



## Product Features

- Up to 2 GHz Operation
- 60dB Tuning Range with 0.5dB Step
- 75Ω System Impedance
- F Female Connector
- USB Powered and Controlled
- Low Power Dissipation
- Easy Control by Software.
- 2 inch x 2 inch Outline

The A260H-U75 is a broad band, high performance, low cost programmable attenuator that designed for power control and lab testing.

The A260H-U75 works with a single USB connection with host computer, and can easily be controlled by multi Virtual Instrument development software and languages.

The A260H-U75 is delivered in a compacted 2 inch x 2 inch package.

## Applications

- CATV
- RF Power Control
- Lab Testing
- ATE



## Electrical Specifications

Parameter	Specification			Condition
	Min.	Typ.	Max.	
<b>RF Performance</b>				
Operation Frequency [MHz]	DC		2000	
Attenuation Range [dB]	0		60	
Attenuation Step [dB]		0.5		
Attenuation Accuracy [dB]			±0.15+5%	f = 1.2GHz
*Insertion Loss [dB]		-2.5		f = <50MHz
		-2.6		f = <100MHz
		-2.7		f = <500MHz
		-3.3		f = <1000MHz
		-3.5		f = <1500MHz
		-4.0		f = <2000MHz
P <sup>-1</sup> dB Compression [dBm]	+30	+34		f = 1.2GHz
Return Loss [dB]	-10	-15		f = 1.2GHz
Input IP3 [dBm]		+52		f = 1.2GHz , p = +18dBm/Tone,
Max. Input Power [dBm]		+30		

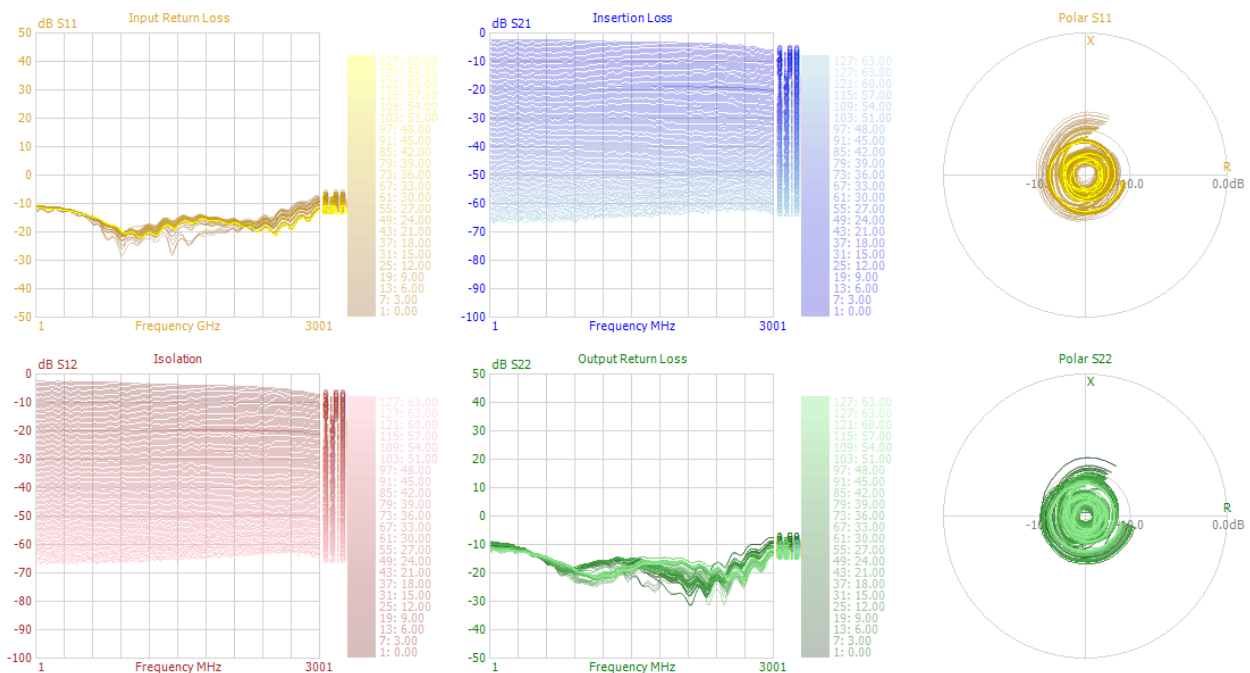


DC Performance			
DC Power Supply Voltage [V]	+5V		Unique USB* Powered
DC Power Supply Current [mA]		30	Via USB
**Attenuation Control			
USB Interface	Type B, USB2.0 Full Speed		
Control Software	UATP.exe, Windows OS, .Net 2.0		
Devices Driver	Windows Driver		
API	Wrapped in dll		
Outline			
Coaxial RF Connector	Type F, Female		
Outline Dimensions [Inch]	2 [W] x 2 [L] x 1 [H]		

