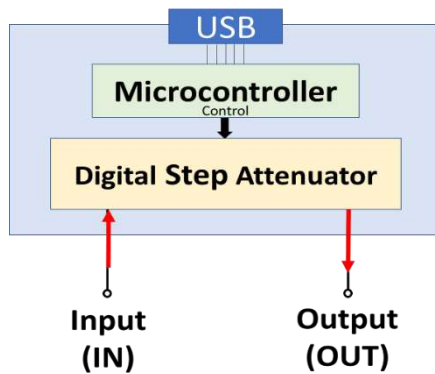




RoHS Compliant



Electrical Schematic

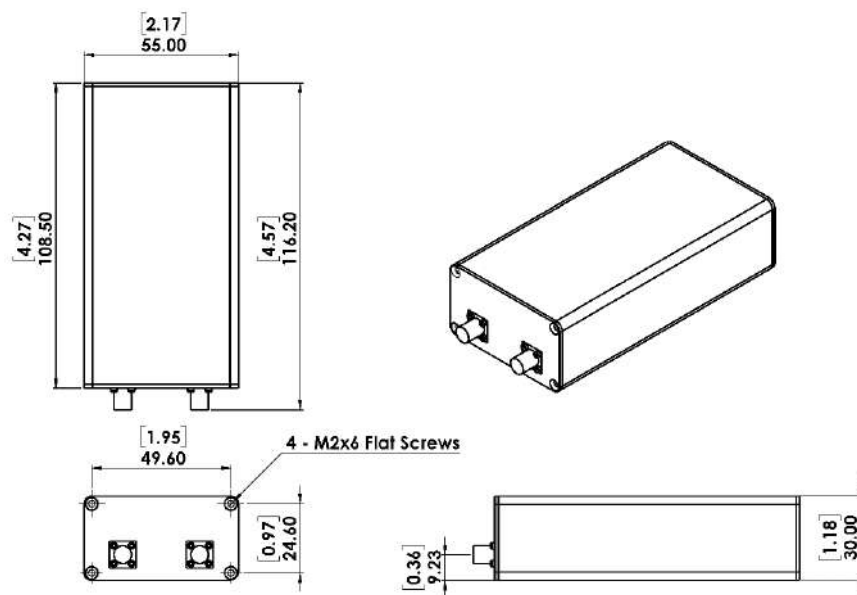
Insertion Loss Compensated

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



Connectors: 2.92mm Female, USB (Micro-B)

Electrical Specifications

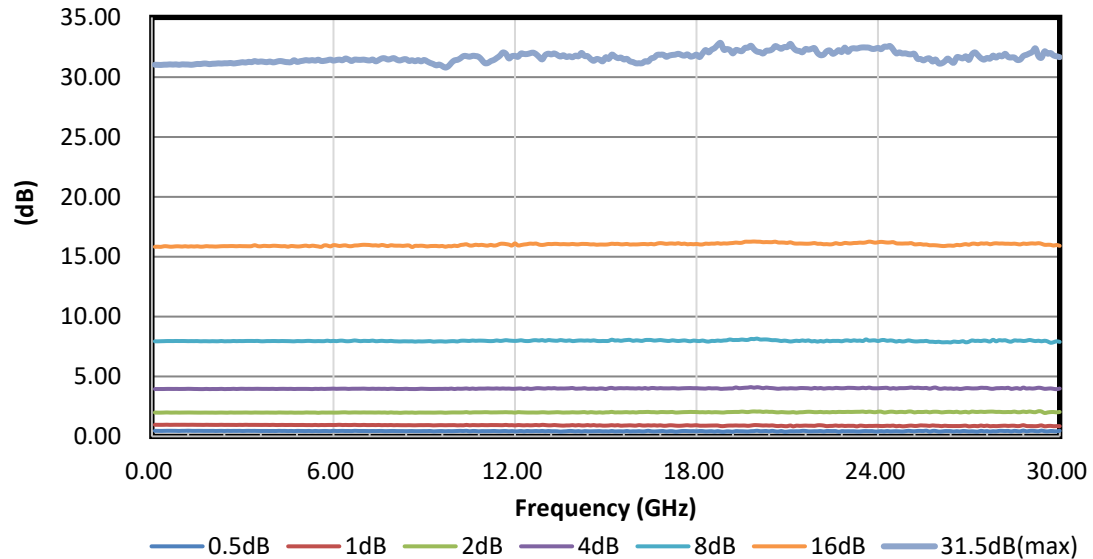
Parameter		Unit	Frequency (MHz)	Conditions		Min.	Typ.	Max.
Attenuation Range		dB	10 - 30000			0		31.5
Step		dB					0.5	
Insertion Loss (I.L.)		dB		@ 0 dB Att.			5.6	5.9
Attenuation Accuracy	Compensate I.L. “OFF” <i>Note1</i> (I.L. Excluded)	dB		@ 0.5 - 15 dB Att.		± (0.2 + 2% of state) (max.)		
				@ 16 - 31.5 dB Att.		± (0.2 + 4% of state) (max.)		
	Compensate I.L. “ON” <i>Note2</i> (I.L. Included)	dB		I.L. ≤ Att. ≤ 31.5dB			± 0.45	± 0.50
Input Operating Power (RF In and RF Out ports)		dBm						27
IP3 Input		dBm					48	
VSWR		:1		@ 0 dB Att.		Input	1.44	1.52
						Output	1.37	
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 50 Ω system, 25°C environment.

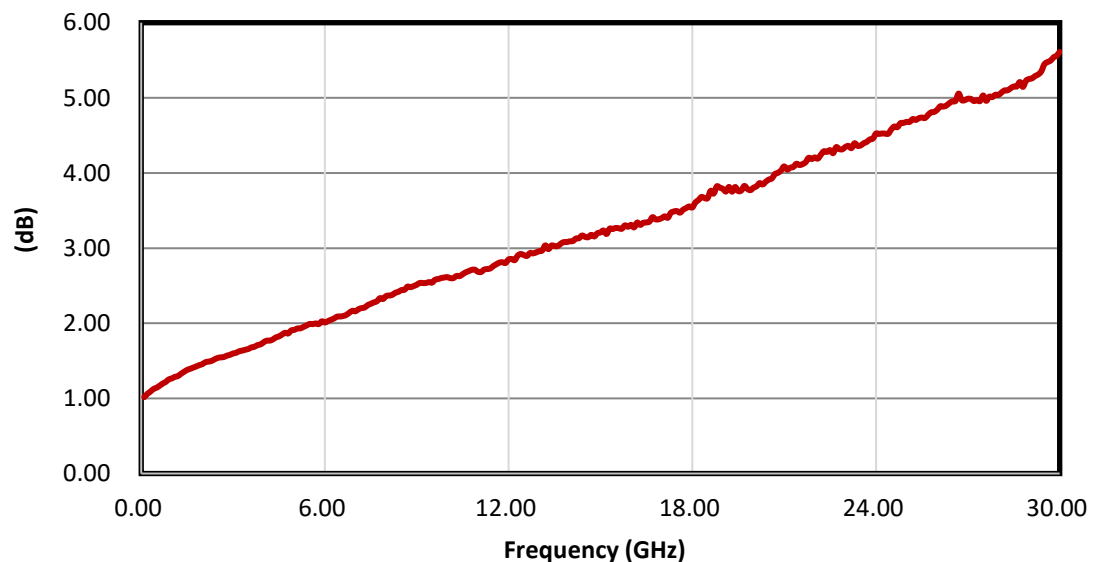
Note1 Max accuracy is relative to attenuation setting value EXCLUDING insertion loss while "Compensate I.L." setting is "OFF".

