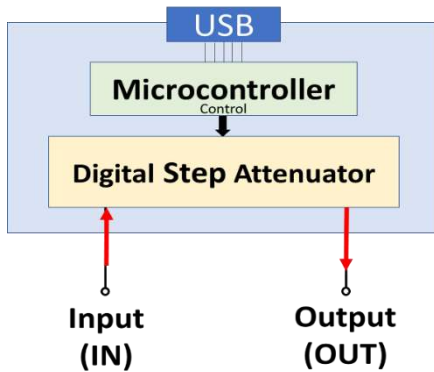




RoHS Compliant



Electrical Schematic

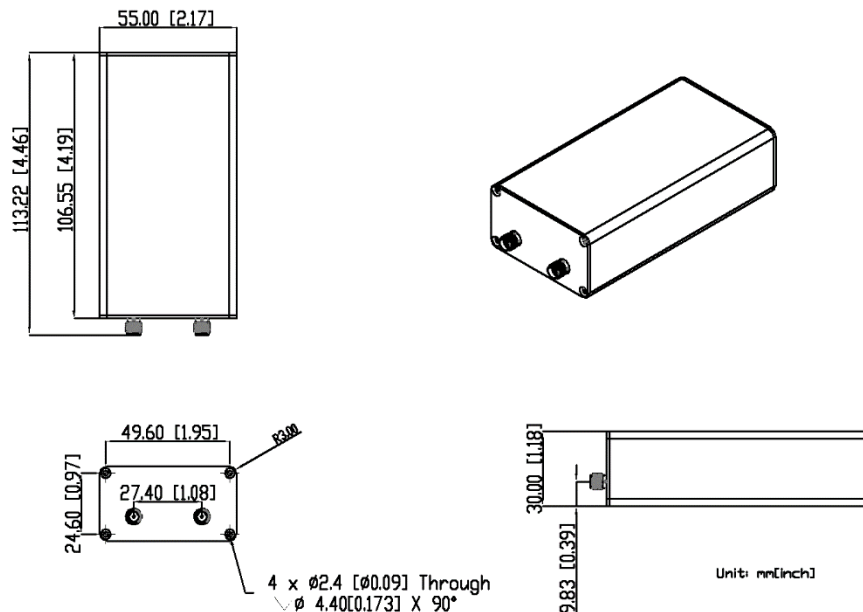
Insertion Loss Compensated

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

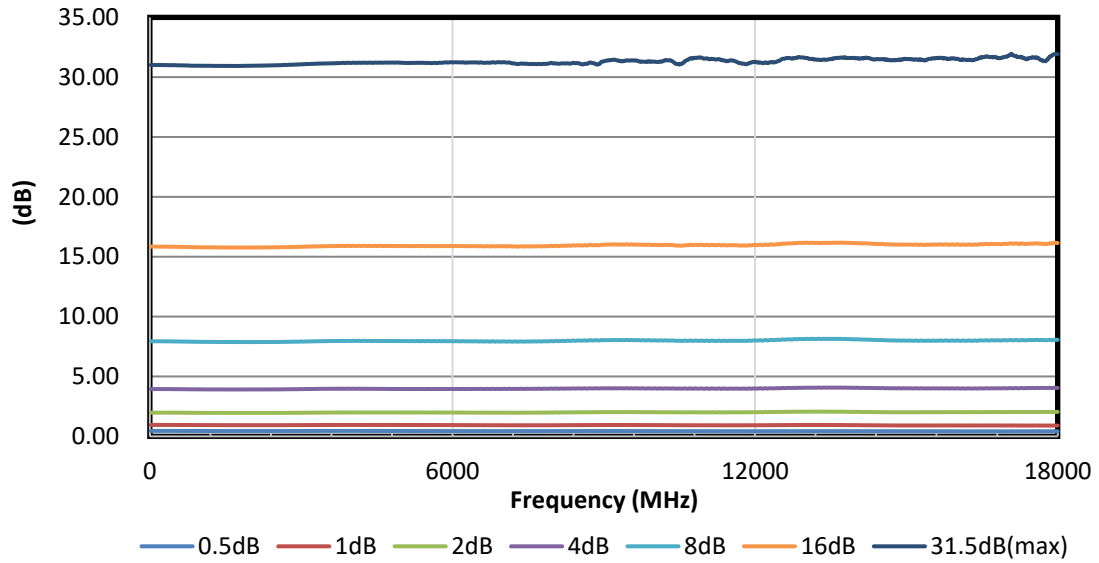
Parameter		Unit	Frequency (MHz)	Conditions	Min.	Typ.	Max.	
Attenuation Range		dB	15 - 18000		0		31.5	
Step		dB				0.5		
Insertion Loss (I.L.)		dB		@ 0 dB Att.		4.0	4.2	
Attenuation Accuracy	Compensate I.L. "OFF" <i>Note1</i> (I.L. Excluded)	dB		@ 0.5 dB Att.		± 0.08	± 0.12	
				@ 1, 2 dB Att.		± 0.10	± 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		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.

