

ATxTel ShieldProAtten

Bidirectional USB/Ethernet Programmable Attenuator

ShieldProAtten represents the latest advancement in ATxTel's series of programmable RF attenuators. Featuring a fully custom-machined aluminum enclosure, the ShieldProAtten ensures exceptional RF isolation, rendering it suitable for applications involving Wi-Fi, cellular technology, and any RF-sensitive testing environments. The ShieldProAtten is equipped with both USB and Power over Ethernet (PoE) interfaces, facilitating seamless integration into testbeds and enabling efficient network control.



Applications

- Wi-Fi Testing (support Wi-Fi 5, 6, 6E and 7)
- Cellular Testing (LTE, 4G/5G)
- Product Engineering Development
- Automated Production Testing
- Network Optimization

Features

- Independent-controlled RF channels programmable attenuator
- 95dB of attenuation range in 0.1dB step size
- Frequency range from 50MHz to 8000 MHz
- Custom machined aluminum RF isolated enclosure
- USB or Ethernet control (support PoE)
- Intuitive web graphical interface
- Compact and stackable size

ShieldProAtten ATX-4C-9501-80

4-Channel Bidirectional USB/Ethernet Programmable Attenuator

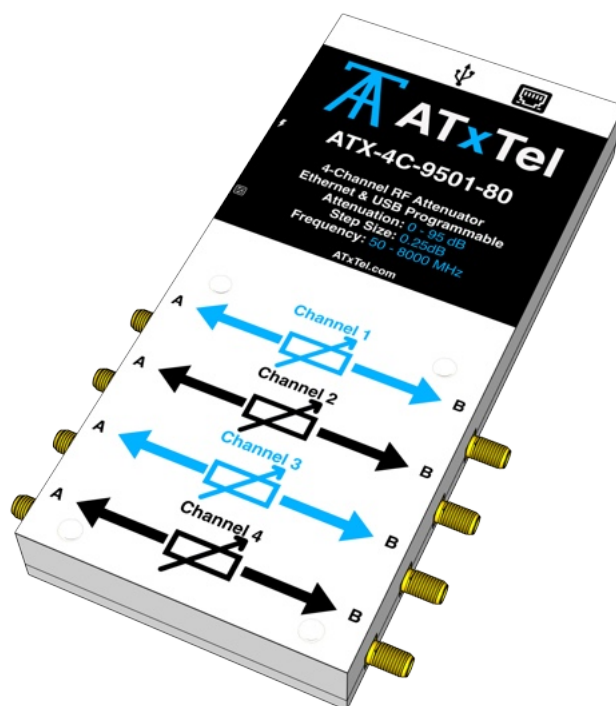
50-8000MHz, 95dB, 0.1dB Step Size

WiFi 7 **WiFi 6E** **WiFi 6** Ready

3GPP **lte** **5G** **6G** Ready



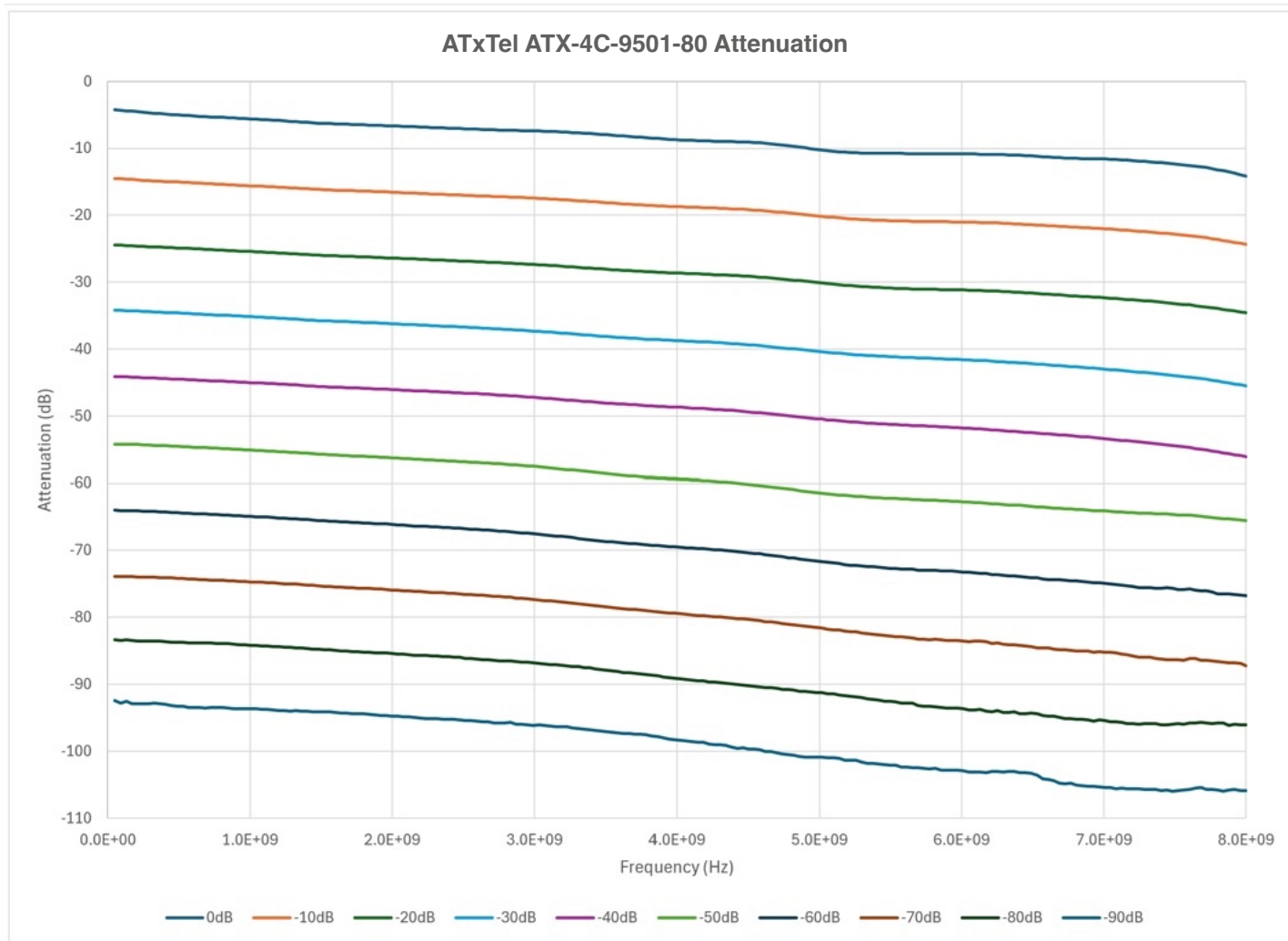
Power Over Ethernet (PoE) and USB Capable



Specifications

Parameter	Specification			
Frequency Range	50MHz - 8GHz			
Variable Attenuation Range	0 to 95dB			
Attenuation Step Size	0.1dB			
Insertion Loss	< 2GHz	2-4GHz	4-6GHz	6-8GHz
	7dB max	9dB max	11dB max	14dB max
RF Input Power	29dBm max			
0.1dB Input Compression Point	>33dBm			
Input 3rd Order Intercept	56dBm			
Adjacent Channel Isolation	>100dB			
Return Loss	0dB Attenuation		>10dB Attenuation	
	< -10dB		< -15dB	
Absolute Attenuation Accuracy	+/- 0.7dB			

Specifications



Web Graphical User Interface

Find Me Device ID: ATX-ATT01 IP Address: 192.168.0.86 **ATxTel**

Current Values
Ch1: 10.0 dB Ch2: 20.0 dB Ch3: 30.0 dB Ch4: 40.0 dB

Attenuator Settings System Settings

All Channels
Set to Max Set to Min Value - 0.0 + dB Step - 10.0 + dB

Ch 1
Value - 10.0 + dB [Slider] Step - 10.0 + dB [Slider]