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

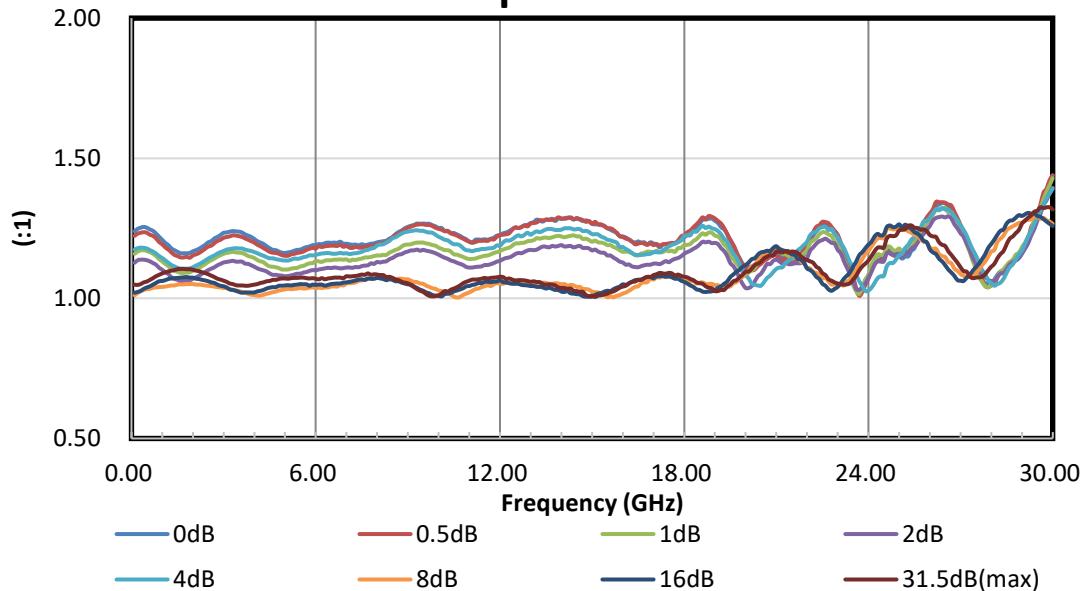
Attenuation relative to Insertion Loss



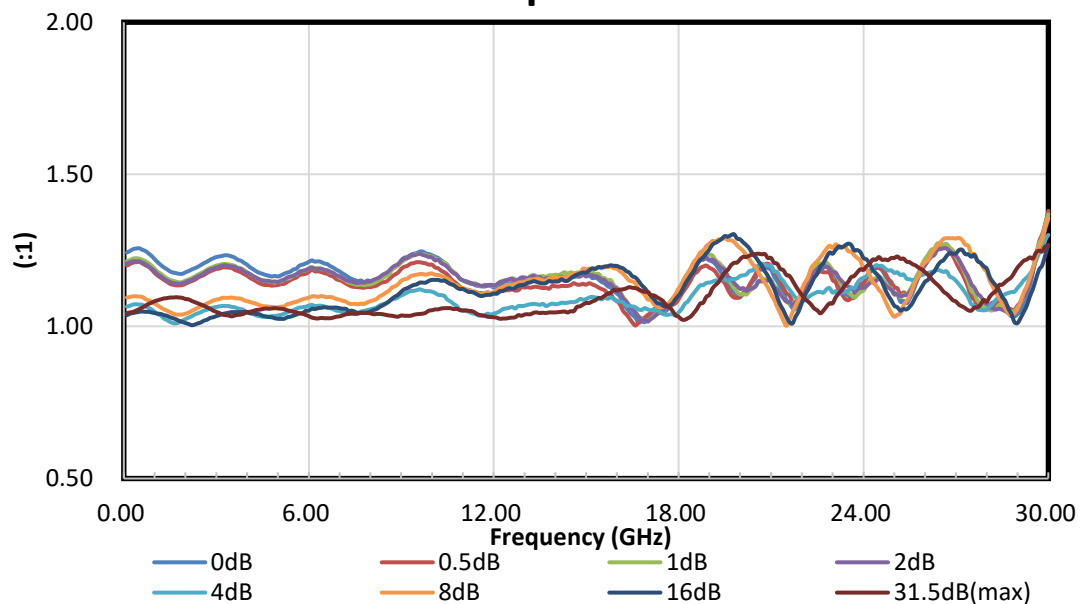
Insertion Loss



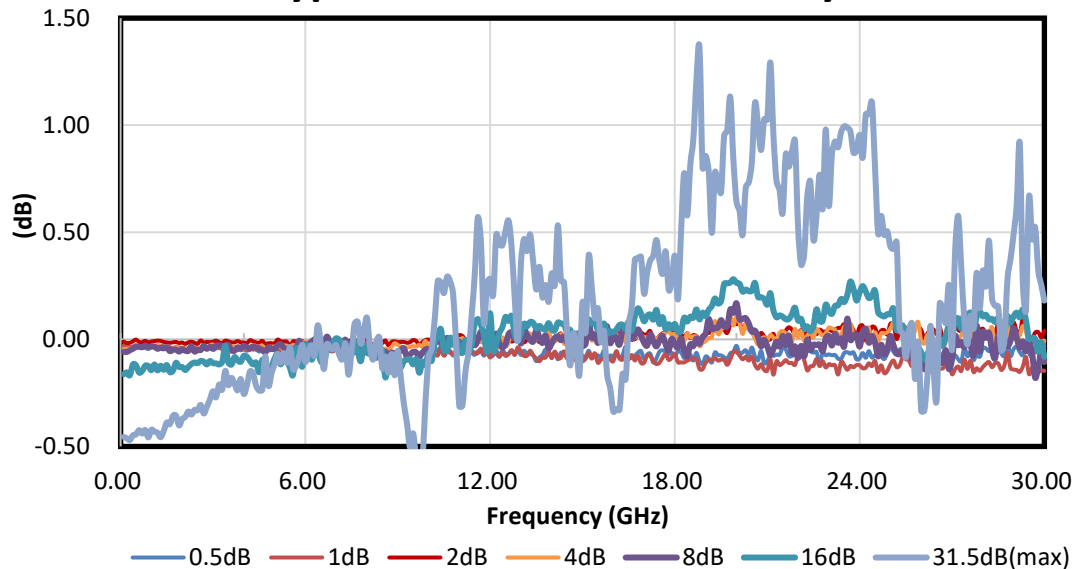
Input VSWR



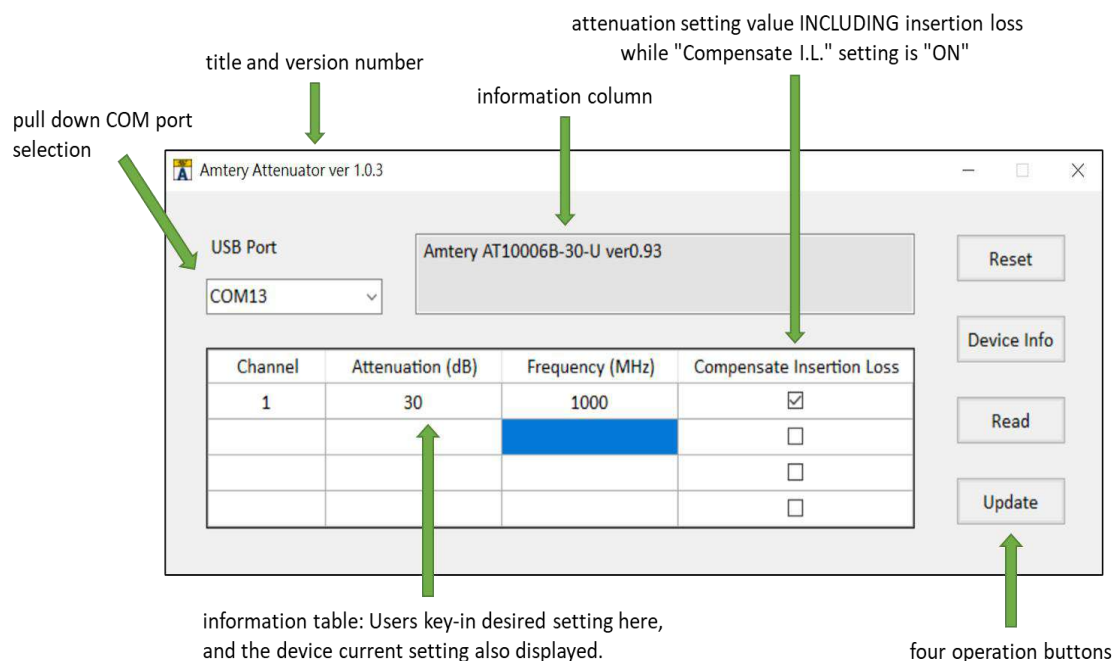
Output VSWR



Typical Attenuation Accuracy



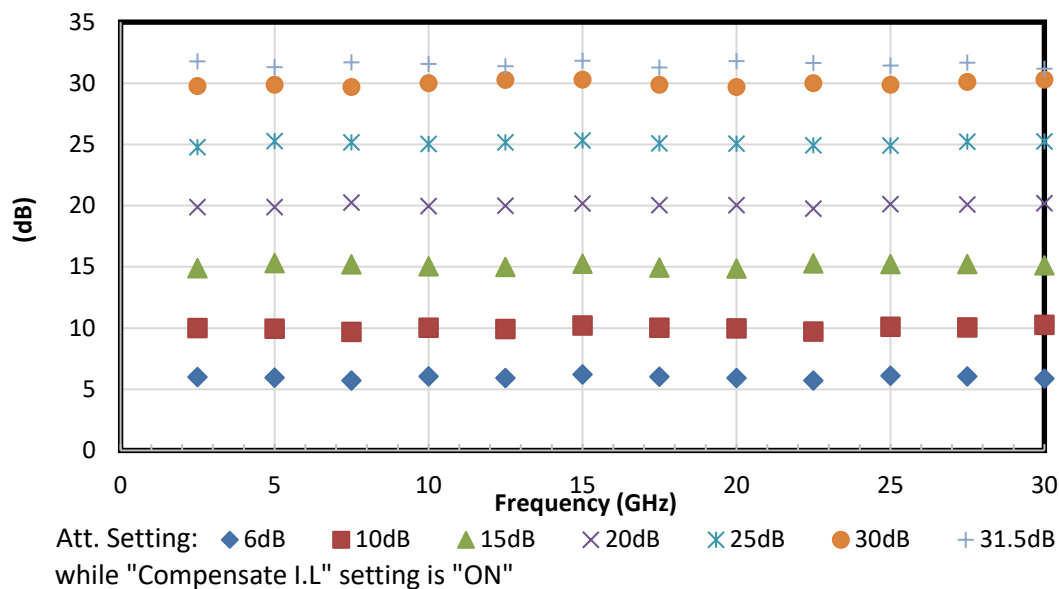
Amtery Graphical User Interface (GUI)



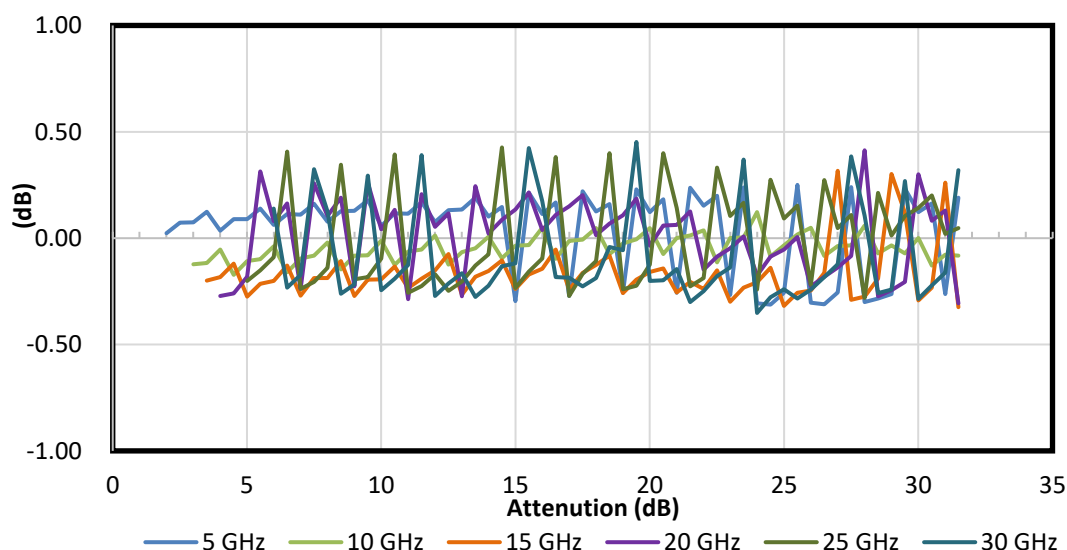
Software Support: <https://www.amtery.com/data/files/Software.zip>

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

Attenuation including Insertion Loss



Typical Attenuation Accuracy with Insertion Loss Compensated



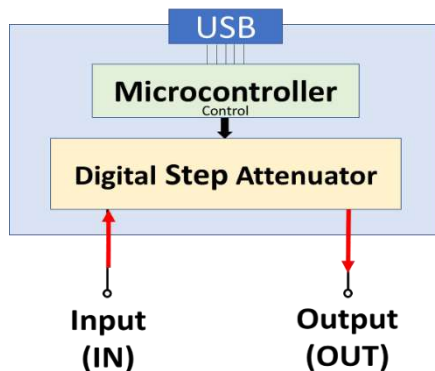
Typical performance S-parameter file: <https://www.amtery.com/en/goods-91>

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

Note: Specifications are subject to change without notice.



RoHS Compliant



Electrical Schematic

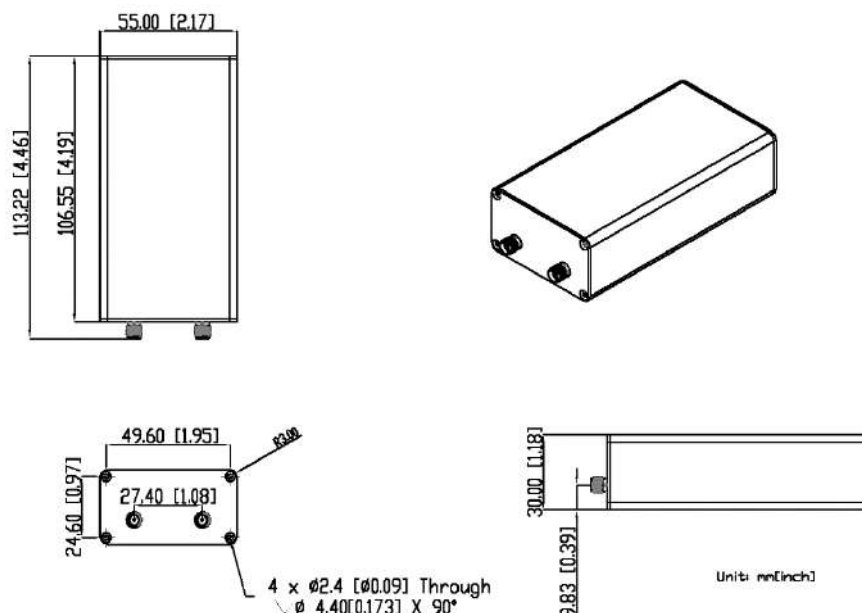
Insertion Loss Compensated

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



Connectors: SMA Female, USB (Micro-B)

Electrical Specifications

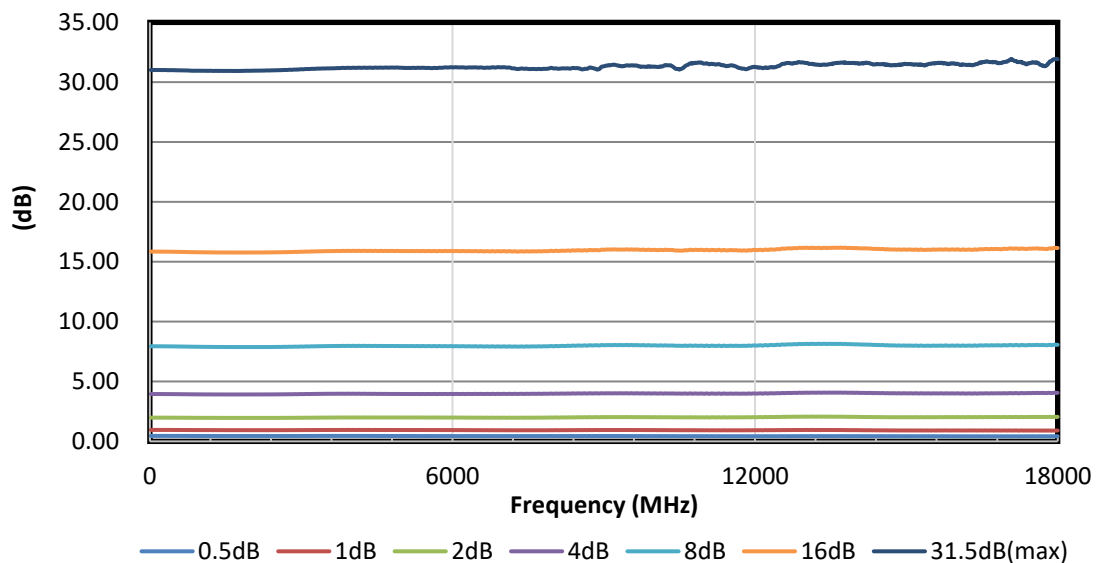
Parameter		Unit	Frequency (MHz)	Conditions		Min.	Typ.	Max.
Attenuation Range		dB	15 - 18000			0		31.5
Step		dB					0.5	
Insertion Loss (I.L.)		dB		@ 0 dB Att.			4.0	4.2
Attenuation Accuracy	Compensate I.L. “OFF” <i>Note1</i> (I.L. Excluded)	dB		@ 0.5 dB Att.			± 0.08	± 0.12
				@ 1, 2 dB Att.			± 0.10	± 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 Output		1.49 1.35	1.52
Switching Speed		us		10% to 90% RF Output			1.3	
				50% Control to 90% RF Output			3.24	
				Supply Voltage		V	USB port	
Supply Current		mA		USB port			10	

Operated in 50Ω system, 25°C environment.

