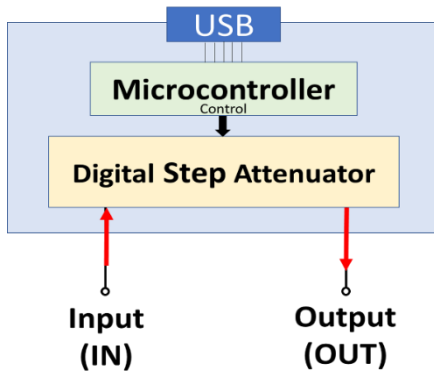




RoHS Compliant



Electrical Schematic

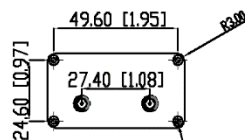
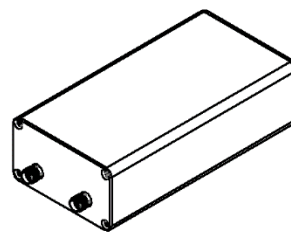
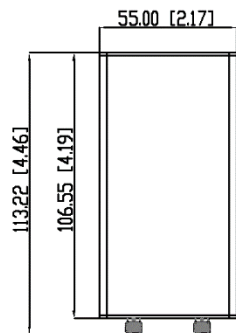
**Insertion Loss Compensated**

**No Extra Insertion Loss**

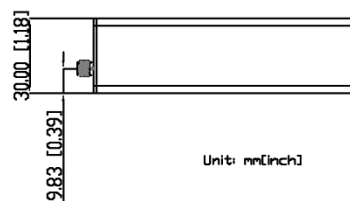
**Setting Attenuation = Actual Attenuation**

Note: When the "compensate I.L." is set "ON", and the frequency and wanted attenuation value is specified, the attenuator will automatically calculate the required additional attenuation value according to the corresponding insertion loss. The final attenuation value will be very close to wanted attenuation value.

### Outline Drawing



4 x  $\varnothing 2.4$  [ $\varnothing 0.09$ ] Through  
 $\sqrt{\varnothing 4.40$  [0.173] X 90°



Unit: mm[Inch]

**Connectors:** SMA Female, USB (Micro-B)

### Electrical Specifications

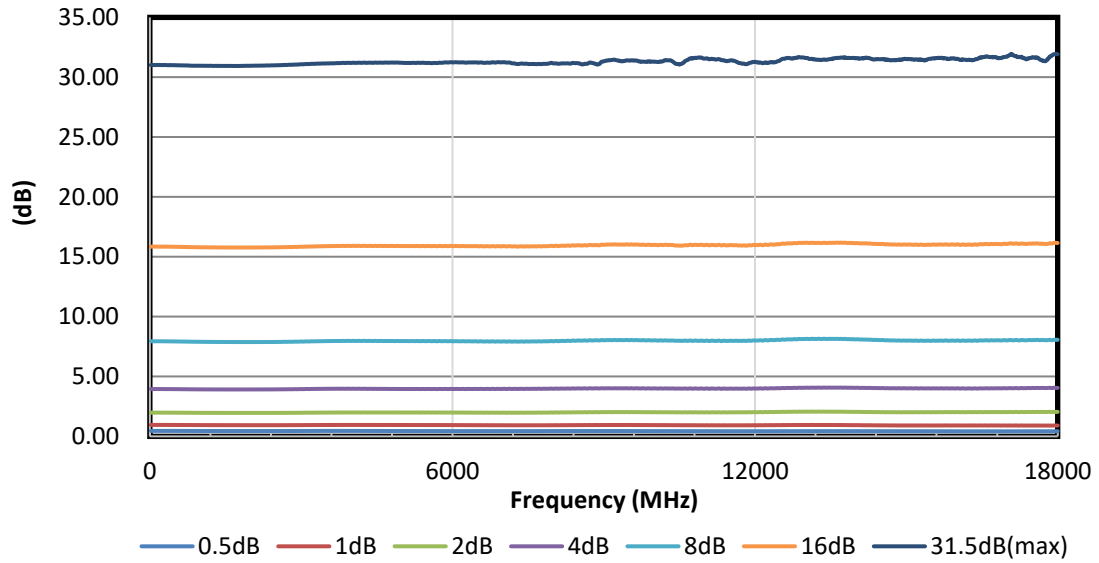
Parameter		Unit	Frequency (MHz)	Conditions	Min.	Typ.	Max.	
Attenuation Range		dB	15 - 18000		0		31.5	
Step		dB				0.5		
Insertion Loss (I.L.)		dB		@ 0 dB Att.		4.0	4.2	
Attenuation Accuracy	Compensate I.L. "OFF" <i>Note1</i> (I.L. Excluded)	dB		@ 0.5 dB Att.		± 0.08	± 0.12	
				@ 1, 2 dB Att.		± 0.10	± 0.15	
				@ 4, 8, 16 dB Att.		± 0.22	± 0.30	
				@ 31.5 dB Att.		± 0.56	± 1.00	
	Compensate I.L. "ON" <i>Note2</i> (I.L. Included)	dB		I.L. ≤ Att. ≤ 31.5dB		± 0.40	± 0.50	
Input Operating Power (RF In and RF Out ports)		dBm						27
IP3 Input		dBm				48		
VSWR		:1		@ 0 dB Att.	Input		1.49	1.52
					Output		1.35	
Switching Speed		us		10% to 90% RF Output			1.3	
				50% Control to 90% RF Output			3.24	
Supply Voltage		V	USB port			5		
Supply Current		mA	USB port			10		

