Rubidium frequency standard CH1-1012

Small CH1-1012 rubidium frequency standard is intended for use as an embedded signal source of high frequency stability measuring instruments and systems, telecommunications systems, navigation and communication.

The device is designed for mobile applications with high demands on the size, weight and power consumption.

Specification

1. Output frequency, MHz..... 10
2. Output signal amplitude at a load of 50 Ω, Vrms, at range..... 0,6 to 1,2
3. Accuracy at shipment, at range..... ..... $\pm 5 \cdot 10^{-11}$
4. Aging (after 72 hrs), at range..... $\pm 4 \cdot 10^{-11}$/month
   at range..... $\pm 4{,}8 \cdot 10^{-10}$/year
5. Frequency retrace (after 24 hrs on)..... $< 2 \cdot 10^{-11}$
6. Short-term stability (Allan variance) 1 s..... $< 3 \cdot 10^{-11}$
   10 s..... $< 1 \cdot 10^{-11}$
   100 s..... $< 3 \cdot 10^{-12}$
   1 day..... $< 1 \cdot 10^{-11}$
7. Temperature shift (0 to +50 ^{0}C)..... $< 3{,}5 \cdot 10^{-10}$
8. The tuning range of the output frequency (analog)..... $> 3 \cdot 10^{-9}$
9. Harmonics, dBc..... < - 30
10. Phase noise, dBc/Hz offset (85±3) Hz..... < - 130
    1 kHz..... < - 140
    10 kHz..... < - 145
11. Supply voltage, V..... 22 to 28
12. Input power, W..... < 12
13. Dimensions (depth×width×height), mm..... 110×52×80
14. Weight, Kg..... < 0,7