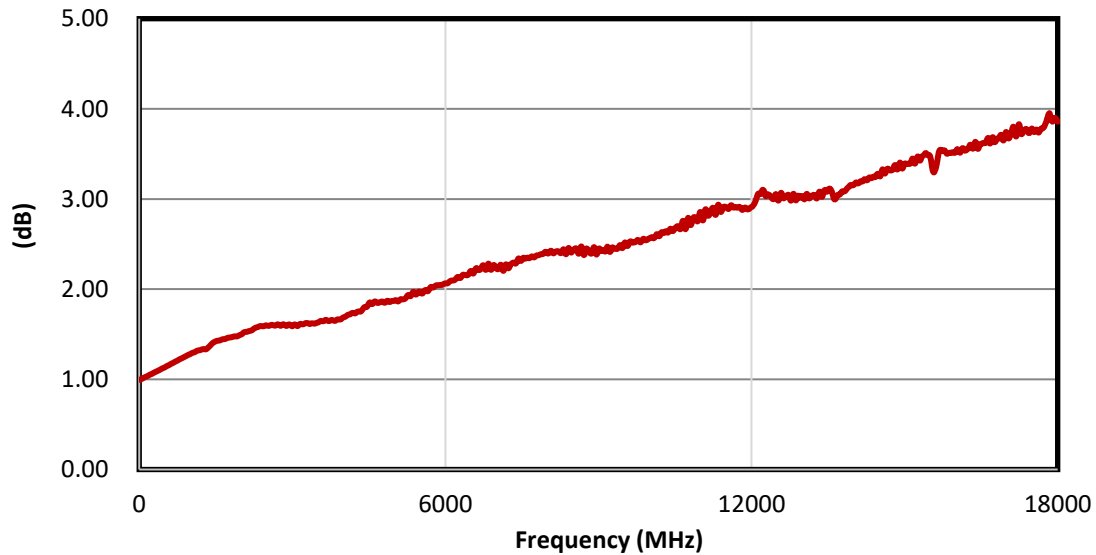
Note1 Max accuracy is relative to attenuation setting value EXCLUDING insertion loss while "Compensate I.L." setting is "OFF".

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

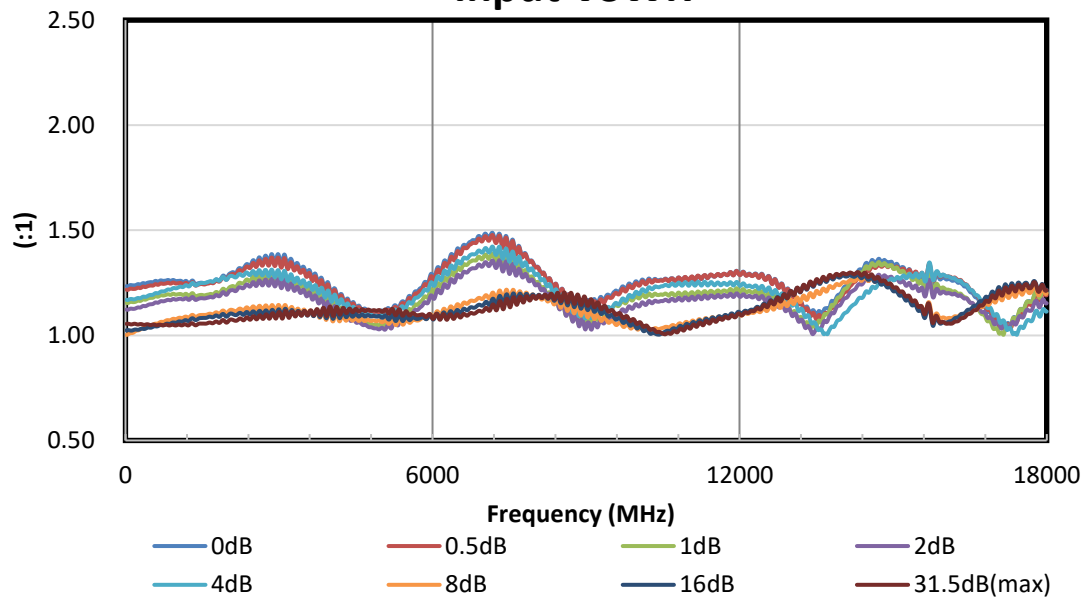
Attenuation relative to Insertion Loss



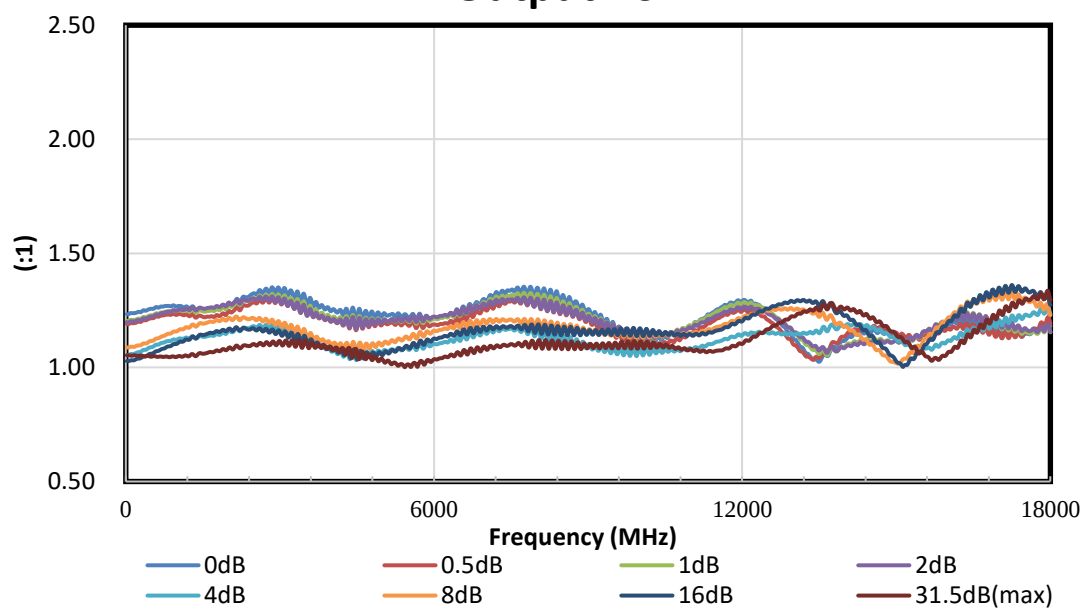
Insertion Loss



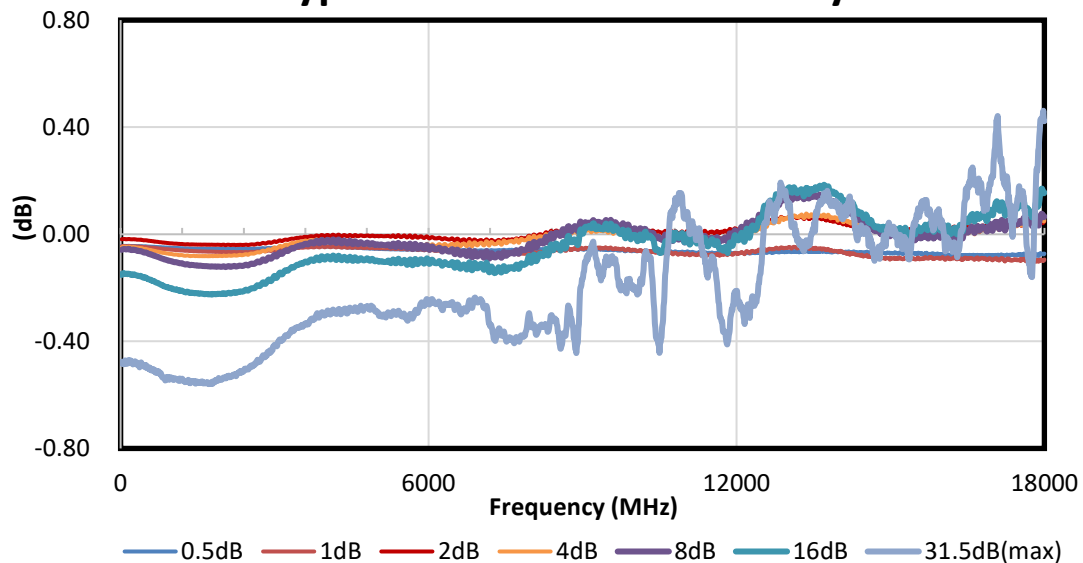
Input VSWR



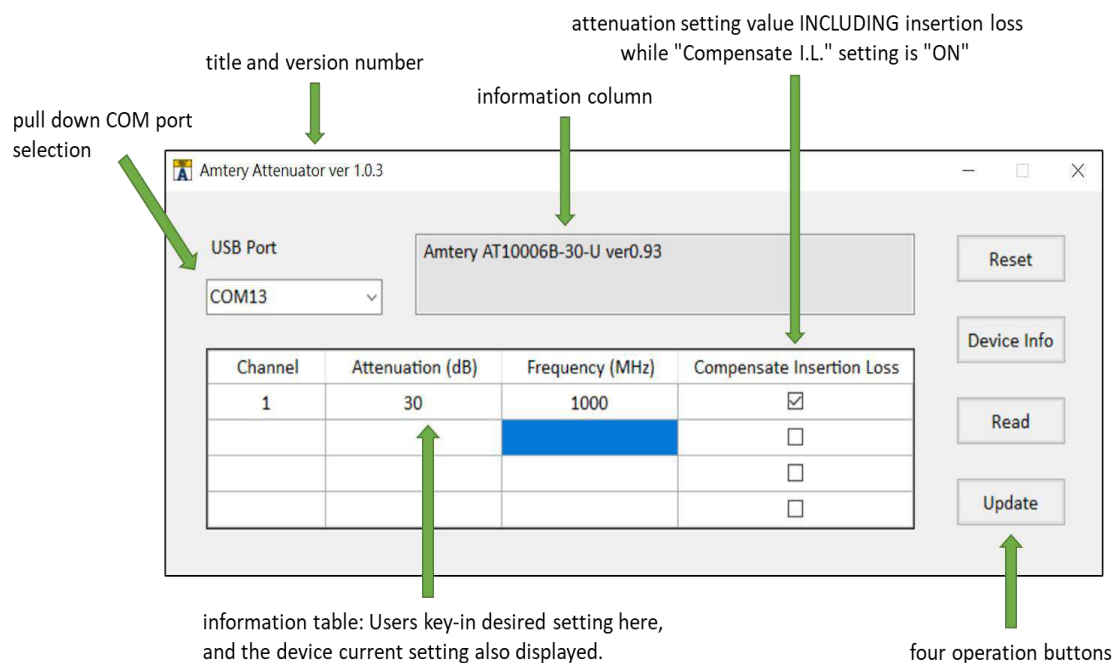
Output VSWR



Typical Attenuation Accuracy

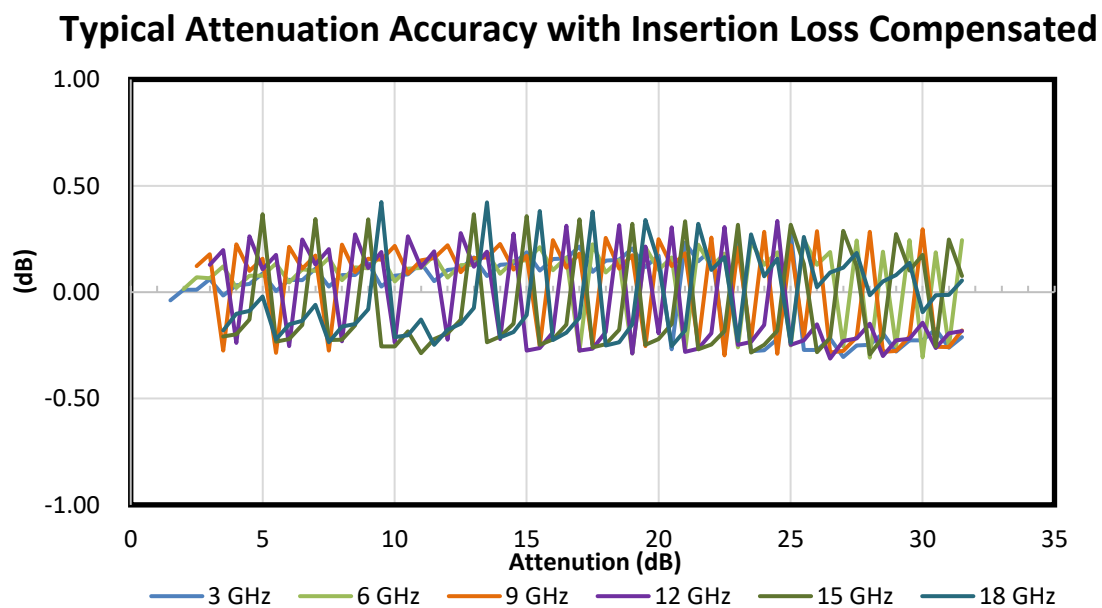
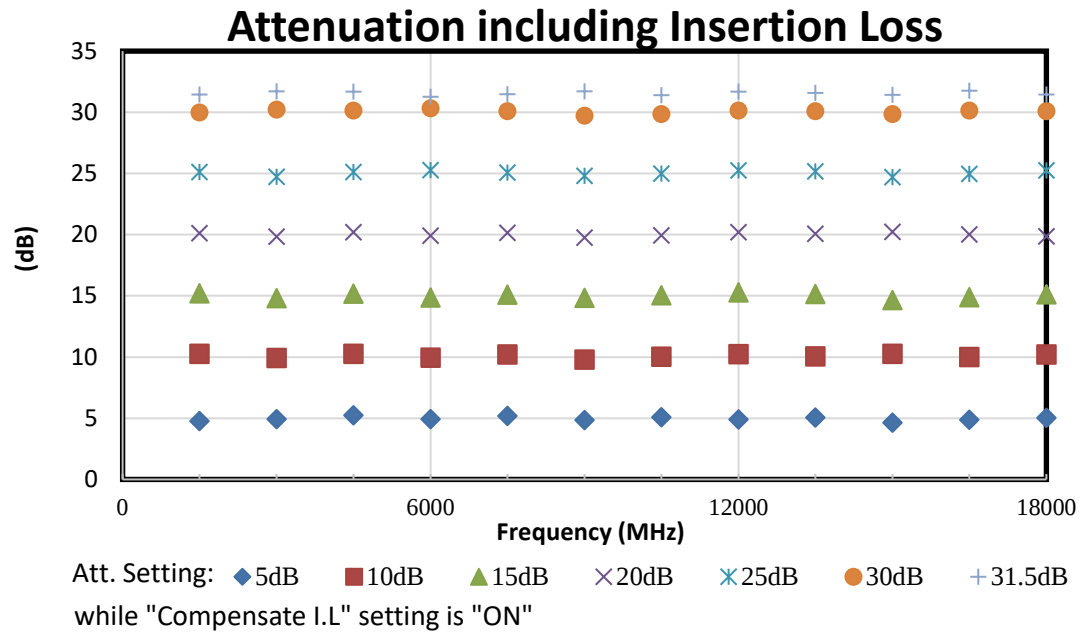