Ch 2
Value - 20.0 + dB [Slider] Step - 10.0 + dB [Slider]

Ch 3
Value - 30.0 + dB [Slider] Step - 10.0 + dB [Slider]

Ch 4
Value - 40.0 + dB [Slider] Step - 10.0 + dB [Slider]

Find Me Device ID: ATX-ATT01 IP Address: 192.168.0.86 **ATxTel**

Current Values
Ch1: 10.0 dB Ch2: 20.0 dB Ch3: 30.0 dB Ch4: 40.0 dB

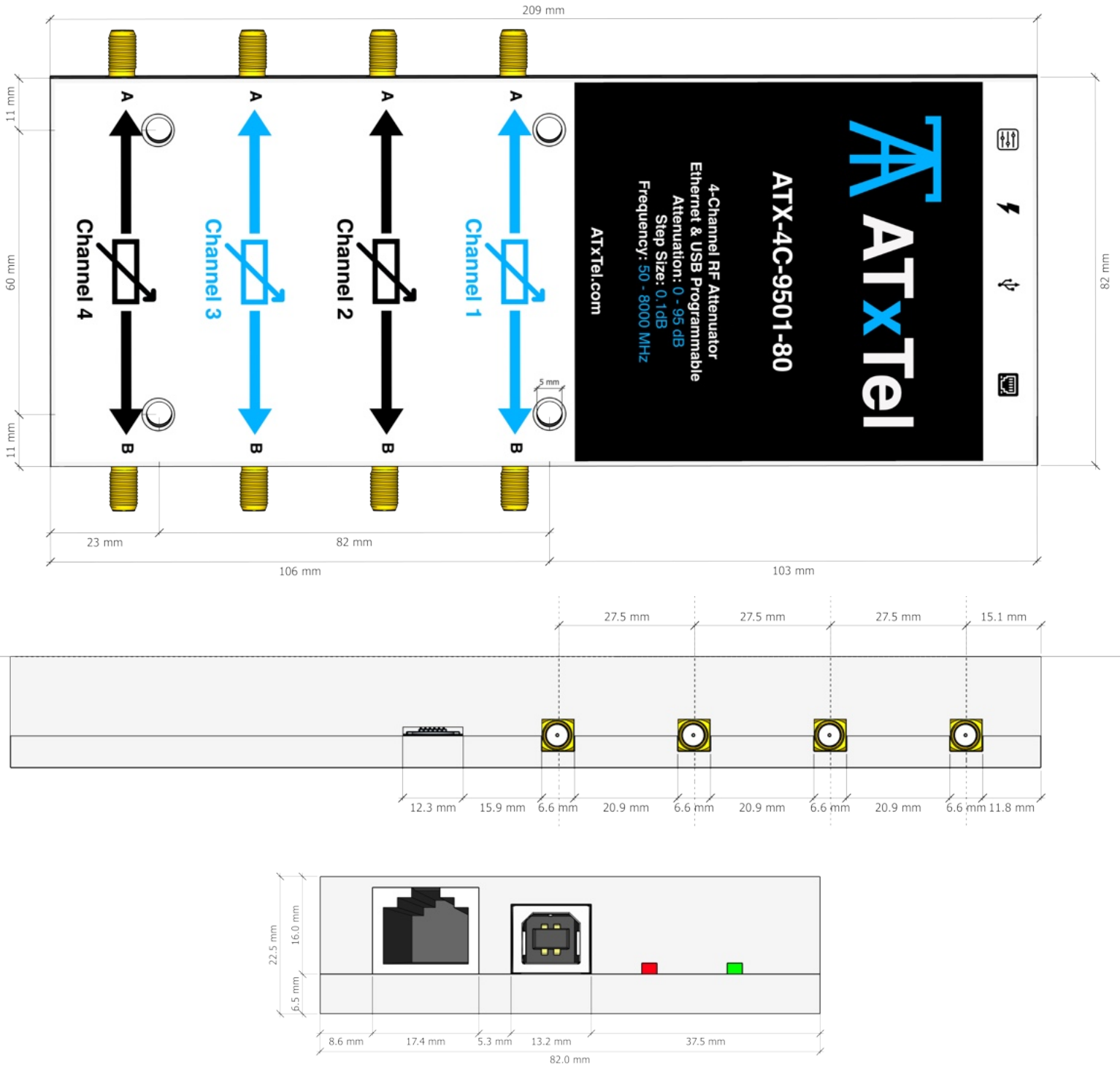
Attenuator Settings System Settings

Ethernet Config
IP Address: 192.168.0.86
Subnet: 255.255.255.0
Gateway: 192.168.0.1
Device ID: ATX-ATT01
Apply

Default Attenuation
Ch 1: 0.0 dB Ch 2: 0.0 dB
Ch 3: 0.0 dB Ch 4: 0.0 dB
Apply

Device Info
Serial Number: ATX4C20231018R0
Firmware Version: 0.23.01
Number of Channels: 4
Attenuation Range: 0-95 dB
Min Attenuation Step: 0.1 dB
MAC: 00:08:DC:AB:CD:EF