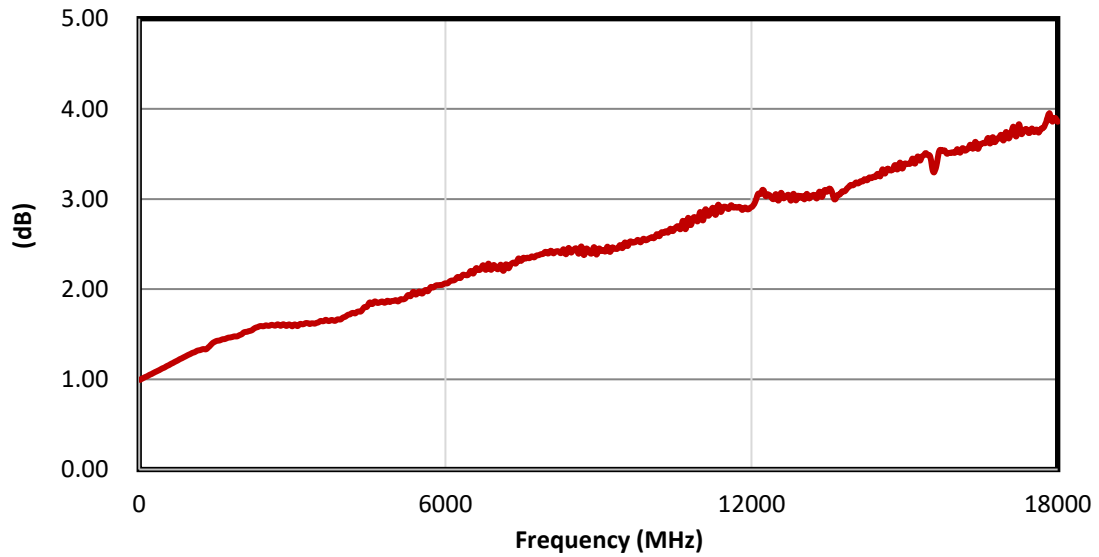
Note1 Max accuracy is relative to attenuation setting value EXCLUDING insertion loss while "Compensate I.L." setting is "OFF".