Operated in 50Ω system, 25°C environment.

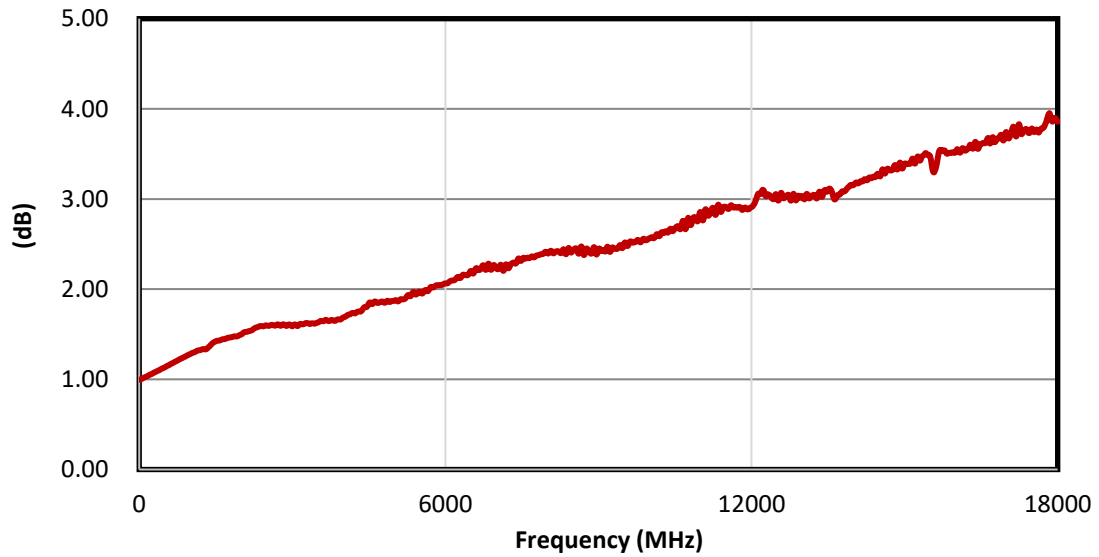
*Note1* Max accuracy is relative to attenuation setting value EXCLUDING insertion loss while "Compensate I.L." setting is "OFF".

*Note 2* Max accuracy is relative to attenuation setting value INCLUDING insertion loss while "Compensate I.L." setting is "ON".

