

TEST REPORT

REPORT NO: SATEL-TiM-2010-4
TEST PERIOD: 10.9.2010
TEST SITE: Satel / R&D Dept., Salo

DEVICE UNDER TEST: TA18

TESTS PERFORMED:

Frequency Stability vs. temperature and voltage variations
(47 CFR: 90.213 & 2.1055)

LIST OF MEASURING EQUIPMENT:

- Power supply GW Instek SPS-1820 Serial nro. EG181338
 - Temperature test chamber Vötsch VT4002 Serial nro. 58566060340010
 - Spectrum analyzer Rohde & Schwarz FSEA Serial nro. 826029/013
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TESTS PERFORMED BY:

Timoteus Marttila

TEST RESULTS

Test performed at transmitter frequency 460.000 MHz.

a) Frequency stability vs. voltage variations

Temperature	Voltage	Frequency	ppm error
+20 °C	11,2 V	460.00012	0.26ppm
+20 °C	13,2 V	460.00009	0.20ppm
+20 °C	15,2 V	460.00008	0.17ppm

b) Frequency stability vs. temperature variations

Temperature	Voltage	Frequency	ppm error
-30°C	13,2 V	460.00013	0.28ppm
-20°C	13,2 V	459.99966	-0.74ppm
-10°C	13,2 V	459.99964	-0.78ppm
± 0°C	13,2 V	459.99986	-0.30ppm
+10°C	13,2 V	459.99987	-0.28ppm
+20°C	13,2 V	460.00009	0.20ppm
+30°C	13,2 V	460.00019	0.41ppm
+40°C	13,2 V	460.00023	0.50ppm
+50°C	13,2 V	460.00037	0.80ppm
+60°C	13,2 V	460.00034	0.74ppm
+70°C	13,2 V	460.00033	0.72ppm