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

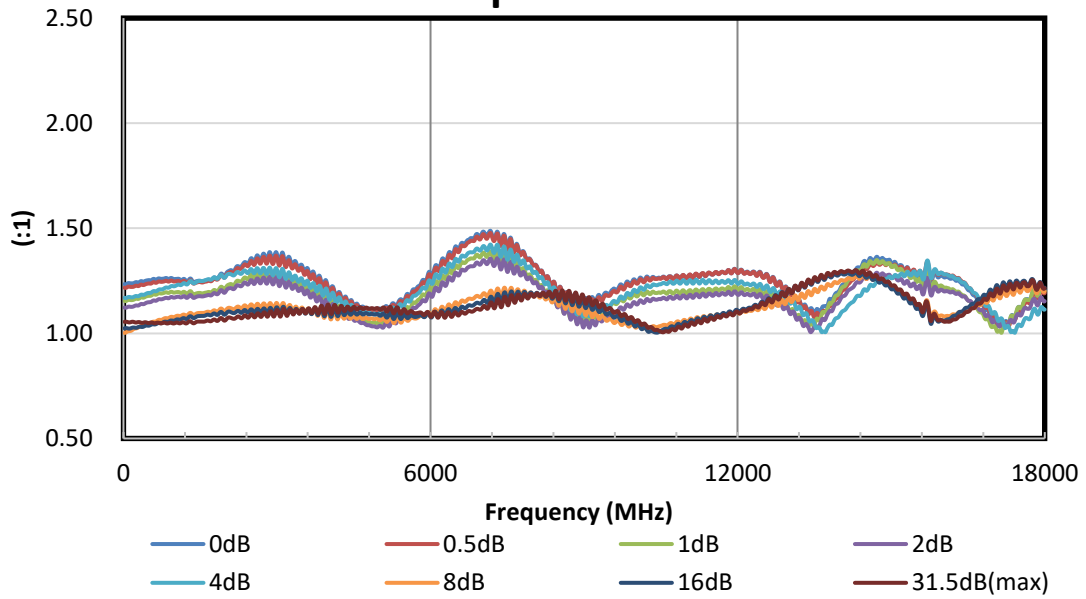
Attenuation relative to Insertion Loss



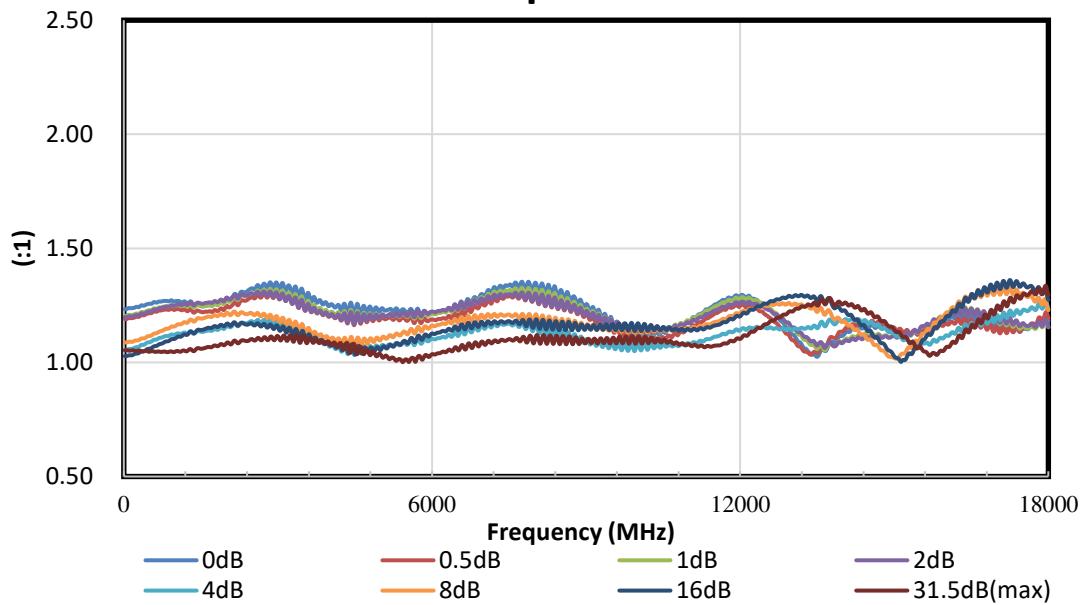
Insertion Loss



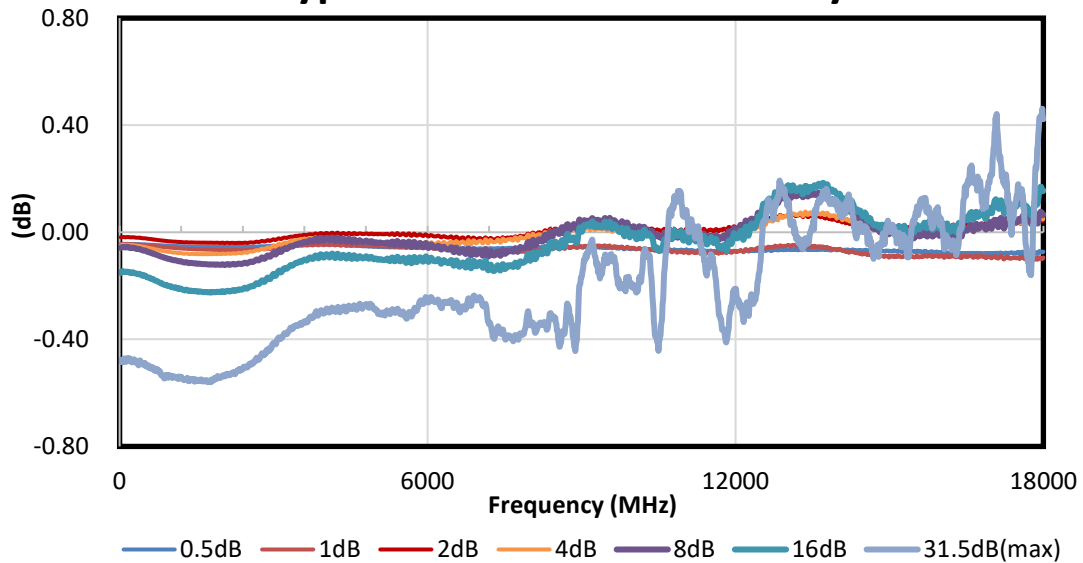
Input VSWR



Output VSWR



Typical Attenuation Accuracy



Amtery Graphical User Interface (GUI)

