iMPT-Lite-808

Multi-Purpose Tuner for Cellular, GSM, Bluetooth, WLAN, WiMAX, 3G/4G

General

High VSWR and Harmonic Tuning, in one compact package. The MPT-Lite uses two independent wideband RF probes and does both:

- Tunes to ultra high VSWR
- Tunes two independent or harmonic frequencies.

Its compact size (only 40-60% of a Classic 3 probe MPT, depending on the frequency range) makes it the preferred solution for on wafer high Gamma and harmonic load pull measurements.

The advanced interpolation and tuning routines developed for the MPT-Lite enable simultaneous amplitude and phase tuning at two independent or harmonic frequencies. Using wideband probes allows for continuous tuning coverage through 0.8 - 8 GHz, as well as instantaneous high Gamma tuning using both probes. The MPT-Lite is an iTuner, making it a modular standalone instrument.

Specifications

Frequency Range (f_0 - $2f_0$, GHz) ..... 0.8 - 8

VSWR (High VSWR tuning) ..... 45:1[1]

VSWR (harmonic tuning, f_0, $2f_0$) ..... 15:1-30:1[2]

Insertion Loss (dB) 0.7

Repeatability (min, dB) ..... - 40

Repeatability (typical, dB) ..... - 50

Step Size (carriage, µm) 25.4

Phase Resolution @ 0.8 GHz ..... 0.049° /step

Phase Resolution @ 8 GHz ..... 0.488° /step

Step Size (probe, µm) 1.5

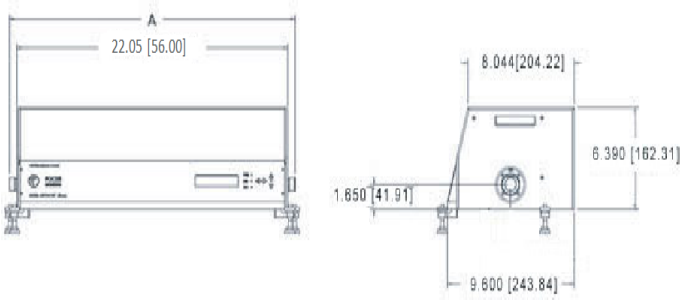
Tuner Weight (lbs) 18.0

Shipping Weight (lbs) ..... 40.0[4]

Size ..... See ***Dimensions***

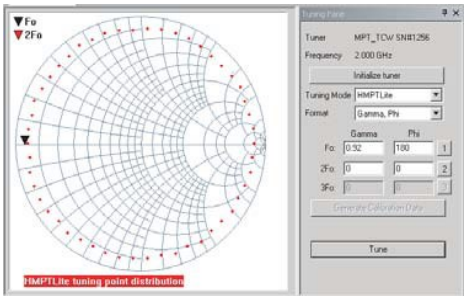
Model	Connector Type	Power Handling (W, CW)[5]	Length A (in)
iMPT-Lite-808	APC7	30	23.88

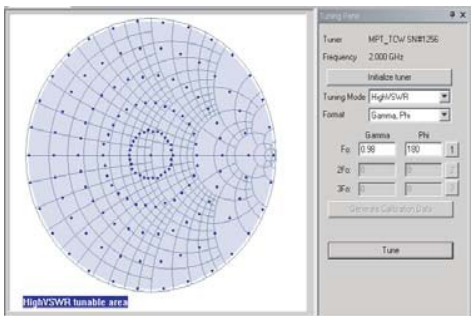
Dimensions



Typical Tuning Point Distribution

2fo harmonic tuning for Γ (fo) = constant →





High VSWR (fo) tuneable area ←

Power Supply Specifications

Input (AC) 100-240V, 1.8A
Output (DC) 12V, 5A

1 Measured at 0.8 GHz
2 Measured at 0.8 GHz for Γ (2Fo) = 0.9
3 Measured at 8 GHz, probe withdrawn
4 Includes packaging and accessories, may vary
5 Measured at 10:1 VSWR

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