Dimensions



SELF DECLARATION FOR RoHS COMPLIANCE

ShieldProAtten ATX-8C-9501-80

8-Channel Bidirectional USB/Ethernet Programmable Attenuator

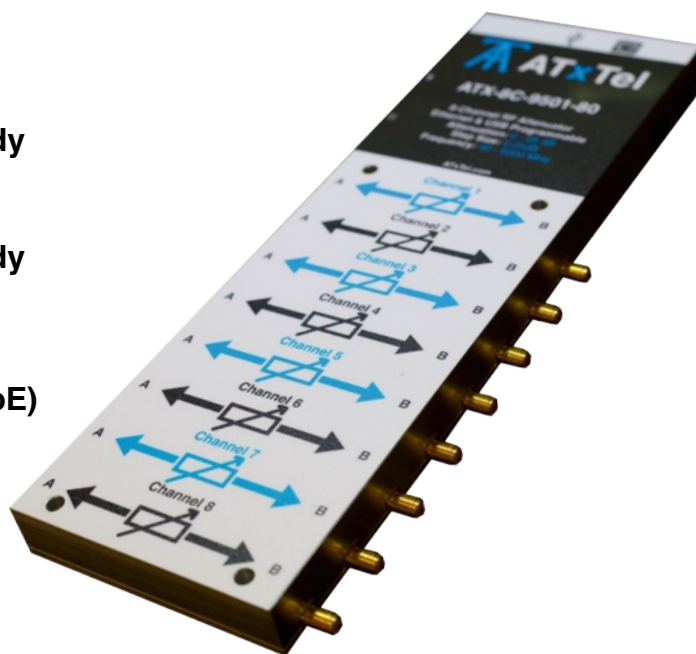
50-8000MHz, 95dB, 0.1dB Step Size

WiFi 7 **WiFi 6E** **WiFi 6** Ready

3GPP **lte** **5G** **6G** Ready



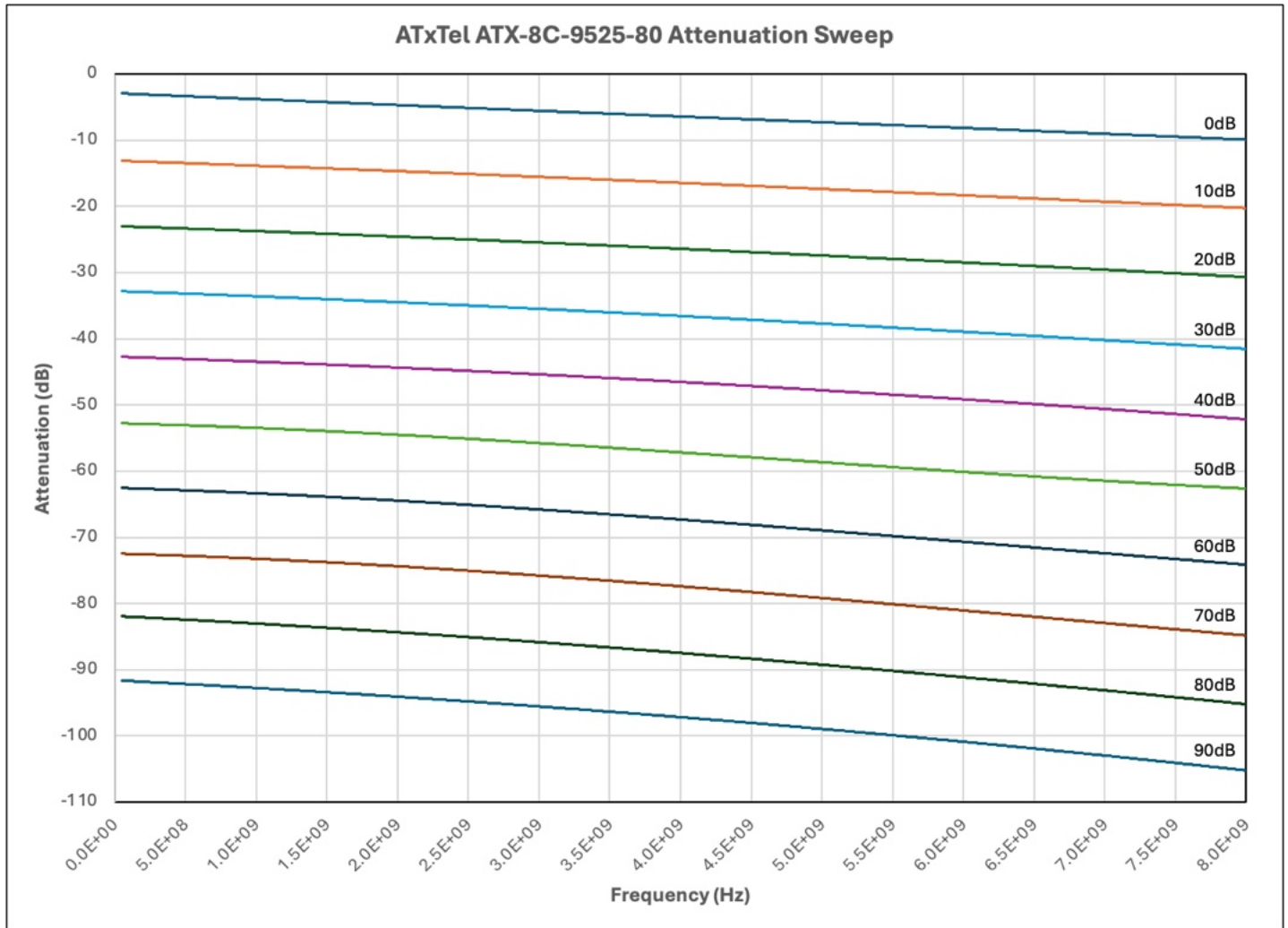
Power Over Ethernet (PoE) and USB Capable



Specifications

Parameter	Specification			
Frequency Range	50 MHz - 8 GHz			
Variable Attenuation Range	0 to 95 dB			
Attenuation Step Size	0.25 dB			
Insertion Loss	< 1 GHz	1-2 GHz	2-4 GHz	4-8 GHz
	4 dB max	5 dB max	7 dB max	10 dB max
RF Input Power	33 dBm max			
0.1dB Input Compression Point	>34 dBm			
Input 3rd Order Intercept	58 dBm			
Adjacent Channel Isolation	>105 dB			
Return Loss (>3dB Attenuation)	<7 GHz			>7 GHz
	>14 dB			>12 dB
Absolute Attenuation Accuracy	+/- 0.7dB			

