



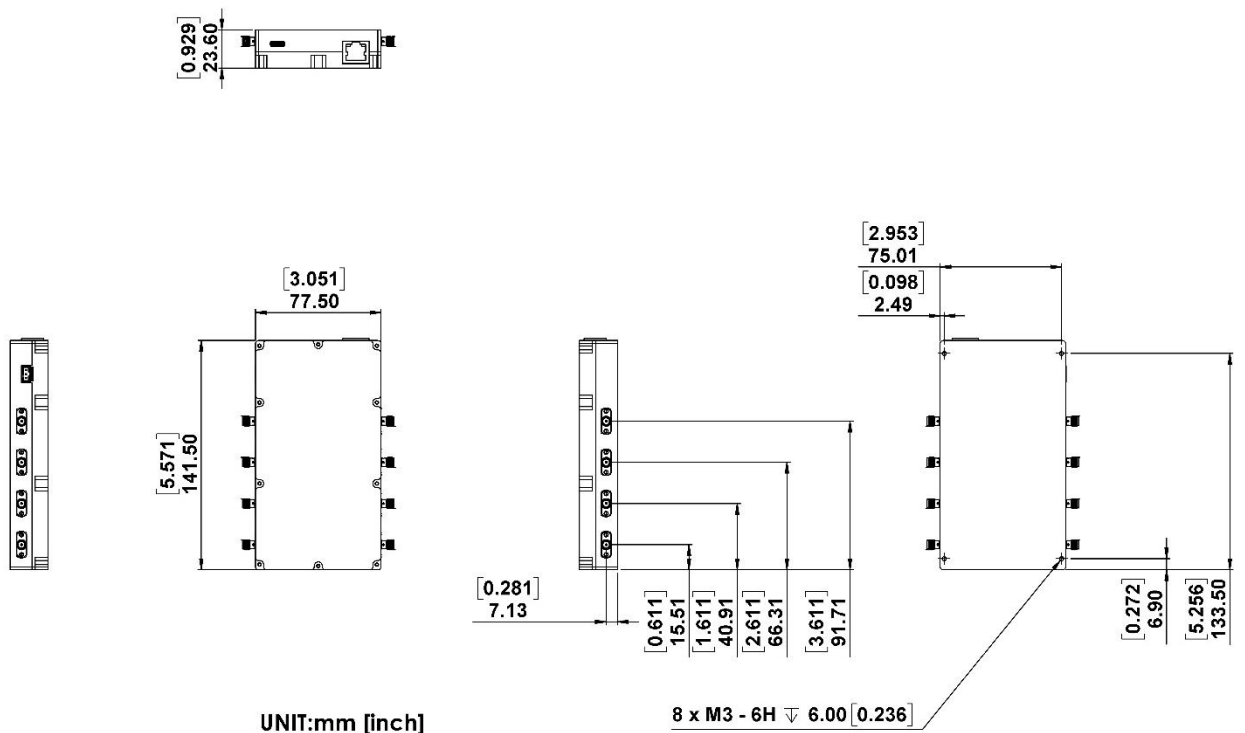
**Insertion Loss Compensated**

**USB Type-C and Ethernet Interface**

**GUI and API Control**

**RoHS Compliant**

### Outline Drawing



**Connectors: SMA Female, USB Type-C, Ethernet**

### Electrical Specifications

Parameter		Unit	Conditions	Min.	Typ.	Max.
Frequency		MHz		50		8000
Attenuation Range		dB				90
Step		dB			0.25	
Insertion Loss (I.L.)		dB	50 - 4000MHz @ 0 dB Att.		7.5	9
			4000 - 8000MHz @ 0 dB Att.		12.1	14
Attenuation Accuracy	Compensate I.L. "OFF" <sup>1</sup>	dB	0 - 30 dB Att.		±0.6	
			30 - 60 dB Att.		±1.2	
			60 - 90 dB Att.		±1.8	
	Compensate I.L. "ON" <sup>2</sup>		0 - 30 dB Att.		±0.5	
			30 - 60 dB Att.		±1	
			60 - 90 dB Att.		±1.5	
Adjacent-Channel Isolation <sup>3</sup>		dB	Adjacent Ch. @ 0 dB Att. Adjacent Ch. @ 90 dB Att.		90 110	
Switching Time		μs	50% CTRL to 90% or 10% RF		1.1	
Input Operation Power		dBm				28
IP3 Input		dBm	@ 0 dB Att.		50	
IP1dB		dBm	@ 0 dB Att.		27	
VSWR		:1	Input @ 0 dB Att.		1.8	
			Output @ 0 dB Att.		1.8	
Interface			USB Type-C / Ethernet			
DC Power Supply			USB Type-C		5V	

