Agilent E6618A
Multiport Adapter

Data Sheet

Used with the Agilent Technologies E6630A wireless connectivity test set, the Agilent Technologies E6618A multiport adapter helps you significantly accelerate throughput during non-signaling wireless connectivity device manufacturing test.

The E6618A is controlled by a plug-and-play USB connection with the E6630A. The solution enables the connection of multiple devices under test (DUTs) to a single instrument for parallel testing.

Anticipate ___ *Accelerate* ___ *Achieve*

Agilent Technologies

Definitions and Conditions

All data listed in this datasheet are nominal values when the E6618A is used in conjunction with the E6630A. Nominal values indicate expected performance, or describe product performance that is useful in the application of the product, such as a 50 Ω connector. This data is not warranted and is measured at room temperature (approximately 25 °C).

RF Performance

Frequency specifications		
RFIO frequency range	RFIO ports 0 to 7	2.4 to 2.5 GHz 4.85 to 6 GHz
GNSS frequency range	GNSS ports 0 to 3	1.1 to 1.7 GHz
Power range		
Output level ranges		
RFIO ports 0 to 7[1]		−110 to +5 dBm
GNSS ports 0 to 3[2]		−110 to −40 dBm
Input level range (average power)		
RFIO ports 0 to 7		−50 to +30 dBm (input level range settable from 50 to +45 dBm)
RFIO maximum input power		+33 dBm
RF IN, RF OUT, and GNSS maximum safe input power		+24 dBm
Amplitude accuracy		
GNSS ports 0 to 3		±0.5 dB, −110 to −40 dBm
RFIO ports 0 to 7		
Output		±0.5 dB, 2.4 to 2.5 GHz, −110 to +5 dBm ±0.7 dB, 4.85 to 6 GHz, −110 to −50 dBm ±0.6 dB, 4.85 to 6 GHz, −50 to +5 dBm
Output (multiple ports enabled)		Add ±0.1 dB to account for RSS of port balancing with output amplitude accuracy[3]
Input		±0.5 dB, 2.4 to 2.5 GHz, −50 to +28 dBm ±0.6 dB, 4.85 to 6 GHz, −50 to +28 dBm
RF return loss		
GNSS ports 0 to 3		> 20 dB, 1.1 to 1.7 GHz
RFIO ports 0 to 7		15 dB, 2.4 to 2.5 GHz, 4.85 to 5.85 GHz (input range > +6 dBm or output power < 0 dBm) 13 dB, 2.4 to 2.5 GHz, 4.85 to 5.85 GHz (input range < +6 dBm or output power > 0 dBm)

[1]*Power level is user settable from −150 to +18 dBm.*

[2]*Power level is user settable from −150 to 0 dBm.*

[3]*With multiple ports enabled you must RSS the worst-case port balance (0.4 dB) with the worst-case amplitude accuracy to calculate the maximum additional amplitude error (listed above). For non-worst-case conditions the error will be less than that listed.*

WLAN analyzer error vector magnitude (EVM)	
Residual EVM (phase tracking on, pre-amble)	
802.11b, 2.4 to 2.5 GHz, 20 MHz	≤ 4% at +8 dBm input power
802.11g, 2.4 to 2.5 GHz, 20 MHz	≤ −52 dB at +8 dBm input power
802.11a, 4.85 to 6 GHz, 20 MHz	≤ −40 dB at +2 dBm input power
802.11n, 4.85 to 6 GHz, 20 MHz	≤ −42 dB at +2 dBm input power
802.11ac, 4.85 to 6GHz, 80 MHz	≤ −41 dB at +2 dBm input power
802.11ac, 4.85 to 6 GHz, 160 MHz	≤ −40 dB at +2 dBm input power
WLAN source error vector magnitude (EVM)	
Residual EVM	
802.11ac, 4.85 to 6 GHz, 80 MHz	≤ −42 dB at −7 dBm source power
802.11ac, 4.85 to 6 GHz, 160 MHz	≤ −42 dB at −7 dBm source power

Front Panel

RF connectors	
RF In	SMA female, 50 Ω
RF Out	SMA female, 50 Ω
GNSS ports 0 to 3 Out	SMA female, 50 Ω
RFIO ports 0 to 7	SMA female, 50 Ω
USB connector	
Standard	Compatible with USB 2.0
Connector	USB Type-B female
Triggers	
Trig 1	BNC female
Trig 2	BNC female
Trig 3	BNC female
Trig Out	BNC female
Trigger level range	LVTTL (5 volt compliant)

General Specifications

Size and weight	
Dimensions (H x W x D)	65 mm x 430 mm x 392 mm (2.6 in x 17 in x 15.4 in)
Weight (without shipping package)	6.8 kg (15 lbs)
Weight (with shipping package)	11.8 kg (26 lbs)

Agilent Technologies