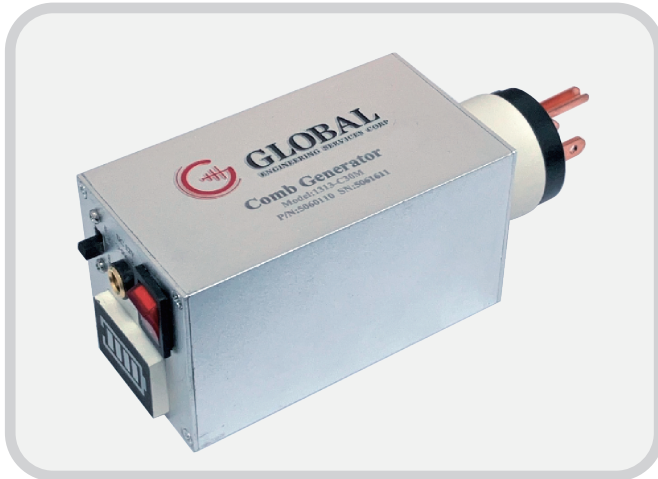


Comb Generator 1313-C30M



Features

- > Reference Signal Source for LISNs
- > User-Selectable Step Sizes of 100 and 500 kHz
- > Usable Frequency Range Up to 30 MHz
- > Battery Operated
- > Three-Year Warranty

Description

The 1313-C30M Comb Generator is a conducted reference signal source for verification of conducted emissions measurement systems. The Comb generator output has the harmonics of the fundamental frequency. It has two userselectable frequency step sizes of 100 kHz and 500 kHz.

This Comb Generator simulates an EUT generating conducted EMI noise. The 1313-C series Comb Generators have a standard NEMA 15-P threeprong or CEE 7/7 schuko connector that can plug directly into any LISN with a compatible power socket. It can be attached to any othersocket type using a suitable adapter. The 1313-C30M has high impedance to the external line voltage, AC or DC up to 230V. This feature allows the Comb Generator to be used while the LISNs are connected to an external power source.

The 1313-C30M is powered by rechargeable internal Li-on batteries. The battery power eliminates the need for any external cabling. When fully charged, the battery allows continuous use of the Comb Generator for up to 5 hours. The Comb Generator and the charger are shipped with a custom storage/carrying case.

Application

The main application of the 1313-C30M Comb Generators is to quickly verify conducted emissions test setups. It is designed to plug directly into the EUT powersocket of an LISN. The conducted noise output level of the Comb Generators are close to or above the CISPR 22 limits. Typical output plots are shown on the next page.

Most EMI labs typically calibrate LISNs and other equipment (spectrum analyzers, cables, connectors, etc.) in the conducted emissions test setup at regular intervals. However, test equipment malfunctions may occur between any calibration interval and may go undetected until the next calibration. In the meantime, these malfunctions may produce erroneous test results. The time and resources lost due to these unforeseen errors can be avoided with the help of a Comb Generator. Using a Comb Generator, the test engineer will be able to quickly verify the conducted measurement system prior to each test to assure accurate test results.

Other possible applications of the 1313-C30M Comb Generator could include production evaluation of components, such as cable shields and filters.

Comb Generator 1313-C30M

Specifications

All specifications are subject to change without notice.
 All values are typical, unless specified.

Intended Application	Reference signal source for LISN verification
Frequency Range	100 kHz to 30 MHz
Frequency Step Size	100 kHz or 500 kHz
Frequency Stability	50ppm
Amplitude Stability	± 0.1 dB
Time Stability	<1 dB over 12 months
Charger Output / Input	12 VDC, 1A/ 110VAC 60 Hz or 230 VAC 50 Hz
Battery Type	7.4V Li-On, 1500 mAh
Operating Time	>5 Hours Typical With Fully Charged Battery
External Indicators	Battery low and power on
LISN Interface Plug	NEMA 15-P / CEE 7/7 schuko
Dimensions	16 x 5.5 x 5.5 cm
Weight	0.33 kg

Typical Output