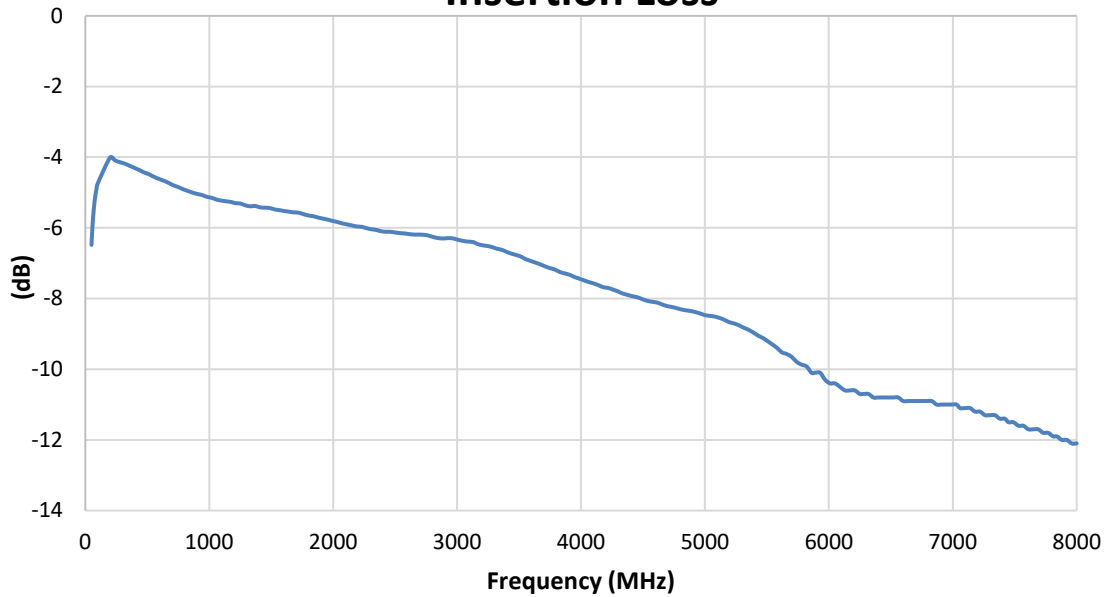
Operated in 50Ω system, 25°C

<sup>1</sup> Compensate Insertion Loss "OFF": This attenuation is relative to insertion loss.  $S_{21}$  = attenuation setting + insertion loss.

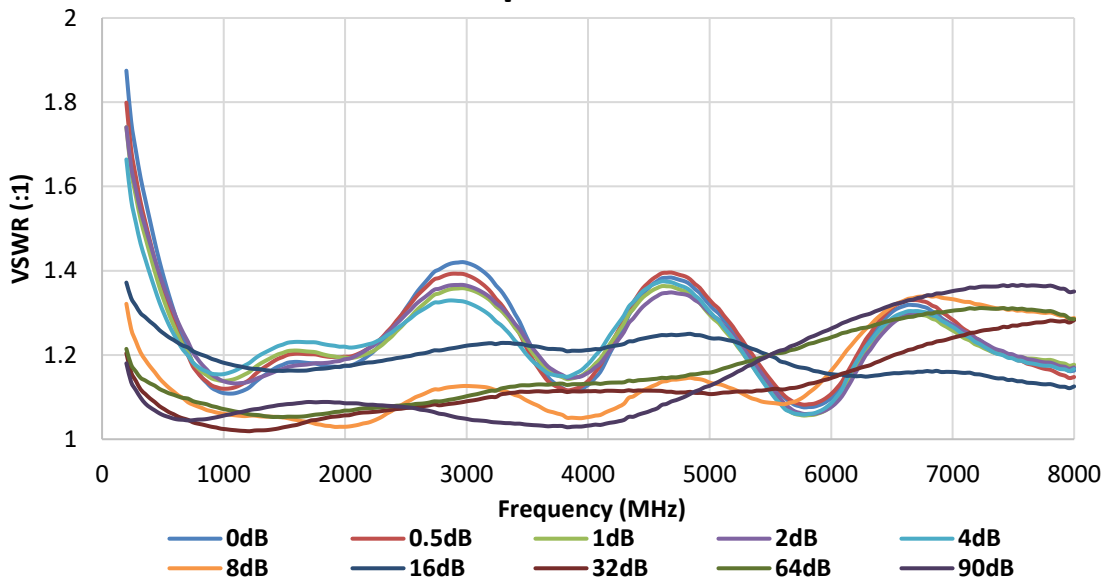
<sup>2</sup> Compensate Insertion Loss "ON": The absolute attenuation including insertion loss.  $S_{21}$  = attenuation setting.