Specifications



Web Graphical User Interface

Find Me Device ID: ATX-ATT01 IP Address: 192.168.0.86 **ATxTel**

Current Values
 Ch1: 20.0 dB Ch2: 23.9 dB Ch3: 60.0 dB Ch4: 16.0 dB
 Ch5: 86.0 dB Ch6: 0.0 dB Ch7: 20.0 dB Ch8: 80.0 dB

Attenuator Parameters Sweep Setup System Configuration

All Channels
 Set to Max Set to Min Value - 20.0 + dB Step - 1.0 + dB

Ch 1 Value - 20.0 + dB Step - 1.0 + dB
 Ch 2 Value - 23.9 + dB Step - 1.3 + dB
 Ch 3 Value - 60.0 + dB Step - 10.0 + dB
 Ch 4 Value - 16.0 + dB Step - 1.0 + dB
 Ch 5 Value - 86.0 + dB Step - 10.0 + dB
 Ch 6 Value - 0.0 + dB Step - 2.0 + dB
 Ch 7 Value - 20.0 + dB Step - 5.0 + dB
 Ch 8 Value - 80.0 + dB Step - 5.0 + dB

Find Me Device ID: ATX-ATT01 IP Address: 192.168.0.86 **ATxTel**

Current Values
 Ch1: 20.0 dB Ch2: 23.9 dB Ch3: 60.0 dB Ch4: 16.0 dB
 Ch5: 86.0 dB Ch6: 0.0 dB Ch7: 20.0 dB Ch8: 80.0 dB

Attenuator Parameters Sweep Setup System Configuration

Settings
 Continuous Sweeping Start → Stop → Start # of Sweeps: 1 Start → Stop, Start → Stop **Start** **Pause**

Parameters

Ch #	Enable	Start (dB)	Step (dB)	Stop (dB)	Dwell (Sec)	Apply to All	Sweep #
1	<input checked="" type="checkbox"/>	10.0	2.0	20.0	1.0	<input type="button" value="Apply"/>	---
2	<input checked="" type="checkbox"/>	1.0	10.0	10.0	1.0	<input type="button" value="Apply"/>	---
3	<input checked="" type="checkbox"/>	10.0	2.0	20.0	1.0	<input type="button" value="Apply"/>	---
		2.0	20.0	10.0	1.0	<input type="button" value="Apply"/>	---
		2.0	80.0	20.0	1.0	<input type="button" value="Apply"/>	---
		2.0	50.0	20.0	1.0	<input type="button" value="Apply"/>	---

Find Me Device ID: ATX-ATT01 IP Address: 192.168.0.86 **ATxTel**

Current Values
 Ch1: 20.0 dB Ch2: 23.9 dB Ch3: 60.0 dB Ch4: 16.0 dB
 Ch5: 86.0 dB Ch6: 0.0 dB Ch7: 20.0 dB Ch8: 80.0 dB

