

Rubidium frequency standard CH1-1012



Small CH1-1012 rubidium frequency standard is intended for use as an embedded signal source for high stability frequency and time measuring systems, telecommunications systems and navigation. 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 $50\ \Omega$, 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..... at range.....	$\pm 4 \cdot 10^{-11}/\text{month}$ $\pm 4.8 \cdot 10^{-10}/\text{year}$								
5. Frequency retrace (after 24 hrs on).....	$< 2 \cdot 10^{-11}$								
6. Short-term stability (Allan variance)	<table border="0"> <tbody> <tr> <td>1 s.....</td> <td>$< 3 \cdot 10^{-11}$</td> </tr> <tr> <td>10 s.....</td> <td>$< 1 \cdot 10^{-11}$</td> </tr> <tr> <td>100 s.....</td> <td>$< 3 \cdot 10^{-12}$</td> </tr> <tr> <td>1 day.....</td> <td>$< 1 \cdot 10^{-11}$</td> </tr> </tbody> </table>	1 s.....	$< 3 \cdot 10^{-11}$	10 s.....	$< 1 \cdot 10^{-11}$	100 s.....	$< 3 \cdot 10^{-12}$	1 day.....	$< 1 \cdot 10^{-11}$
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7. Temperature shift (0 to + 50 °C), at range.....	$\pm 3.5 \cdot 10^{-10}$								
8. The tuning range of the output frequency (analog).....	$> 3 \cdot 10^{-9}$								
9. Harmonics, dBc.....	$< - 30$								
10. Phase noise, dBc/Hz	<table border="0"> <tbody> <tr> <td>offset 85 Hz.....</td> <td>$< - 130$</td> </tr> <tr> <td>1 kHz.....</td> <td>$< - 140$</td> </tr> <tr> <td>10 kHz.....</td> <td>$< - 145$</td> </tr> </tbody> </table>	offset 85 Hz.....	$< - 130$	1 kHz.....	$< - 140$	10 kHz.....	$< - 145$		
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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								

made in RUSSIA