<sup>3</sup> Input port @ 0 dB Att. to adjacent-channel output port.

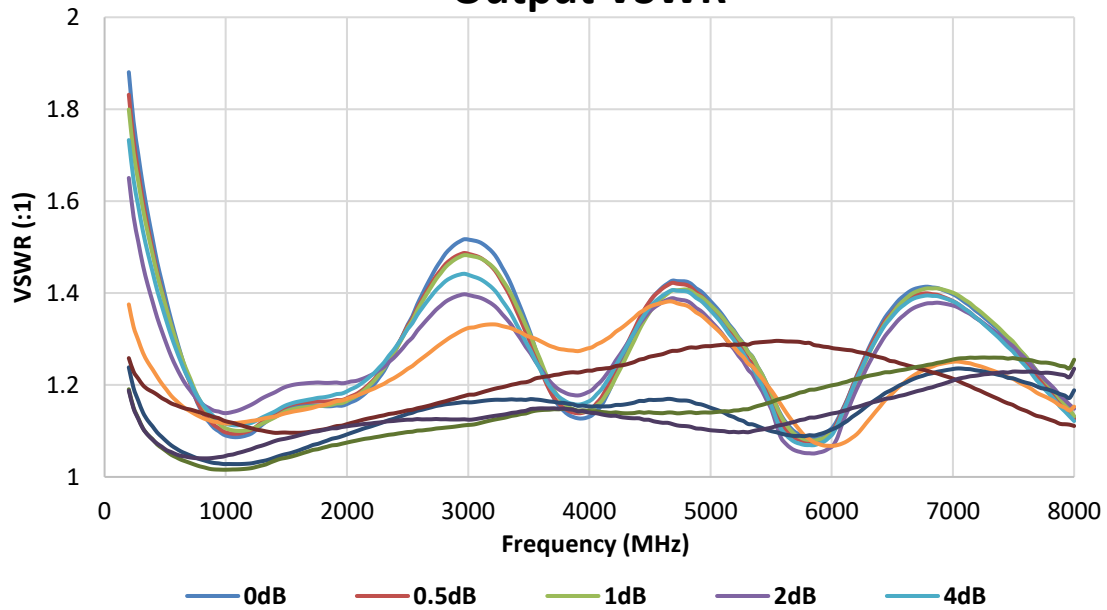
### Insertion Loss



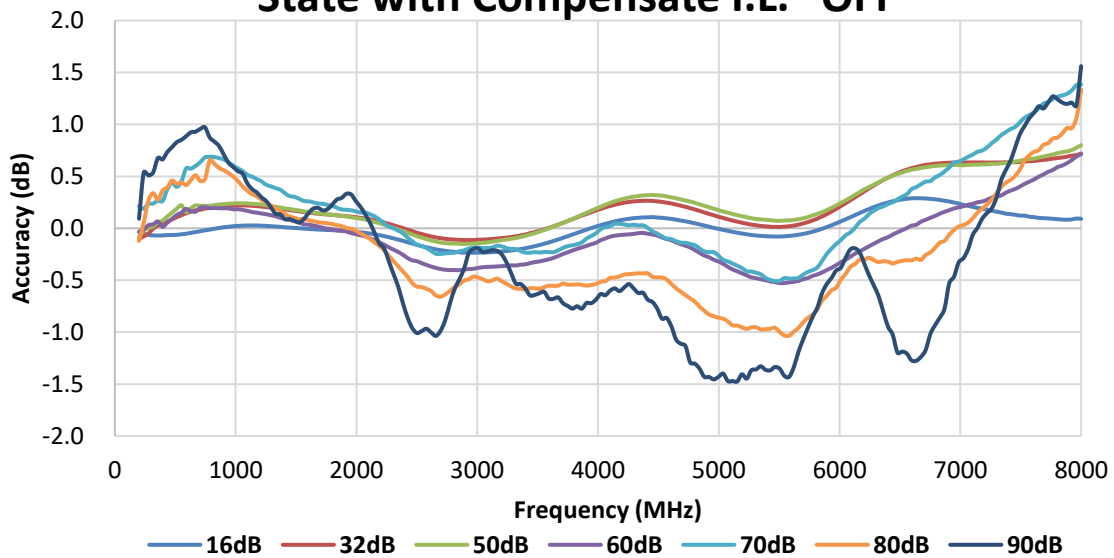