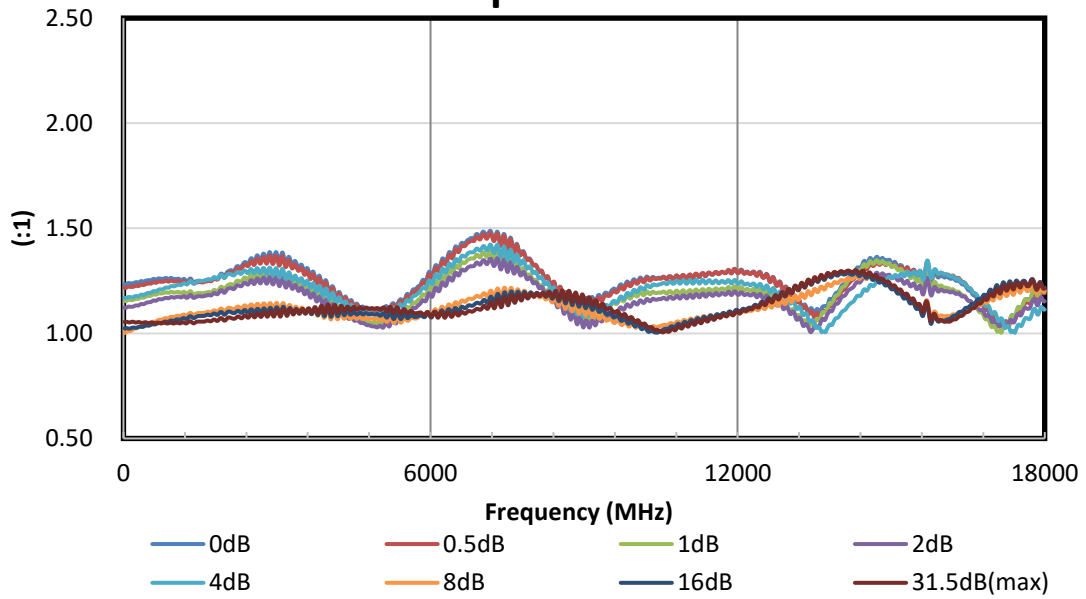
### Attenuation relative to Insertion Loss



