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Frequency measurement with a Frequency Counter of spectrum analyzer option

◇ **It is possible to make an accurate frequency measurement with a Frequency Counter of spectrum analyzer option.**

[～*Application*～]

For example, as a test of wireless equipment of technical standards conformity, there is a "Frequency deviation ".
The meter to be used for the test is required 10 times or more accuracy than the allowable deviation of wireless equipment rule.

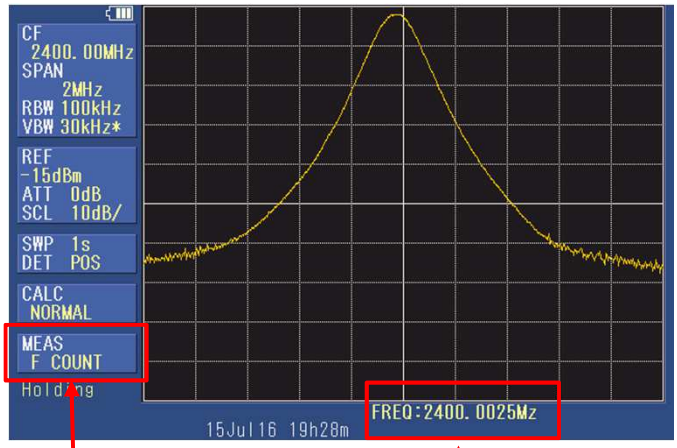
[～*Solution*～]

A Frequency Counter of spectrum analyzer MSA300 or MSA400 series option is used to make an accurate frequency measurement of technical standards conformity test. When using the Frequency Counter, the measurement accuracy is +/- 2ppm (23 ℃).

"Frequency deviation " technical standards conformity test of wireless equipment is executed with non-modulated continuous signal. A Signal Generator non-modulated continuous signal is measured with spectrum analyzer MSA438, and the measurement results are compared between "with Frequency Counter" and "without Frequency Counter".

< Measuring the 2400MHz signal from Signal Generator >

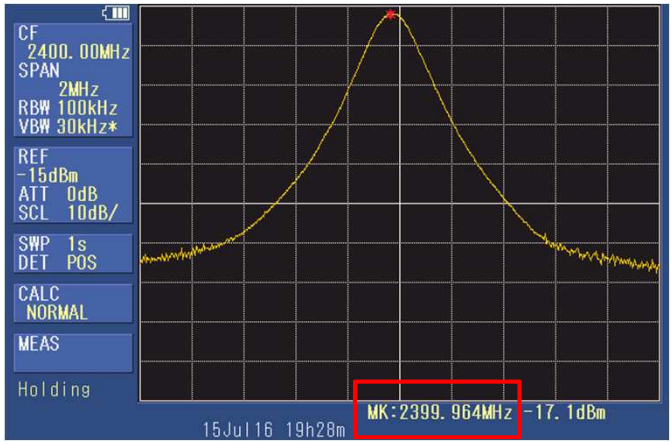
with Frequency Counter



Frequency Counter Mode

Measured value：2400.0025MHz
Difference from 2400MHz：
2.5kHz（approx. 1ppm）

without Frequency Counter



Measured value：2399.964MHz
Difference from 2400MHz：
36kHz(approx. 15ppm)

Accuracy up

[～*System constitution*～]

Spectrum analyzer (MSA300 series, MSA400 series)	×1
Frequency Counter (Factory option)	×1

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※MICRONIX Corporation reserves the right to make changes in design, specification and other information without prior notice.

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