### Input VSWR



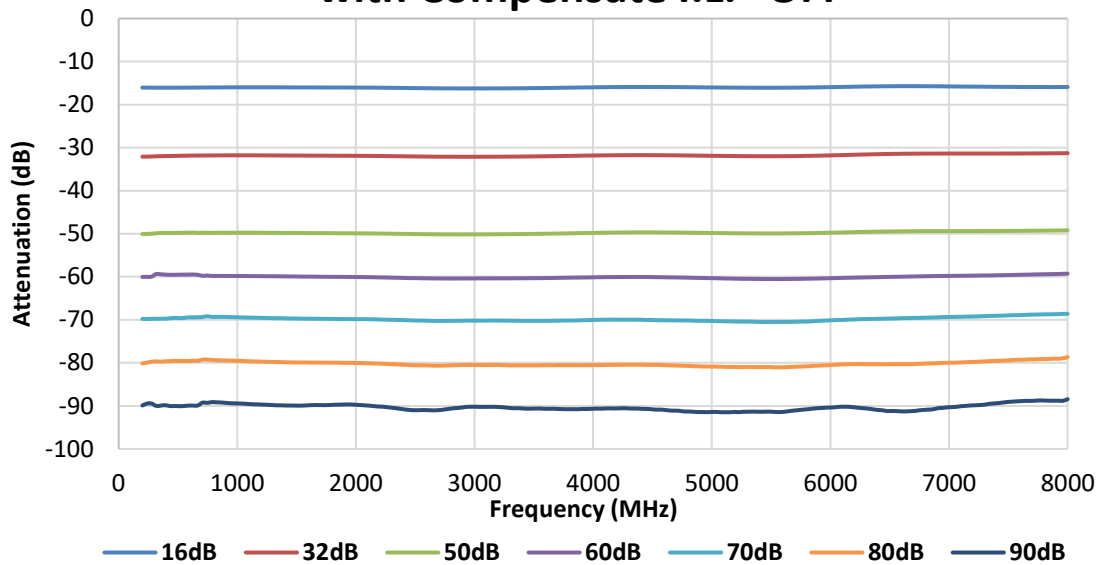
### Output VSWR



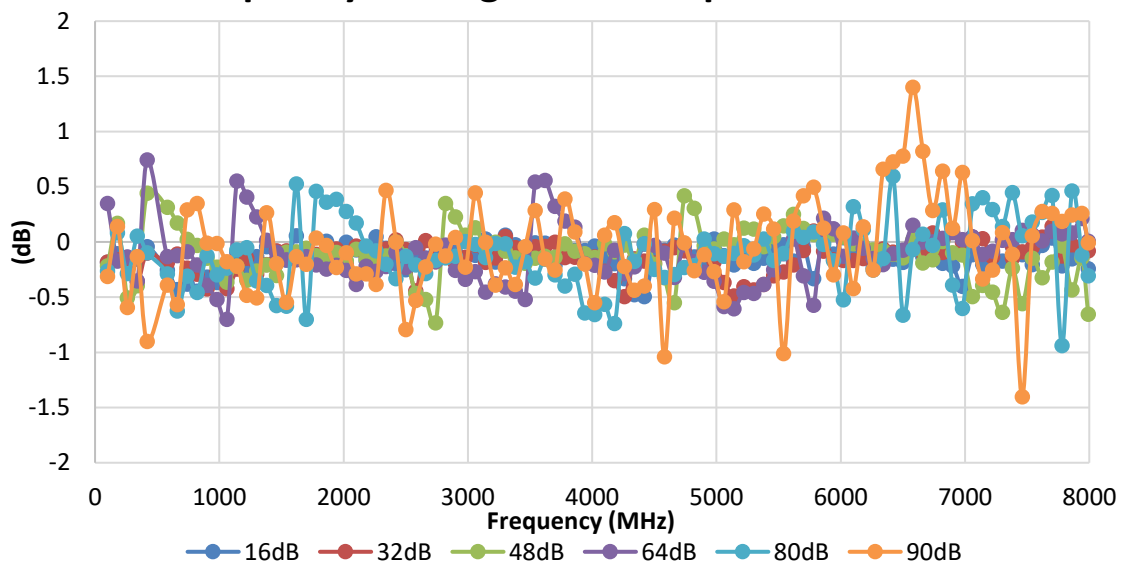
### Normalized Attenuation Accuracy for All State with Compensate I.L. "OFF"