Amtery Graphical User Interface (GUI)



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

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



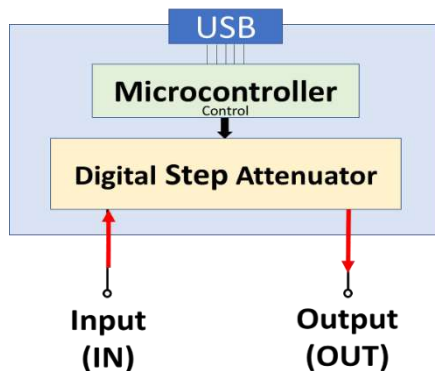
Typical performance S-parameter file: <https://www.amtery.com/en/goods-90>

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

Note: Specifications are subject to change without notice.



RoHS Compliant



Electrical Schematic

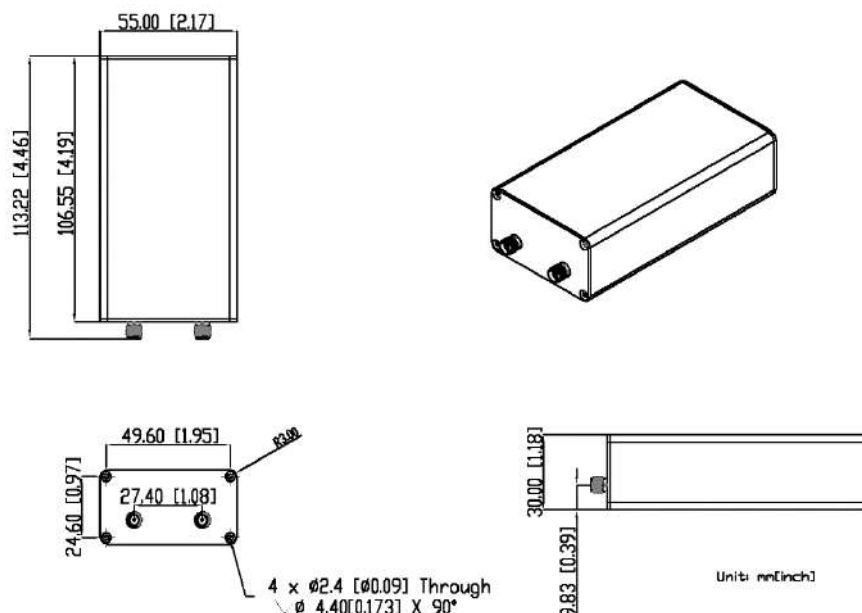
Insertion Loss Compensated

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



Connectors: SMA Female, USB (Micro-B)

Electrical Specifications

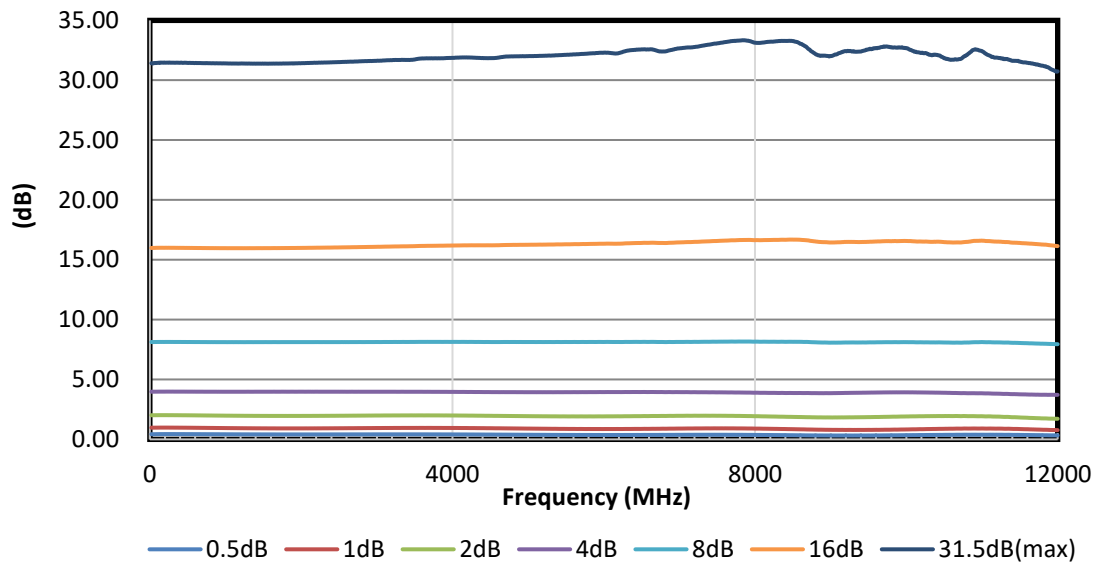
Parameter		Unit	Frequency (MHz)	Conditions		Min.	Typ.	Max.
Attenuation Range		dB	15 - 12000			0		31.5
Step		dB					0.5	
Insertion Loss (I.L.)		dB		@ 0 dB Att.			5.6	5.8
Attenuation Accuracy	Compensate I.L. “OFF” <i>Note1</i> (I.L. Excluded)	dB		@ 0.5 dB Att.			±0.19	±0.23
				@ 1, 2, 4, 8 dB Att.			±0.30	±0.33
				@ 16 dB Att.			±0.80	±0.90
				@ 31.5 dB Att.			±1.84	±2.00
	Compensate I.L. “ON” <i>Note2</i> (I.L. Included)	dB		I.L. ≤ Att. ≤ 16dB			± 0.50	± 0.70
				16dB < Att. ≤ 31.5dB			± 0.70	± 0.95
Input Operating Power (RF In and RF Out ports)		dBm						25
IP3 Input		dBm					36	
VSWR		:1		@ 0 dB Att.	Input		1.58	1.64
					Output		1.57	
Switching Speed		us		10% to 90% RF Output			45	
				50% Control to 90% RF Output			293	
Supply Voltage		V	USB port			5		
Supply Current		mA	USB port			13		

Operated in 50Ω system, 25°C environment.

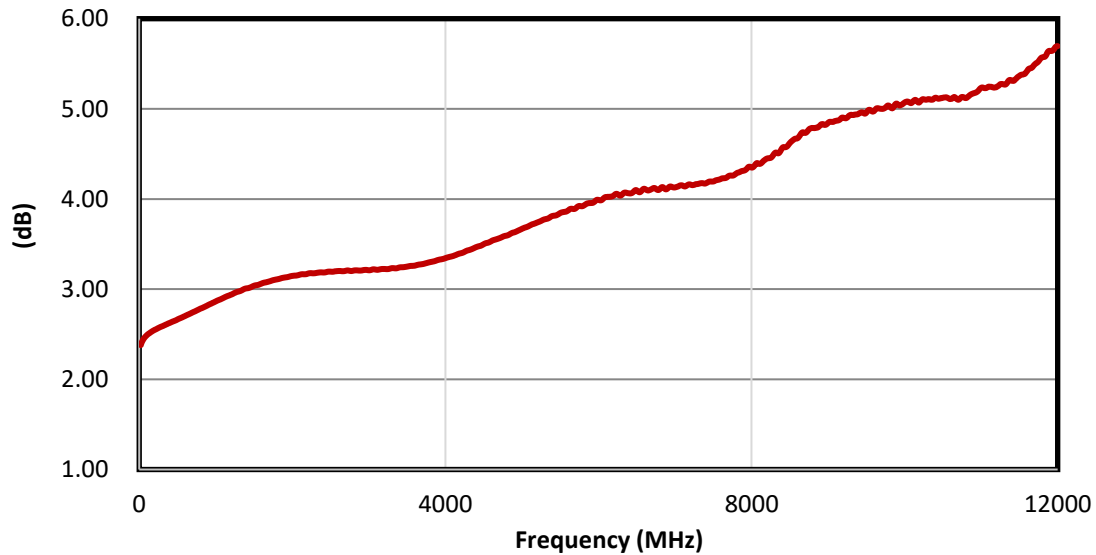
Note1 Max accuracy is relative to attenuation setting value EXCLUDING insertion loss while "Compensate I.L." setting is "OFF".