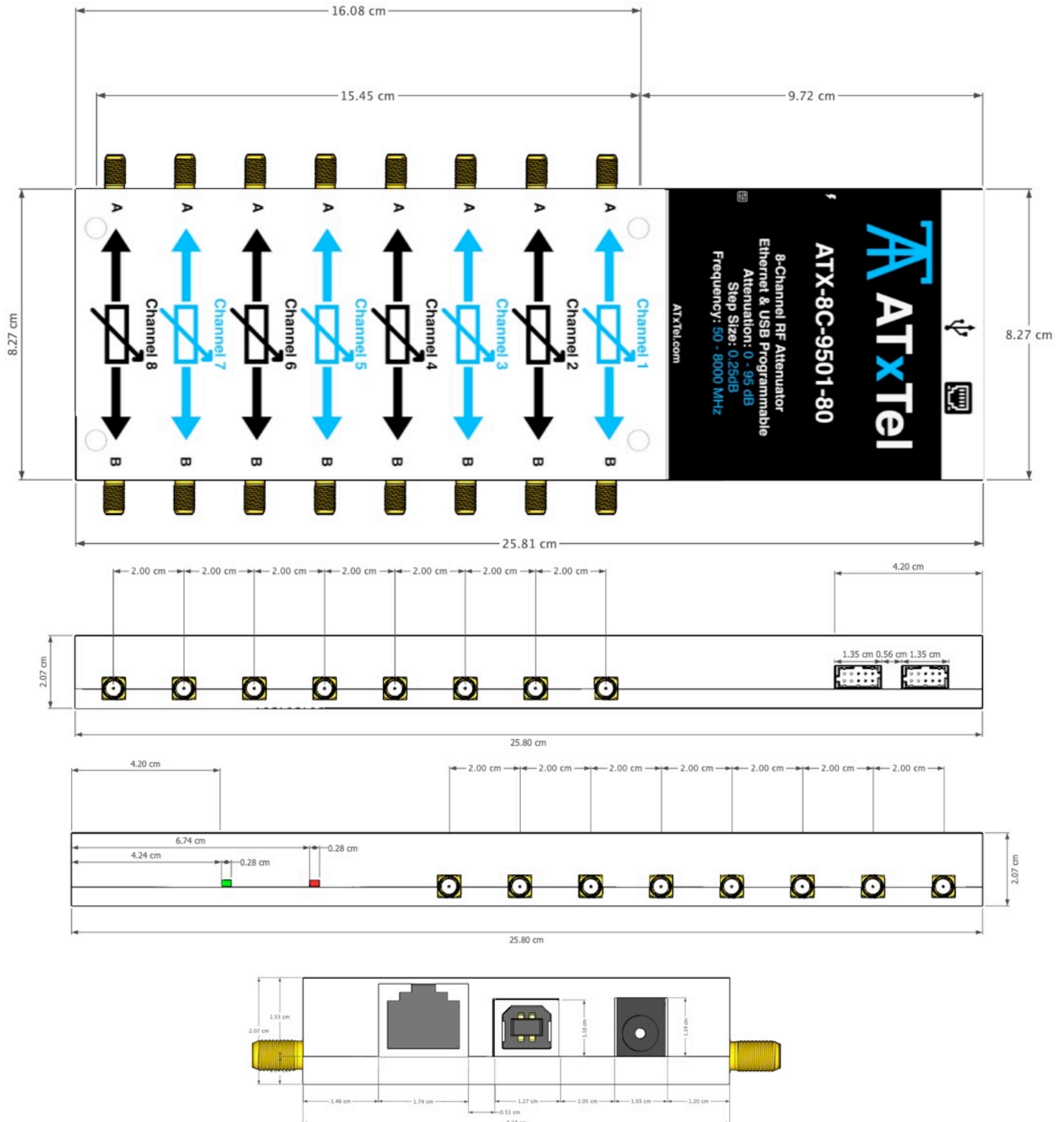
Attenuator Parameters Sweep Setup System Configuration

Ethernet Config
 IP Address: 192.168.0.86
 Subnet: 255.255.255.0
 Gateway: 192.168.0.1
 Device ID: ATX-ATT01 **Apply**

Device Info
 Serial Number: PG8108600
 Firmware Version: 0.05.12
 Number of Channels: 8
 Attenuation Range: 0-95 dB
 Min Attenuation Step: 0.1 dB
 MAC: 8C:1F:64:41:80:00

Default Attenuation
 Ch 1: 0.0 dB Ch 2: 0.0 dB Ch 3: 0.0 dB Ch 4: 0.0 dB
 Ch 5: 0.0 dB Ch 6: 0.0 dB Ch 7: 0.0 dB Ch 8: 0.0 dB **Apply**

Dimensions



SELF DECLARATION FOR RoHS COMPLIANCE