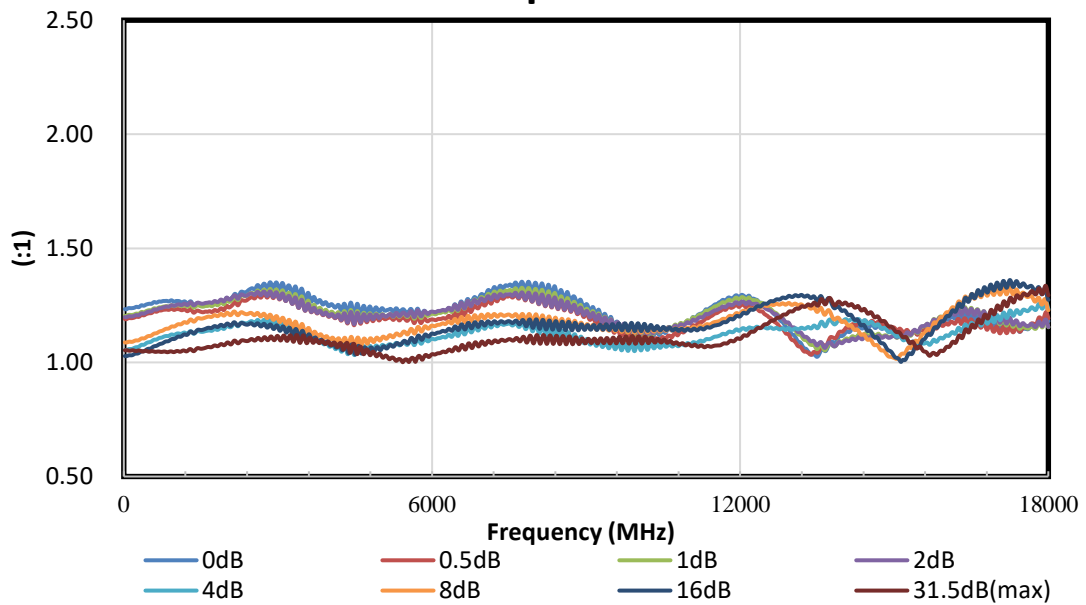
### Insertion Loss



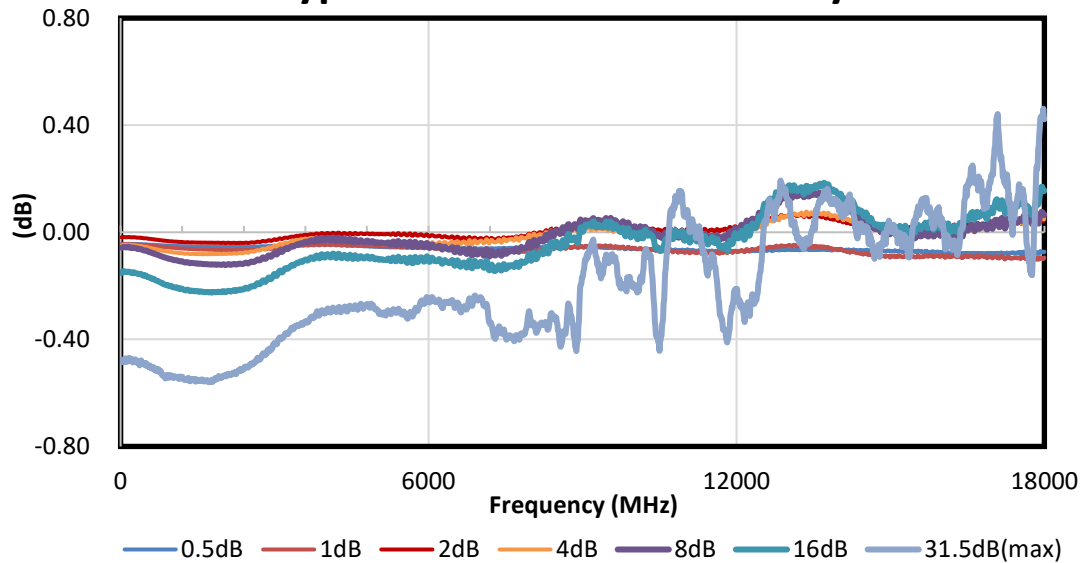
### Input VSWR



### Output VSWR



### Typical Attenuation Accuracy



### Amtery Graphical User Interface (GUI)

attenuation setting value INCLUDING insertion loss while "Compensate I.L." setting is "ON"