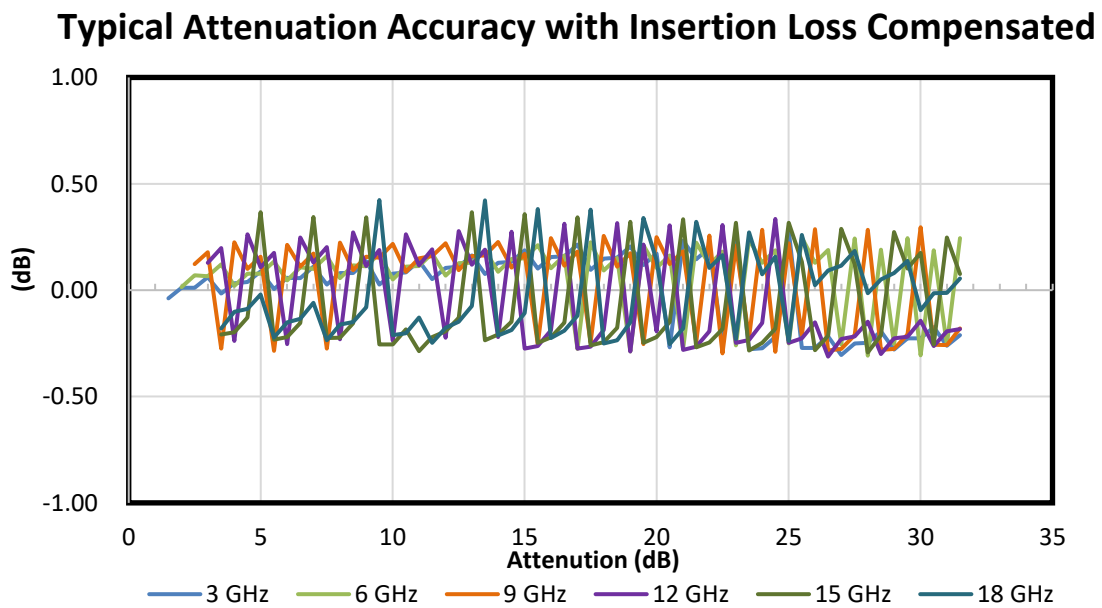
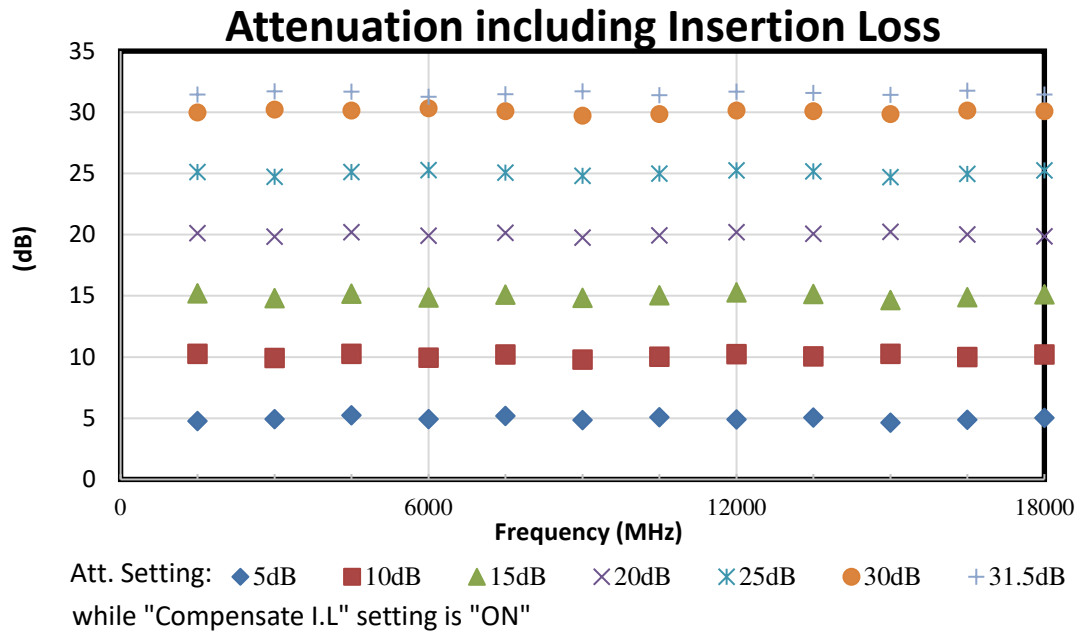
The GUI window is titled "Amtery Attenuator ver 1.0.3". It features a "USB Port" dropdown menu currently set to "COM13". A text box displays the device information: "Amtery AT10006B-30-U ver0.93". Below this is a table with the following structure:

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

Annotations include: "pull down COM port selection" pointing to the USB Port dropdown; "title and version number" pointing to the window title; "information column" pointing to the device information text box; "attenuation setting value INCLUDING insertion loss while 'Compensate I.L.' setting is 'ON'" pointing to the 30 dB value in the table; "information table: Users key-in desired setting here, and the device current setting also displayed." pointing to the table; and "four operation buttons" pointing to the "Reset", "Device Info", "Read", and "Update" buttons on the right side.

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.