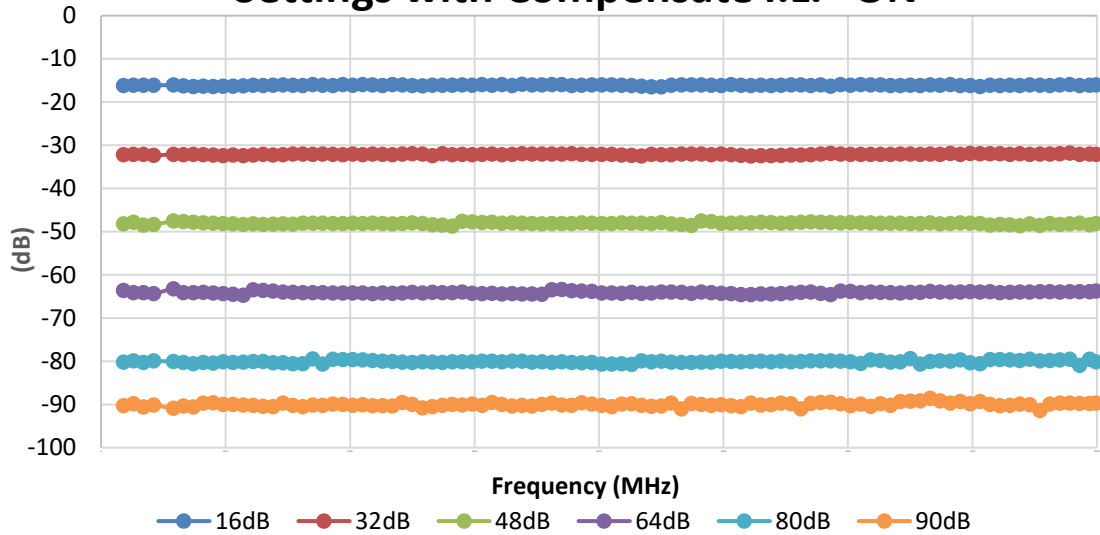
### Normalized Attenuation for All State with Compensate I.L. "OFF"



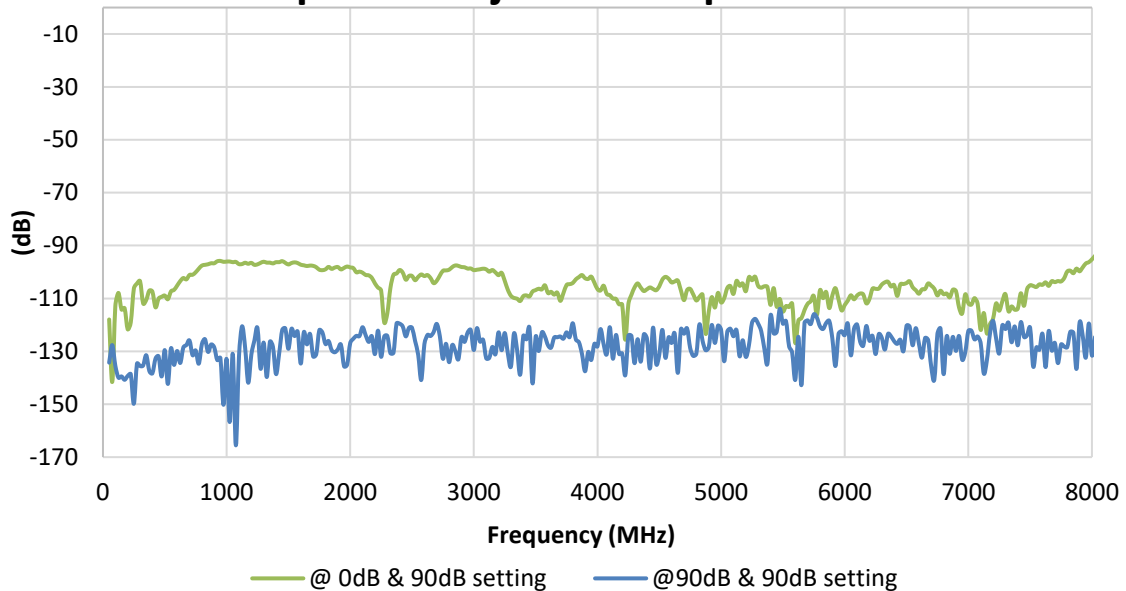
### Attenuation Accuracy for All Attenuation & Frequency Settings with Compensate I.L. "ON"