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

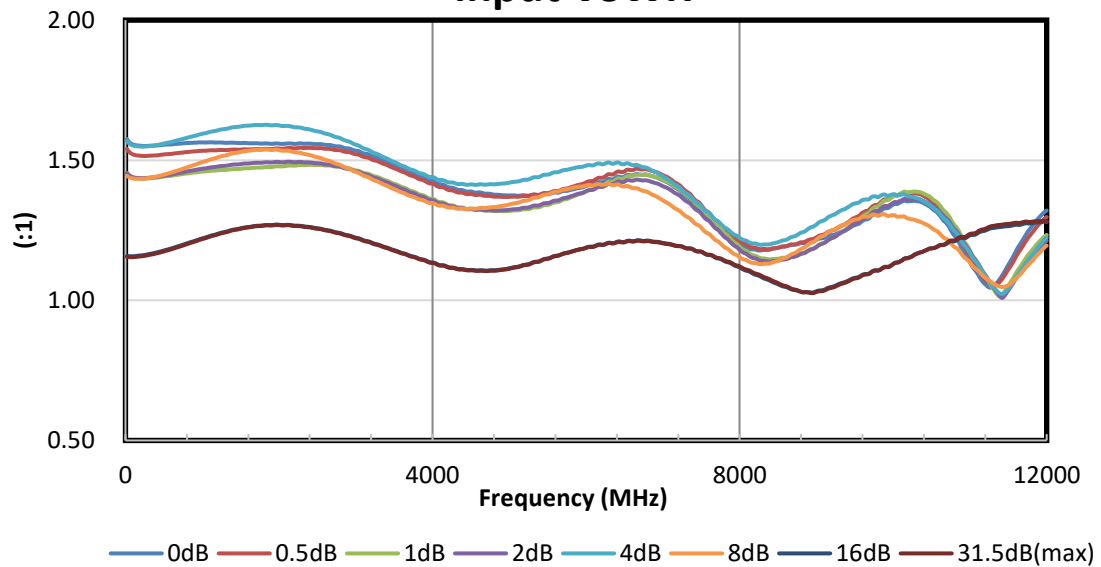
Attenuation relative to Insertion Loss



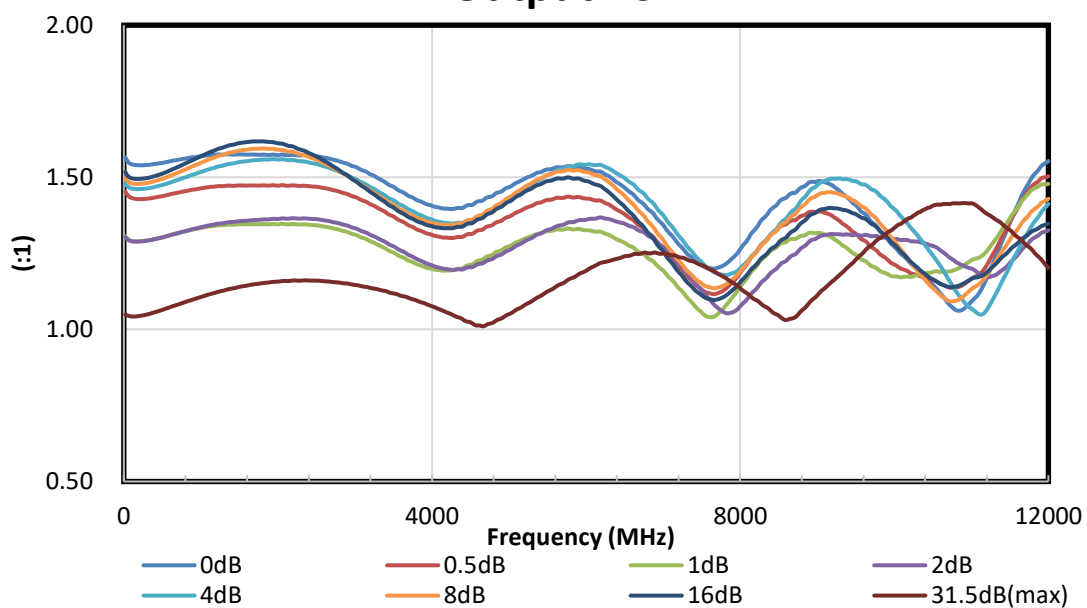
Insertion Loss



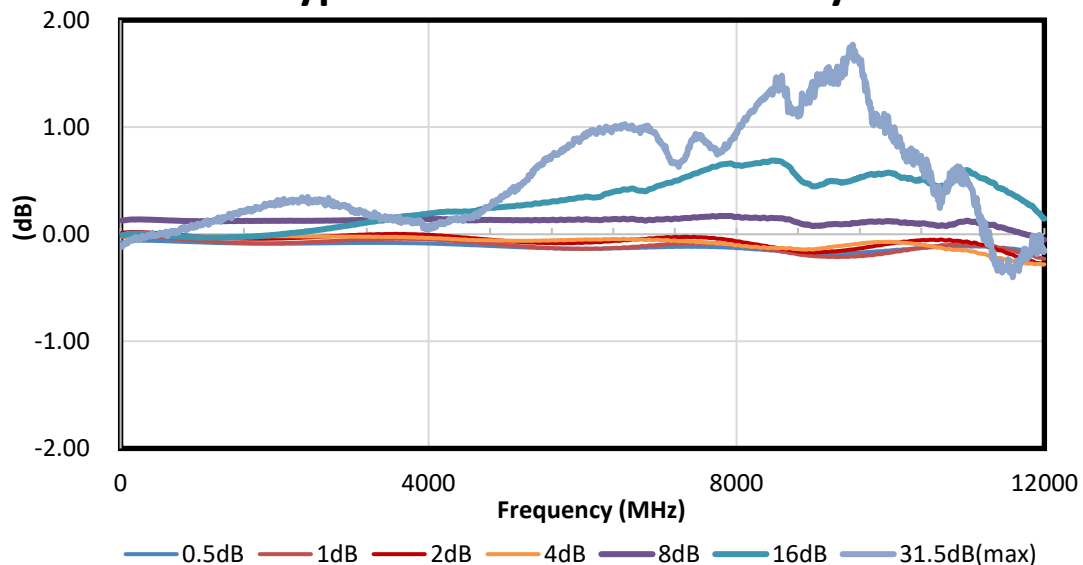
Input VSWR



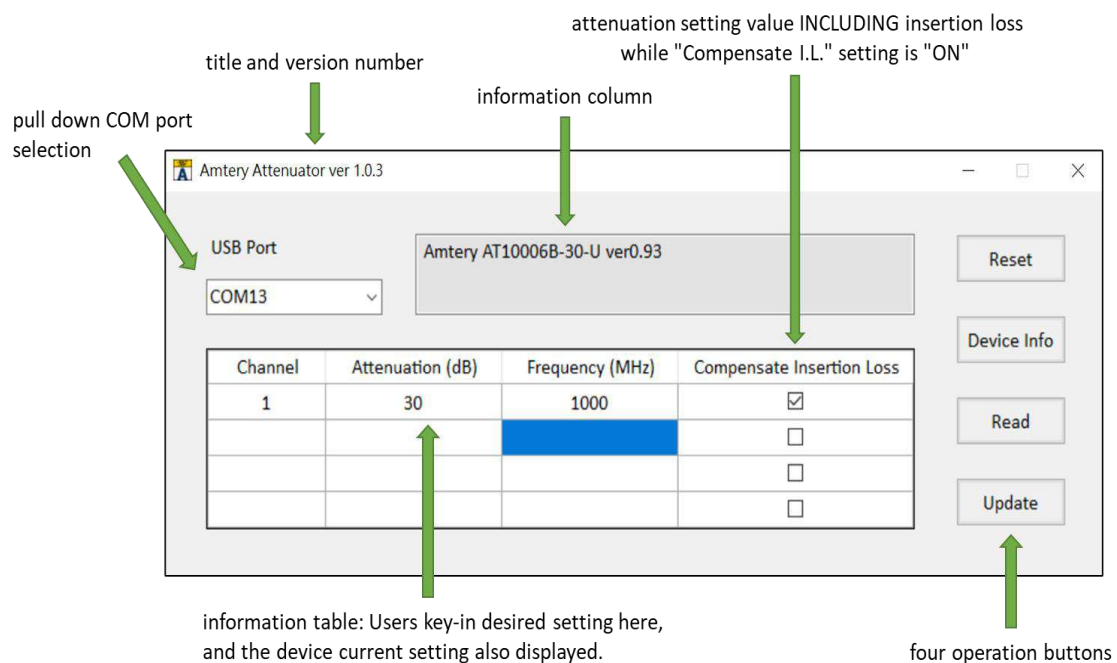
Output VSWR



Typical Attenuation Accuracy

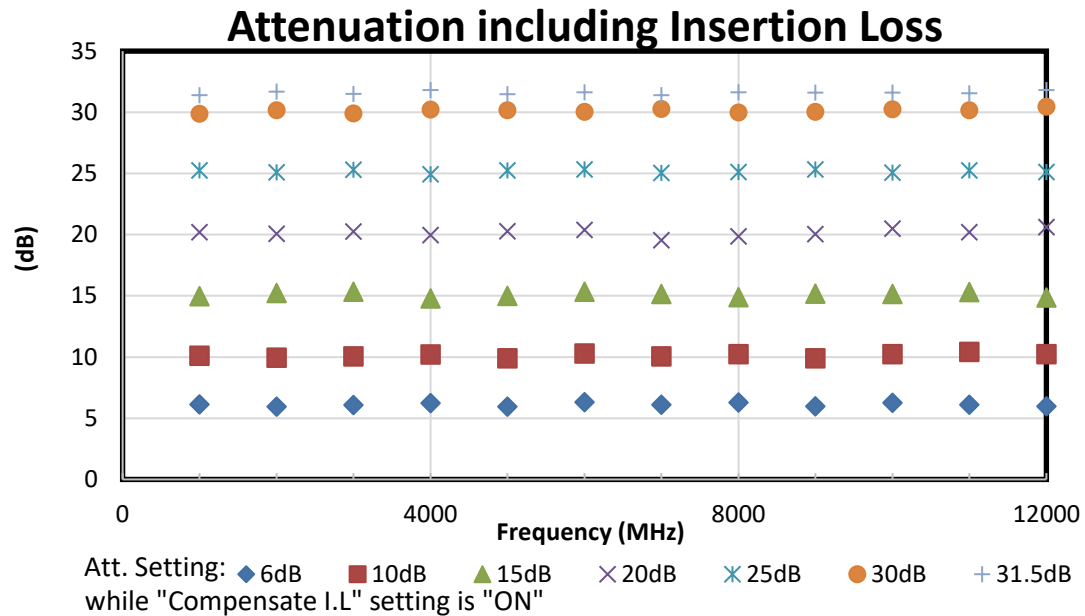


Amtery Graphical User Interface (GUI)

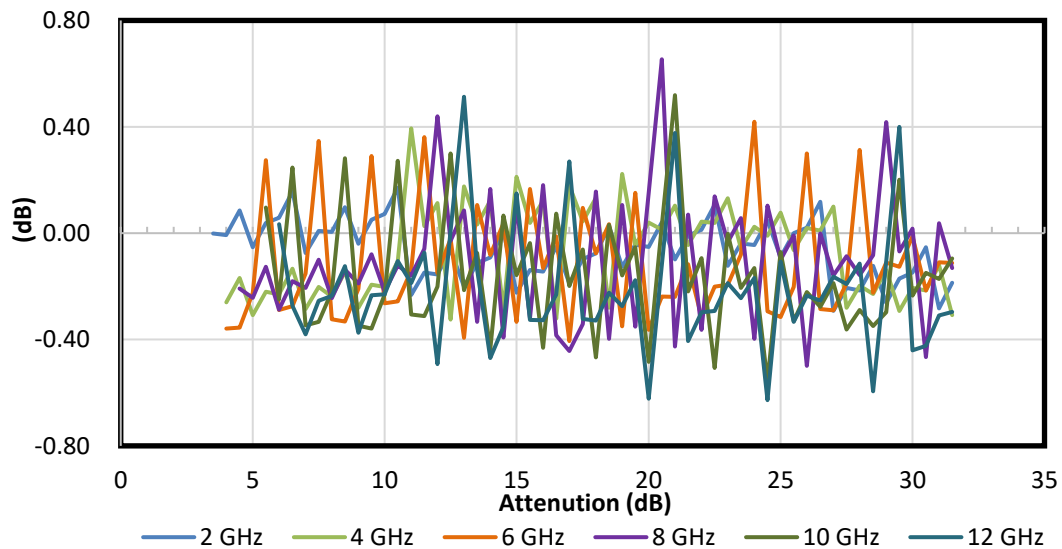


Software Support: <https://www.amtery.com/data/files/Software.zip>

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



Typical Attenuation Accuracy with Insertion Loss Compensated



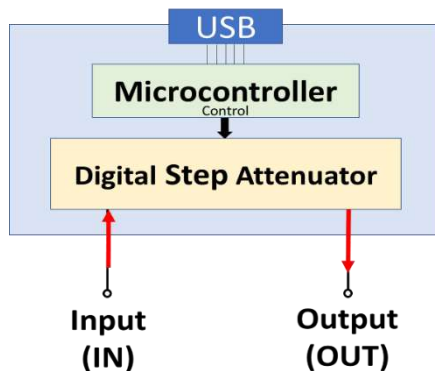
Typical performance S-parameter file: <https://www.amtery.com/en/goods-89>

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

Note: Specifications are subject to change without notice.



RoHS Compliant



Electrical Schematic

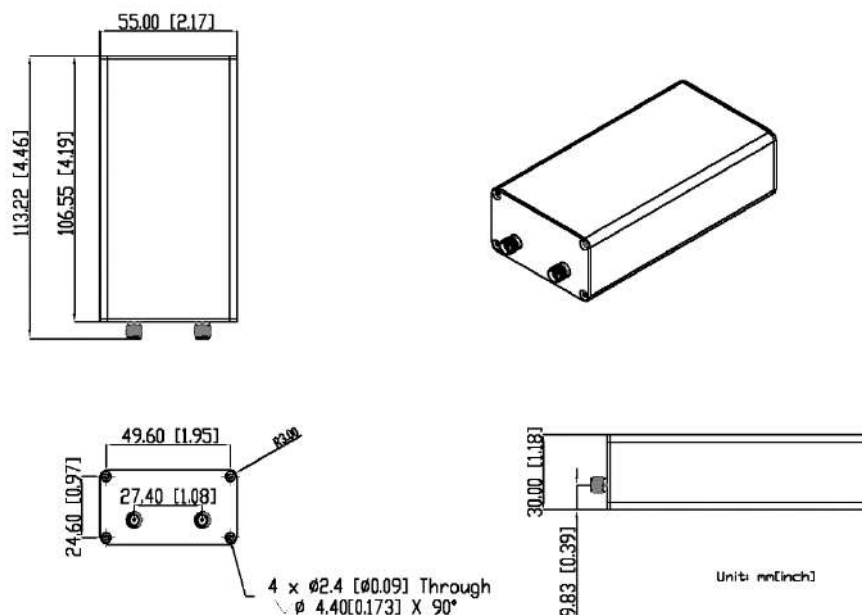
Insertion Loss Compensated

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



Connectors: SMA Female, USB (Micro-B)

