).....	$< 2 \cdot 10^{-10}$
9. The tuning range of the output frequency (digital with step $1 \cdot 10^{-12}$).....	$2 \cdot 10^{-9}$
10. Harmonics, dBc.....	< -30
11. Phase noise, dBc/Hz offset (85 ± 3) Hz..... 1 kHz..... 10 kHz.....	< -130 < -140 < -145
12. Synchronization accuracy by external 1 pps signal, μs , at range.....	$\pm 0,1$
13. Supply voltage, V.....	22 to 28
14. Input power, W.....	< 18
15. Dimensions (depth×width×height), mm.....	$158 \times 78 \times 87$
16. Weight, Kg.....	$< 1,2$