title and version number

pull down COM port selection

information column

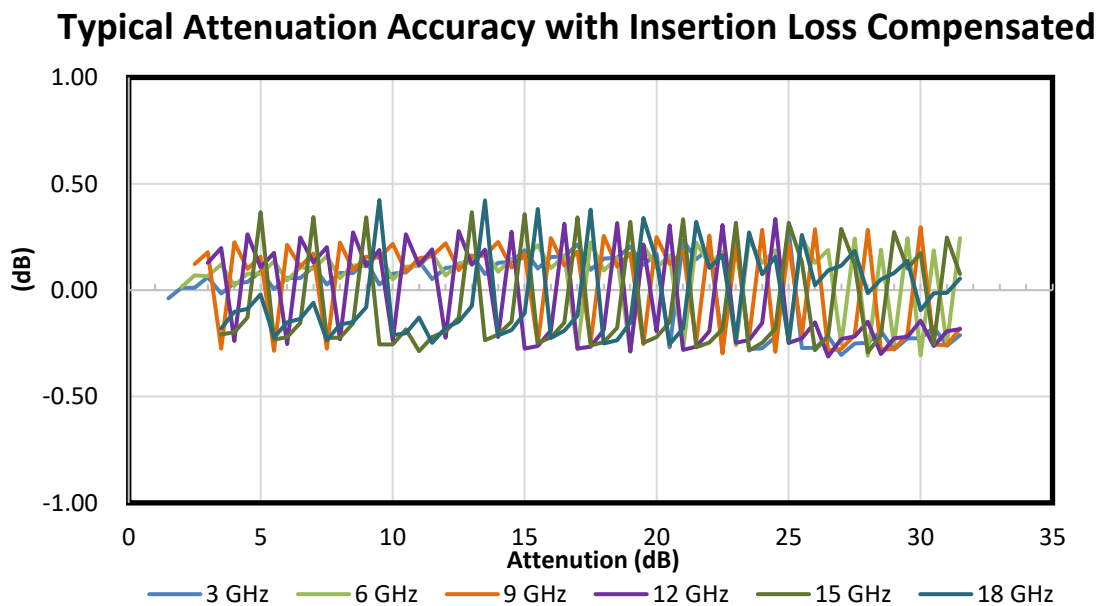
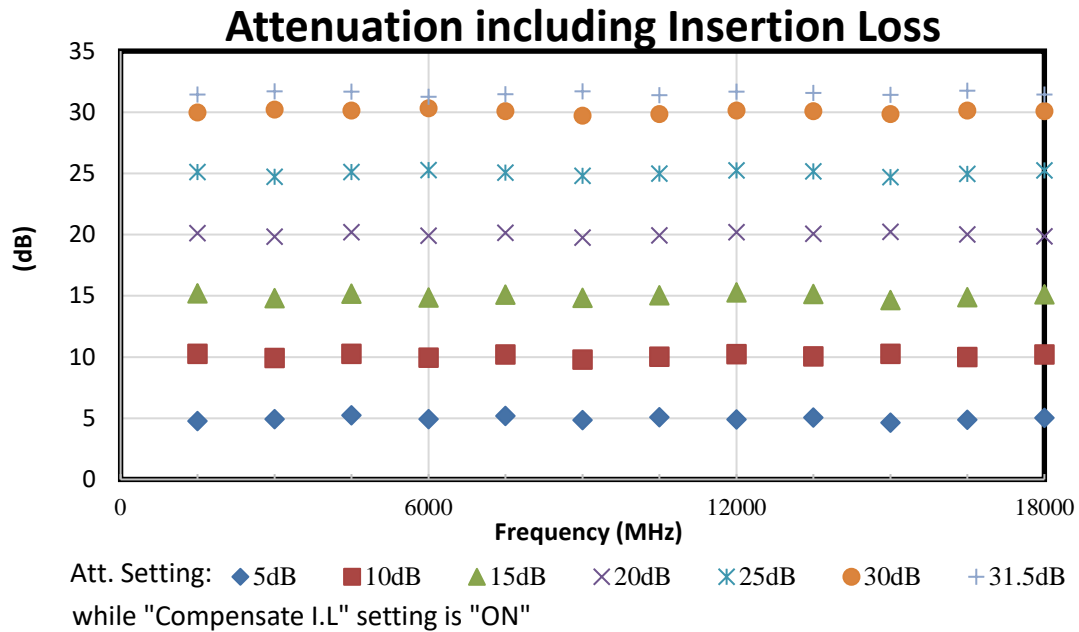
Channel	Attenuation (dB)	Frequency (MHz)	Compensate Insertion Loss
1	30	1000	<input checked="" type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>

information table: Users key-in desired setting here, and the device current setting also displayed.

four operation buttons

Software Support: <https://www.amtery.com/data/files/Software.zip>

User manual: <http://www.amtery.com/data/files/User%20Manual.pdf>



Typical performance S-parameter file: <https://www.amtery.com/en/goods-90>

For each S/N S-parameter file, go to <https://www.amtery.com/en/downloads>

Note: Specifications are subject to change without notice.