8817 FEM

PRODUCT OVERVIEW

z8817 RF FEM
RF Front-End Module
PXIe

Overview

The z8817 front end module extends the dynamic range of the z8655 Vector Signal Analyzer (VSA) and z8752 Vector Signal Generator (VSG). The PXIe unit provides on the fly programmable amplification / attenuation of RF signals sourced by the VSG, and programmable attenuation of RF signals routed to the VSA. Supporting tighter PA linearity for 1024QAM modulation the RF module maintains complete signal integrity in view of the Wi-Fi standard 802.11ax.

Advantages

- Multi band support 2.4GHz, 5GHz, U-NII-4/5/6/7/8 with comprehensive range of operation from 250 MHz – 7.2 GHz
- Up to 20 dB amplification of z8752 VSG RF output with +37 dBm OIP3
- Up to 20 dB attenuation of z8752 VSG RF output down to -100 dBm
- Up to 10 dB attenuation of RF input to z8655 VSA RF, extending maximum VSA RF input to +30 dBm

Applications

- Dynamic range extension for characterizing high end PAs
- Extends the maximum and minimum linear output power from the z8752 VSG
- Extends the maximum input power to the z8655 VSA
- Transceiver test connection of VSA & VSG to single T/R antenna port

LITEPOINT

Key Specifications

- Supports variable channel bandwidth with up to a maximum of 160 MHz
- Tighter PA linearity for use with higher Modulation and Coding scheme of 1024 QAM
- Offers Gain accuracy of ±0.5 dB
- Broad gain flatness curve with Gain range extending from -37 dB to +20 dB

Configurations

Frequently used with:

- z8752 Vector Signal Generator
- z8655 Vector Signal Analyzer
- zSeries 9-slot or 18-slot chassis

z8817 Specifications

RF Input/output	Value
Frequency Range	250 MHz to 7.2 GHz, nominal to 7.5 GHz
RF Input	**Value**
Absolute Maximum Input Power	+25 dBm (RF1), +30 dBm (RF T/R and RF2)
VSG Amplification (RF1 to RF T/R)	**Value**
OIP3	+37 dBm
Programmable Gain/Attenuation (RF1 to RF T/R)	**Value**
Range	-37 dB to +20 dB
Resolution	1 dB
Accuracy	± 0.5 dB
Noise Figure	<5 dB
Programmable Attenuation (RF T/R to RF2)	**Value**
Range	0 or 10 dB attenuation
Physical	**Value**