Electrical Specifications

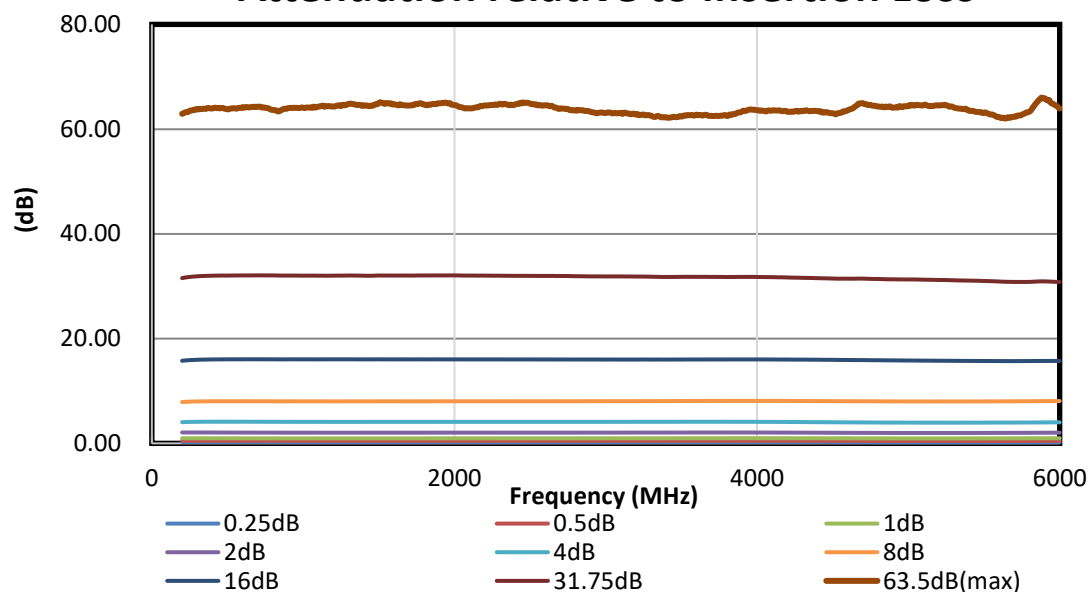
Parameter		Unit	Frequency (MHz)	Conditions		Min.	Typ.	Max.
Attenuation Range		dB	200 - 6000			0		63.5
Step		dB					0.25	
Insertion Loss (I.L.)		dB		@ 0 dB Att.			5.5	5.7
Attenuation Accuracy	Compensate I.L. “OFF” Note1 (I.L. Excluded)	dB		@ 0.25 dB Att.			± 0.03	± 0.04
				@ 0.5, 1, 2 dB Att.			± 0.07	± 0.13
				@ 4, 8, 16 dB Att.			± 0.27	± 0.32
				@ 31.75 dB Att.			± 0.93	± 1.20
				@ 63.5 dB Att.			± 2.53	± 3.50
	Compensate I.L. “ON” Note2 (I.L. Included)	dB		I.L. ≤ Att. ≤12dB			± 0.10	± 0.25
				12dB < Att. ≤ 63.5dB			± 0.20	± 0.30
Input Operating Power (RF In and RF Out ports)		dBm						24
IP3 Input		dBm					47	
VSWR		:1		@ 0 dB Att.	Input		1.50	1.80
					Output		1.42	
Switching Speed		ns		10% to 90% RF Output			90	
			50% Control to 90% RF Output			205		
Supply Voltage		V	USB port			5		
Supply Current		mA	USB port			36		

Operated in 50Ω system, 25°C environment.

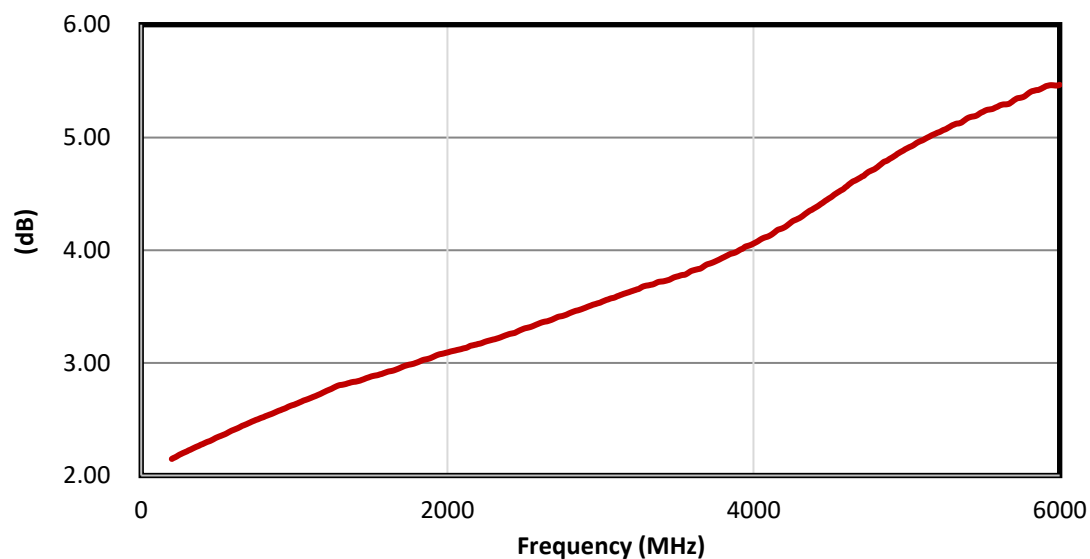
Note1 Max accuracy is relative to attenuation setting value EXCLUDING insertion loss while "Compensate I.L." setting is "OFF".