\*Measured in a 50ohm system

\*\*Contact your sales respective for more information

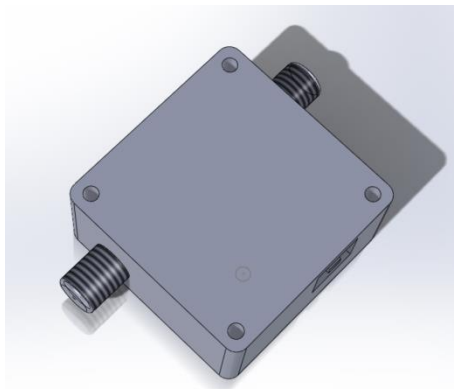
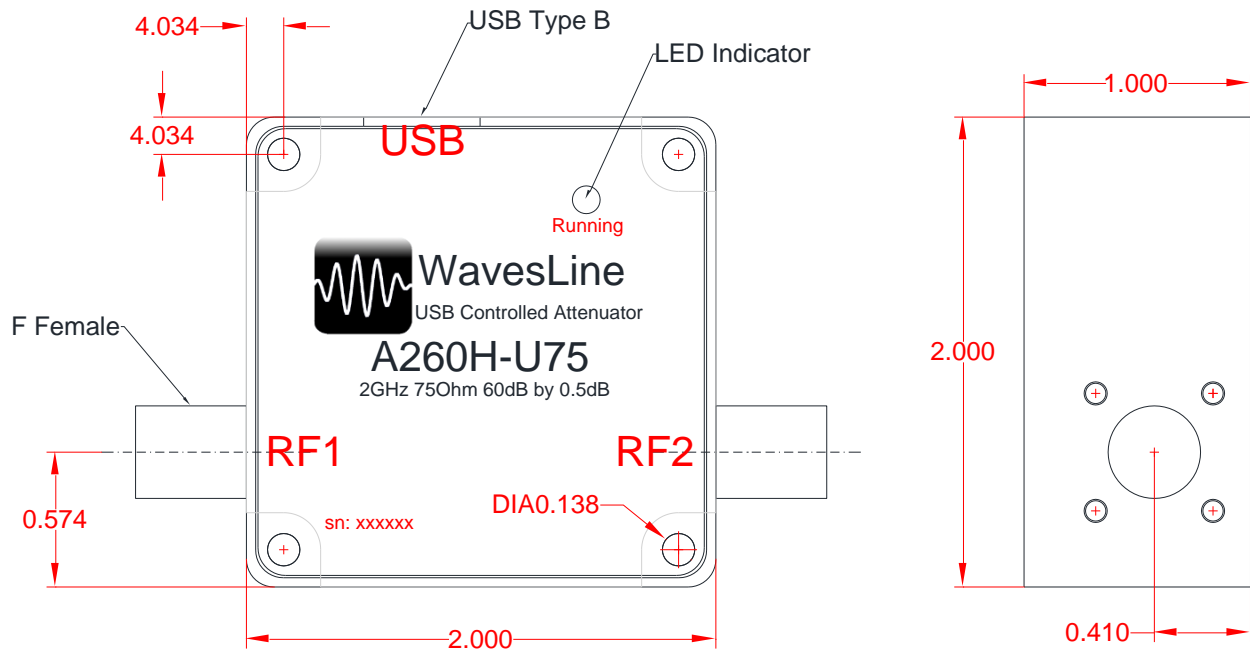
## Typical Performance [Measured in a 50 ohm system.]



S parameters at all attenuation steps



## Outline Drawing [Unit: inch]





## Controlling the Attenuator

The USB driver for Microsoft Windows System must be installed when attach attenuator to host computer. And this driver need only be installed for the 1<sup>st</sup> time. The driver is developed over USB CDC protocol, which treats the USB device as a virtual serial port (COM) that can be easily controlled.

UATP.exe is the easy-to-use application program to set attenuation from host computer.

In an attempt to minimize customer efforts in controlling the device via USB, WavesLine offers easy to use dynamic link library (dll), which wraps a variety of functions such as, checking active ports that device is attached to, open/close connections to device, write command to device, read response from device and etc. The dll is wrapped to work over Microsoft .Net Framework 2.0.

## Command Format

Commands write to device must be in string formats, and all return values are in string format as well.

### **\*IDN?**

Query device information, it returns device information in string format.

### **UATT[space]value**

Set attenuation value, it returns the value when settings are done.  
Value = attenuation/step;

### **FLASH**

Device indicator LED will flash when receive this command.

### *Note:*

- 1. Commands are case sensitive.*
- 2. A <CR> (char 13 or 0x0D) is necessary to terminate the command.*