

Extended Frequency Measurement Solution Using External Mixer

Signal Analyzer MS2830A/MS2840A/MS2850A

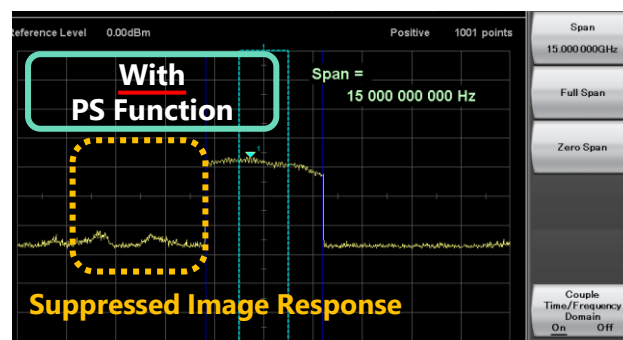
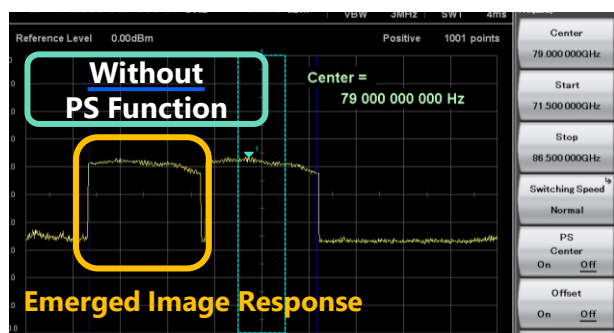
External Mixer Connection Function MX284090A

This document introduces the features, configuration, and expandable frequency range of the Extended Frequency Measurement Solution combining the Signal Analyzer MS2830A/MS2840A/MS2850A with the External Mixer Connection Function MX284090A and Eravant/VDI mixers.

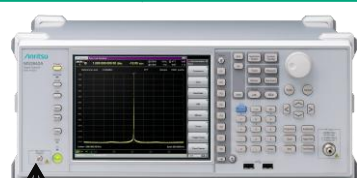
■ Features

- Connecting external mixer extends measurement frequency range flexibly up to 325 GHz
- Easy test setup using LO/IF coaxial cables
- Accessory USB memory with mixer preset conversion loss data
- Wide image-free response measurements up to 7.5 GHz bandwidth

→ **Image-response-free measurement is supported across a wide bandwidth (up to 7.5 GHz) using the signal analyzer high IF (1.875 GHz) and Anritsu's proprietary PS (Polarity Swap) function.**



■ Configuration



Signal Analyzer
MS2830A/MS2840A/MS2850A

LO/IF Signal Path

LO/IF Signal Path

Connecting the signal analyzer 1st Local Output port to an external mixer extends the frequency range.



Eravant Mixer



Measurement
Target



VDI Mixer



Measurement
Target

■ Eravant and VDI Mixers Supported Frequency Range

■ Eravant

Model	Supported Frequency Range (GHz)
STC-N12-15-S1-IDP	50 to 75
STC-N15-12-S1-IDP	60 to 90
STC-N12-10-S1-IDP	75 to 110
STC-N18-08-S1-IDP	90 to 140
STC-N18-06-S1-IDP	110 to 170
STC-N20-05-S1-IDP	140 to 220



■ VDI

Model	Supported Frequency Range (GHz)
WR19SAX-Z-M	40 to 60
WR15SAX-Z-M	50 to 75
WR12SAX-Z-M	60 to 90
WR10SAX-Z-M	75 to 110
WR8.0SAX-Z-M	90 to 140
WR6.5SAX-Z-M	110 to 170
WR5.1SAX-Z-M	140 to 220
WR4.3SAX-Z-M	170 to 260
WR3.4SAX-Z-M	220 to 325



■ Ordering Information

Model	Name	Remarks
MS2830A MS2830A-044 MS2830A-045	Signal Analyzer 26.5 GHz Signal Analyzer 43 GHz Signal Analyzer	Main unit Choose frequency upper limit. Select one of Opt-044 or -045.
MS2840A MS2840A-044 MS2840A-046	Signal Analyzer 26.5 GHz Signal Analyzer 44.5 GHz Signal Analyzer	Main unit Choose frequency upper limit. Select one of Opt-044 or -046.
MS2850A MS2850A-047 MS2850A-046	Signal Analyzer 32 GHz Signal Analyzer 44.5 GHz Signal Analyzer	Main unit Choose frequency upper limit. Select one of Opt-047 or -046.
MX284090A	External Mixer Connection Function (7.5 GHz wideband image-free response)	Required
J1692B	Coaxial Cord, 1 m	SMA-P • SUCOFLEX126E • SMA-P, DC ~ 18 GHz, 50Ω