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

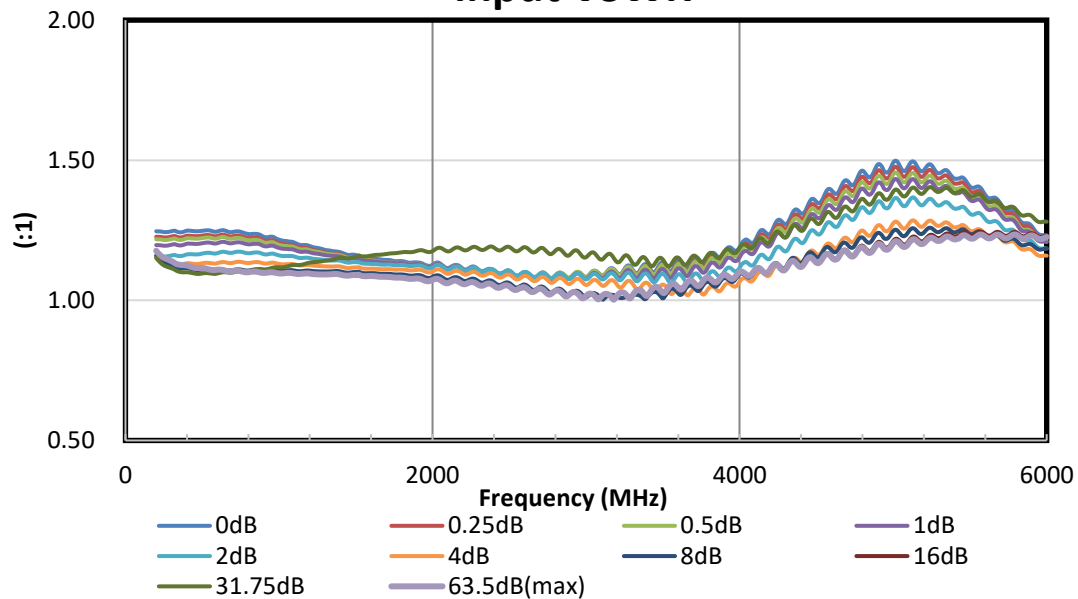
Attenuation relative to Insertion Loss



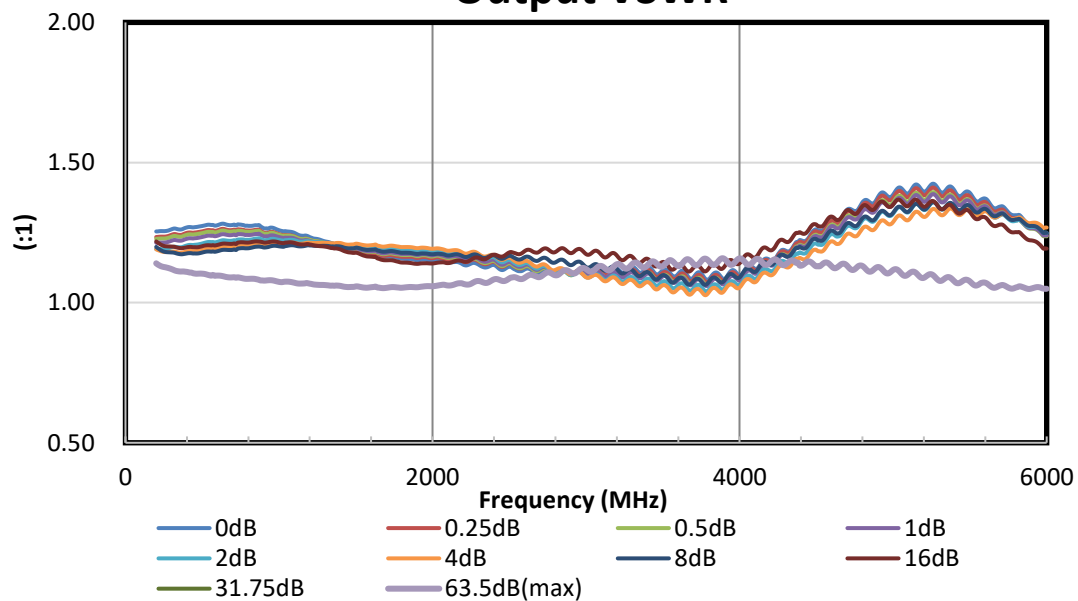
Insertion Loss



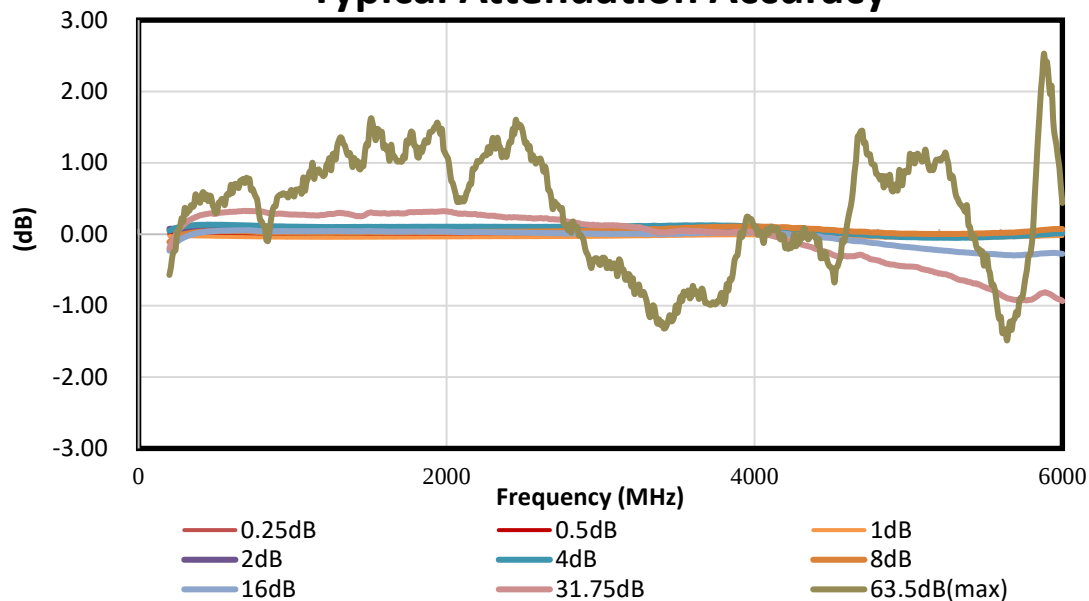
Input VSWR



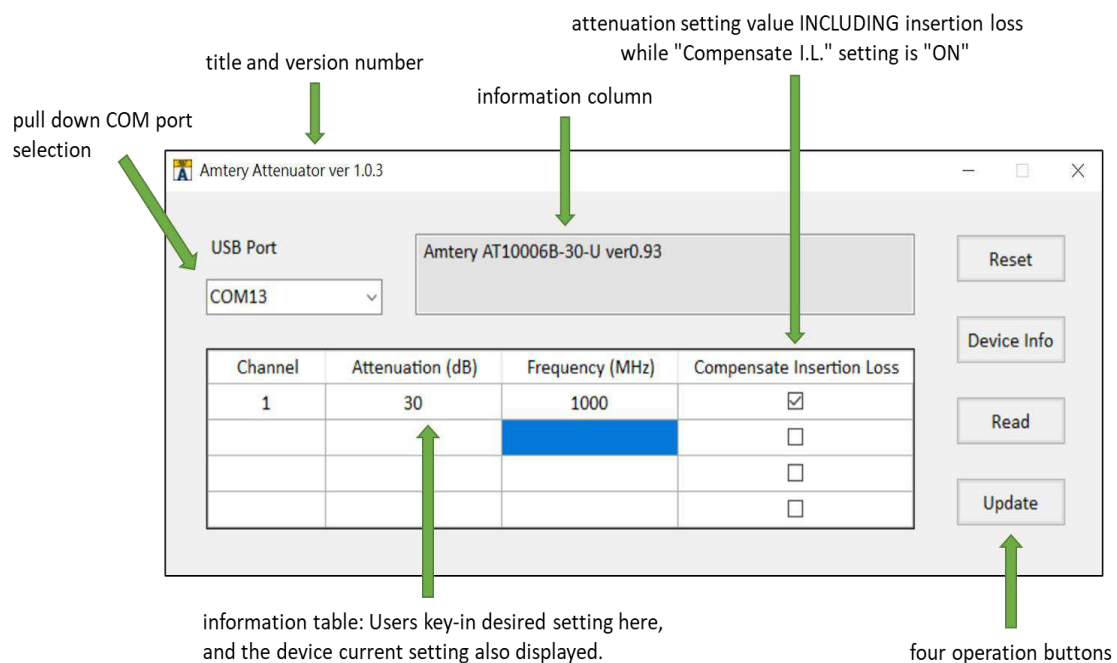
Output VSWR



Typical Attenuation Accuracy

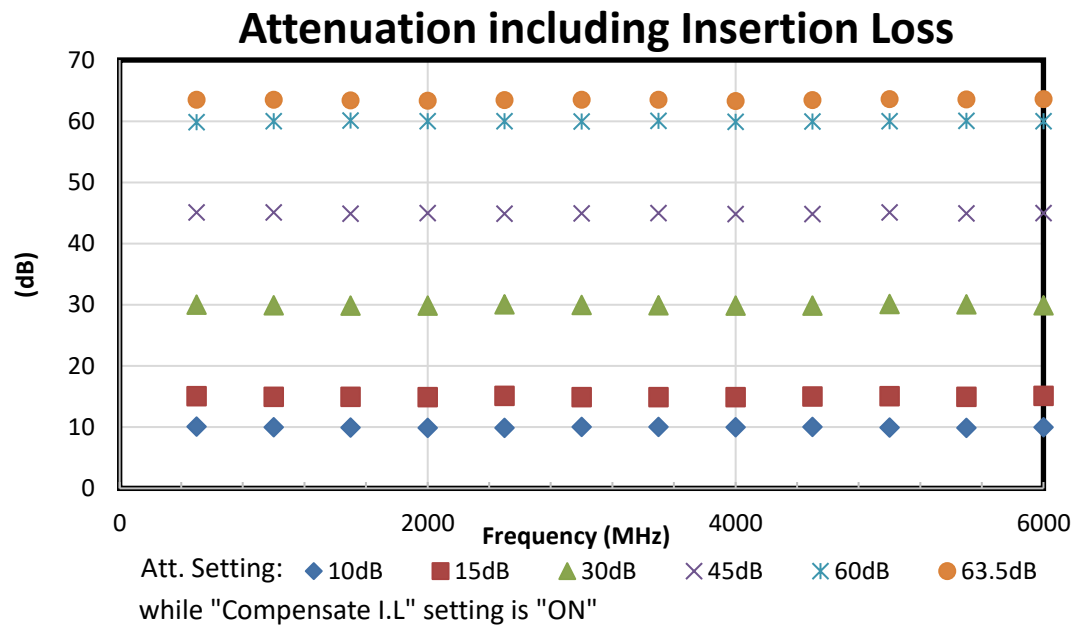


Amtery Graphical User Interface (GUI)

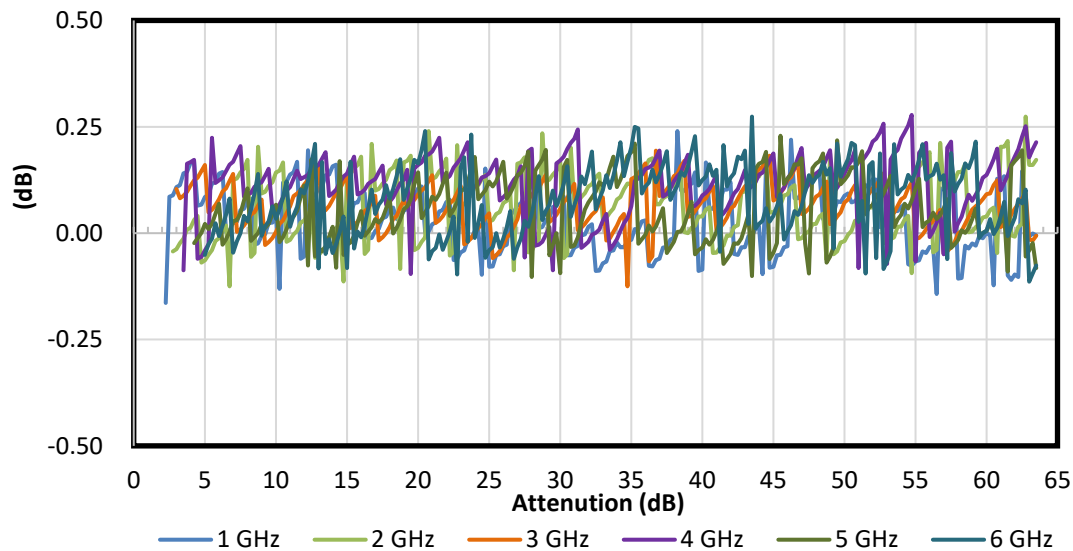


Software Support: <https://www.amtery.com/data/files/Software.zip>

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



Typical Attenuation Accuracy with Insertion Loss Compensated



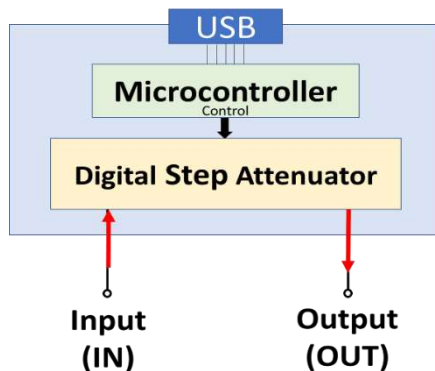
Typical performance S-parameter file: <https://www.amtery.com/en/goods-85>

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

Note: Specifications are subject to change without notice.



RoHS Compliant



Electrical Schematic

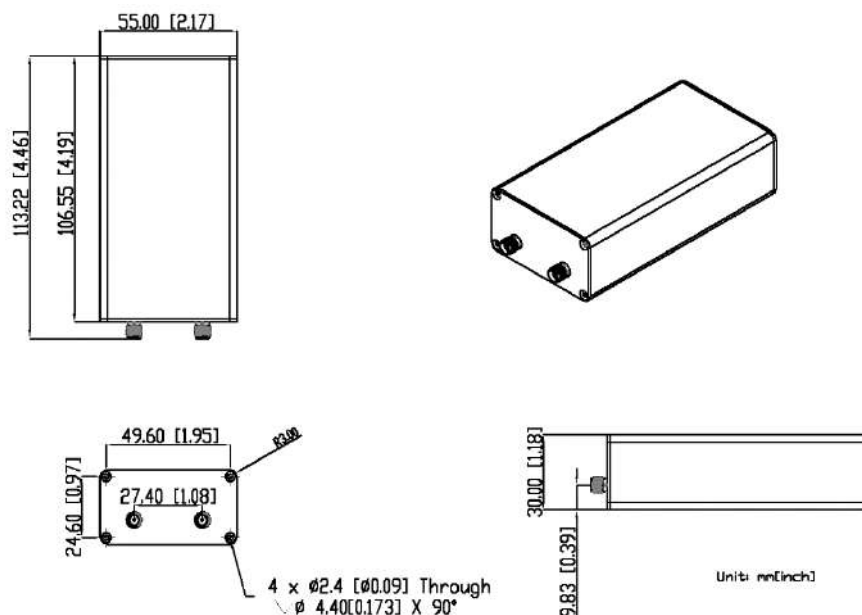
Insertion Loss Compensated

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



Connectors: SMA Female, USB (Micro-B)

Electrical Specifications

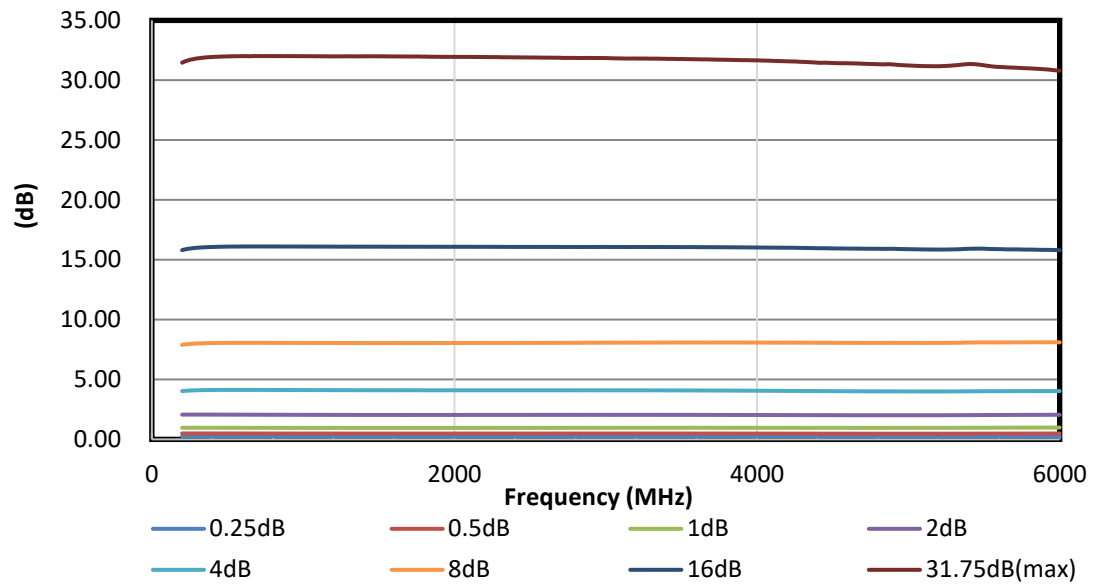
Parameter		Unit	Frequency (MHz)	Conditions		Min.	Typ.	Max.
Attenuation Range		dB	200 - 6000			0		31.75
Step		dB					0.25	
Insertion Loss (I.L.)		dB		@ 0 dB Att.			3.2	3.4
Attenuation Accuracy	Compensate I.L. “OFF” <i>Note1</i> (I.L. Excluded)	dB		@ 0.25 dB Att.			±0.02	±0.03
				@ 0.5, 1, 2 dB Att.			±0.07	±0.10
				@ 4, 8, 16 dB Att.			±0.20	±0.32
				@ 31.75 dB Att.			±0.95	±1.10
	Compensate I.L. “ON” <i>Note2</i> (I.L. Included)	dB		I.L. ≤ Att. ≤5dB			± 0.20	± 0.25
				5dB < Att. ≤ 31.75dB			± 0.25	± 0.30
Input Operating Power (RF In and RF Out ports)		dBm						24
IP3 Input		dBm					51	
VSWR		:1		@ 0 dB Att.	Input		1.36	1.40
					Output		1.35	
Switching Speed		ns		10% to 90% RF Output			70	
				50% Control to 90% RF Output			165	
Supply Voltage		V	USB port			5		
Supply Current		mA	USB port			10.4		

Operated in 50Ω system, 25°C environment.

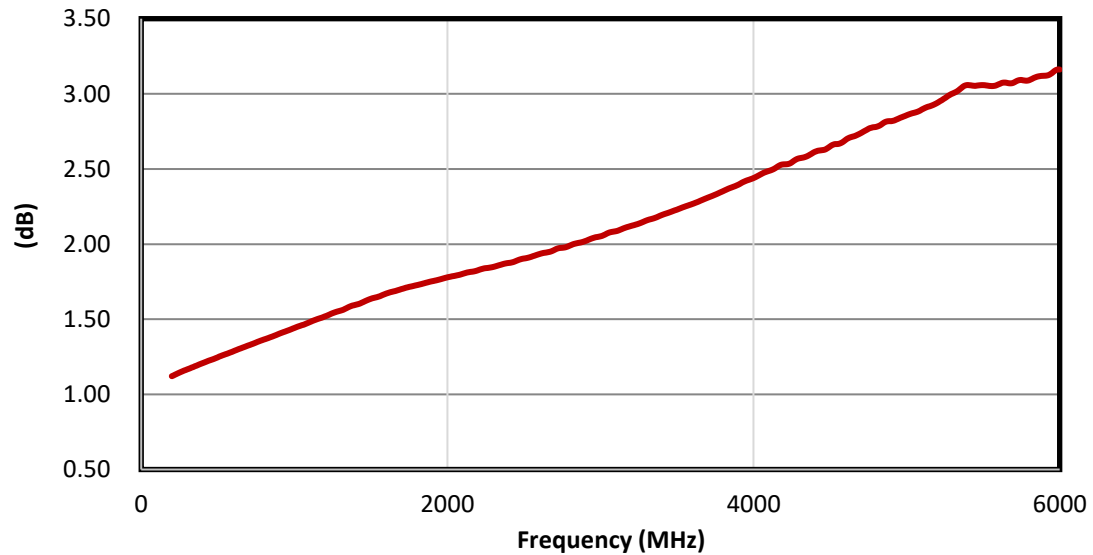
Note1 Max accuracy is relative to attenuation setting value EXCLUDING insertion loss while "Compensate I.L." setting is "OFF".