### Attenuation for All Attenuation & Frequency Settings with Compensate I.L. "ON"

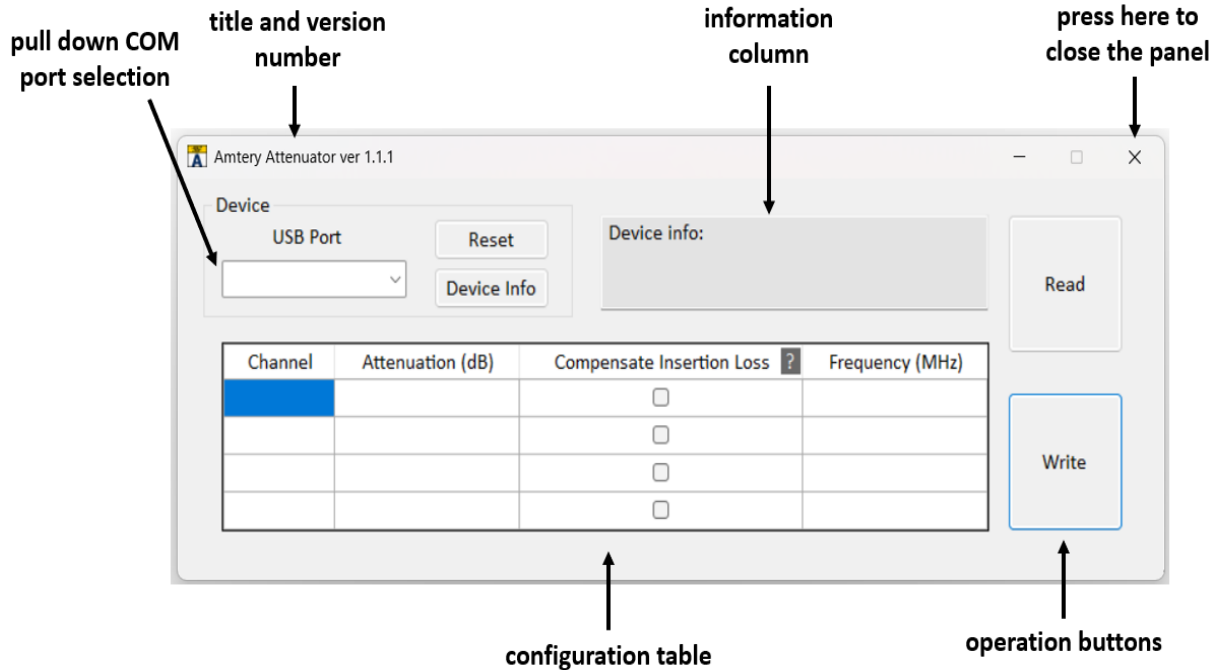


### Input-to-Adjacent-Output Isolation



### Graphical User Interface

Attenuator Software Panel controls Amtery attenuators with USB interface without programming.



To enable the compensation function, select the “**Compensate Insertion Loss**” checkbox and enter the desired frequency. Note that compensation can only be applied to a single frequency point.

To disable this function, clear the “**Compensate Insertion Loss**” checkbox; The “**Frequency (MHz)**” field will then be disabled.

Typical performance S-parameter file: <https://www.amtery.com/en/goods-102>

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

Note: Specifications are subject to change without notice.