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

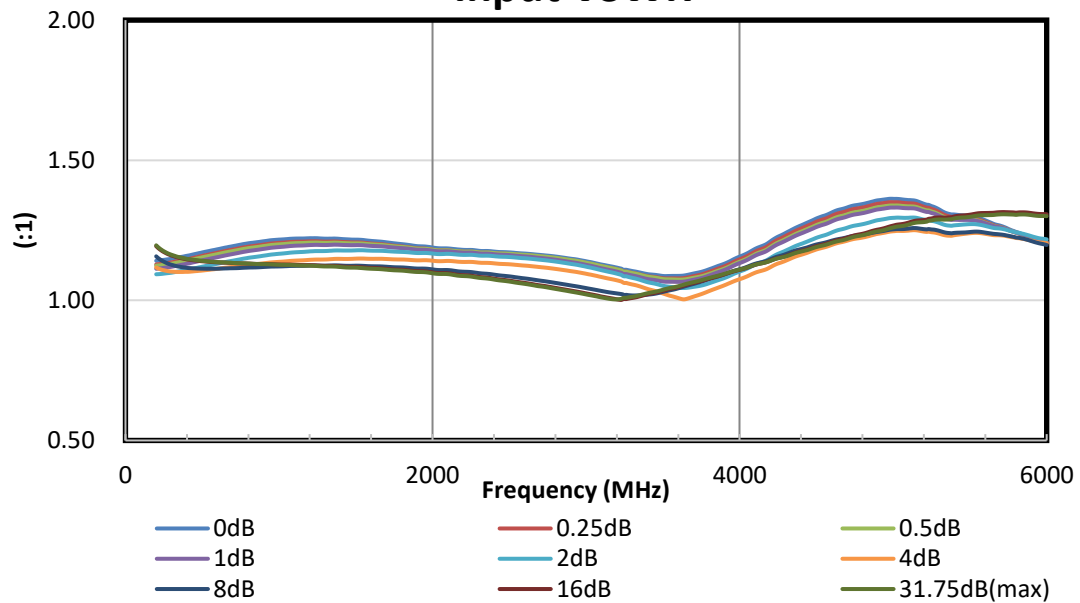
Attenuation relative to Insertion Loss



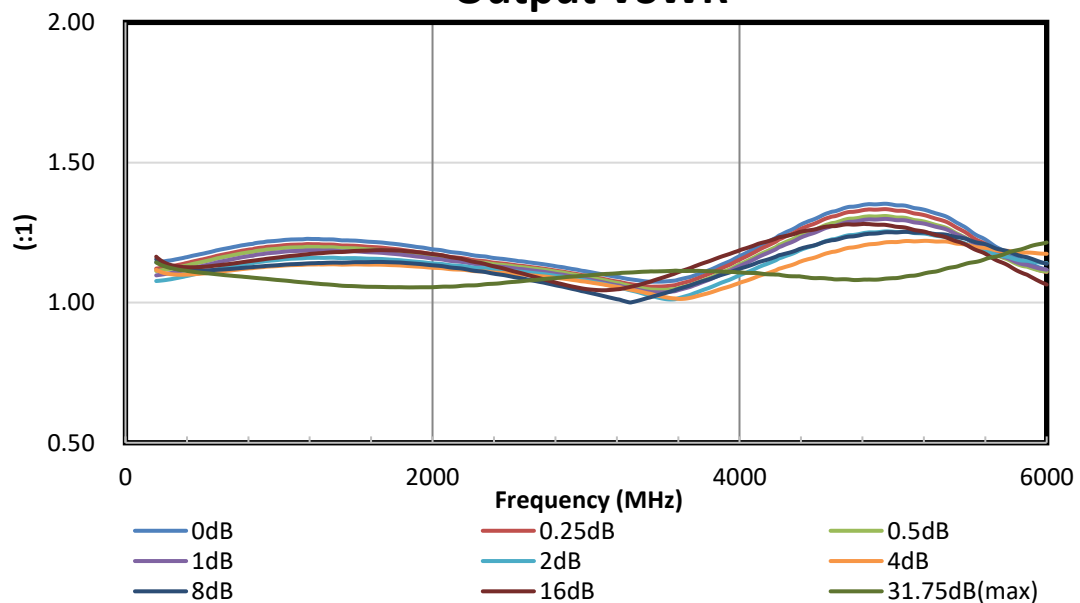
Insertion Loss



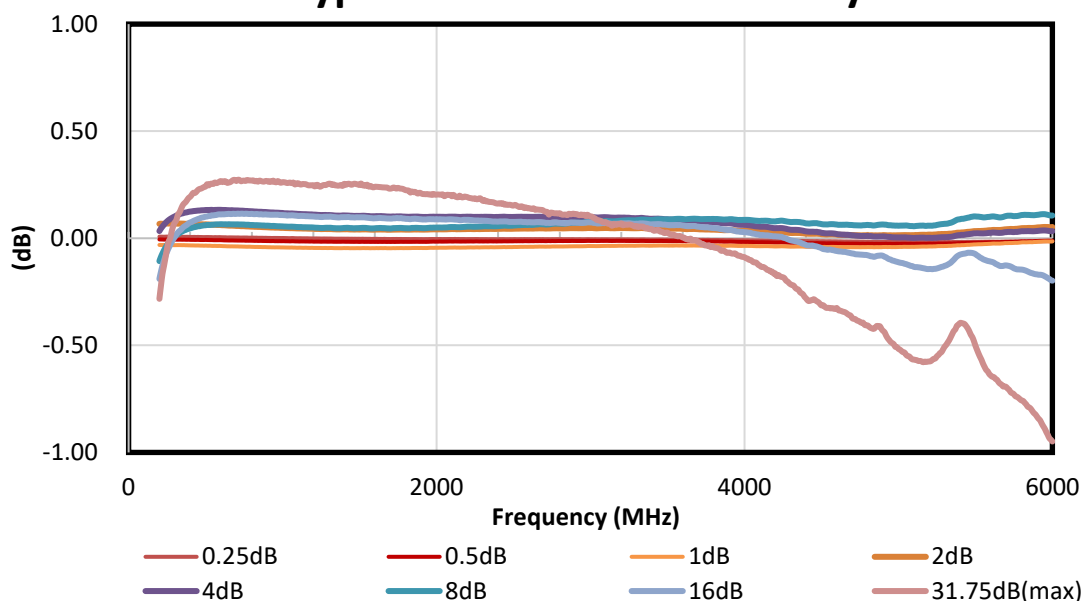
Input VSWR



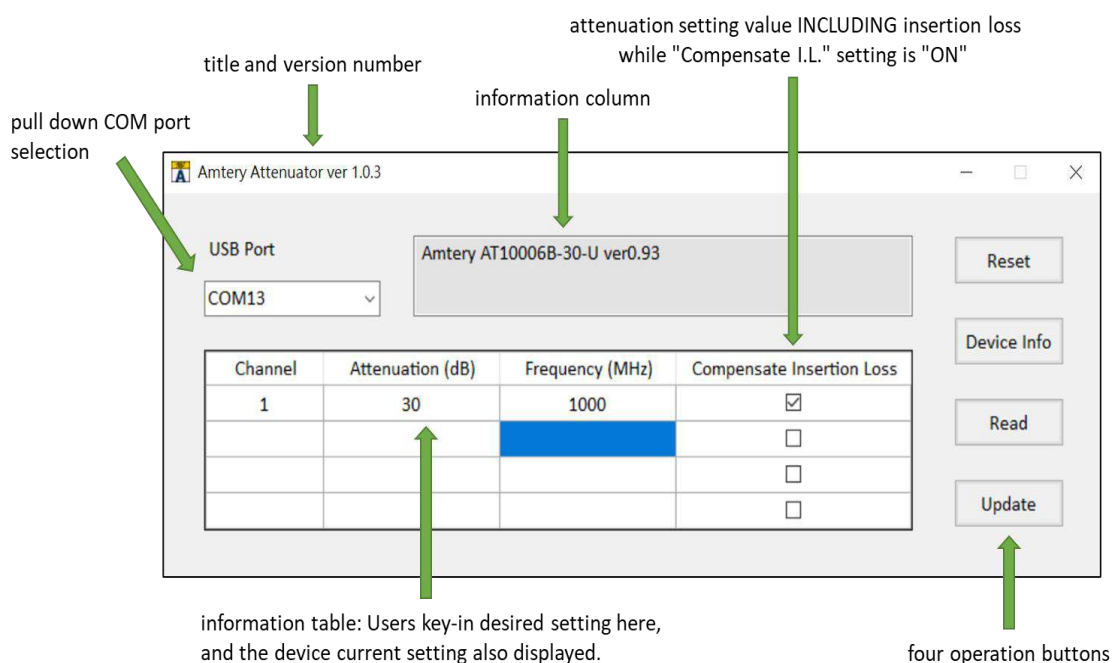
Output VSWR



Typical Attenuation Accuracy

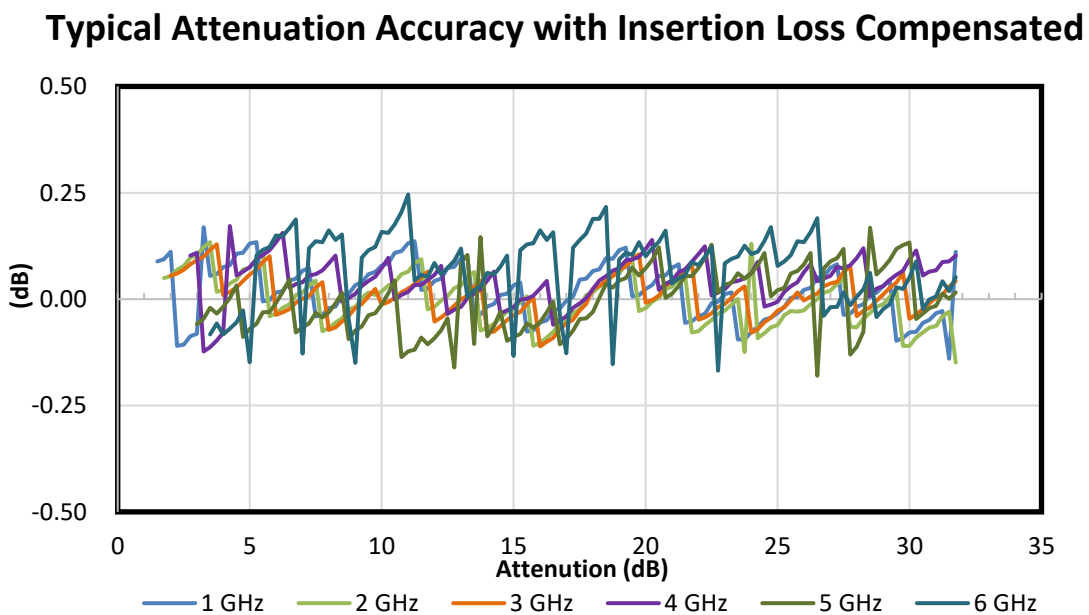
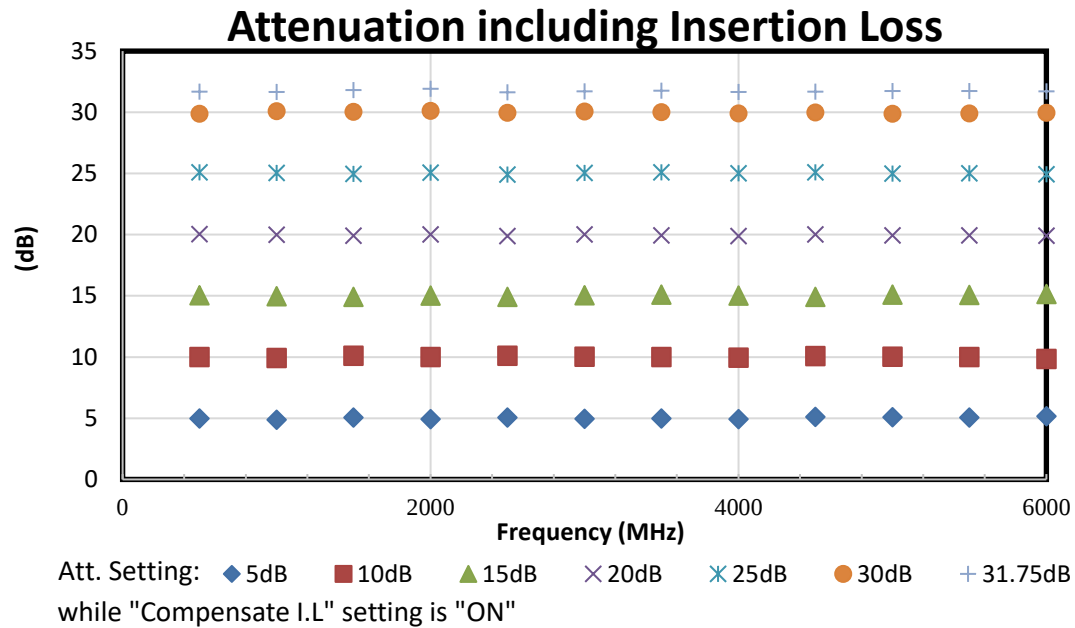


Amtery Graphical User Interface (GUI)



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-88>

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

Note: Specifications are subject to change without notice.