



## 90DB DIGITAL ATTENUATOR 6GHZ



### Description

The DS Instruments **DAT90L** [Digital Programmable Attenuator](#) is a compact stand-alone and USB-controlled RF Step Attenuator with 0.50dB steps and a range of 0 to **90dB**. This premium version features a bright OLED **display** and front user control buttons. Input frequency ranges from 5MHz to 6GHz. No host PC is required to use this device. Automated scripted control is extremely easy requiring no extra drivers, just a simple virtual COM port connection and SCPI based text commands.

### Digital Attenuator Specs:

- Max input power: +25.0dBm
- Typical Maximum Insertion loss: <math><10\text{dB}</math>
- Dimensions: 2.75" x 1.25" x 3"
- Attenuation: **0-90dB**
- Step Size: 0.50dB
- Frequency: 5MHz – 6GHz

### DAT90L Features:

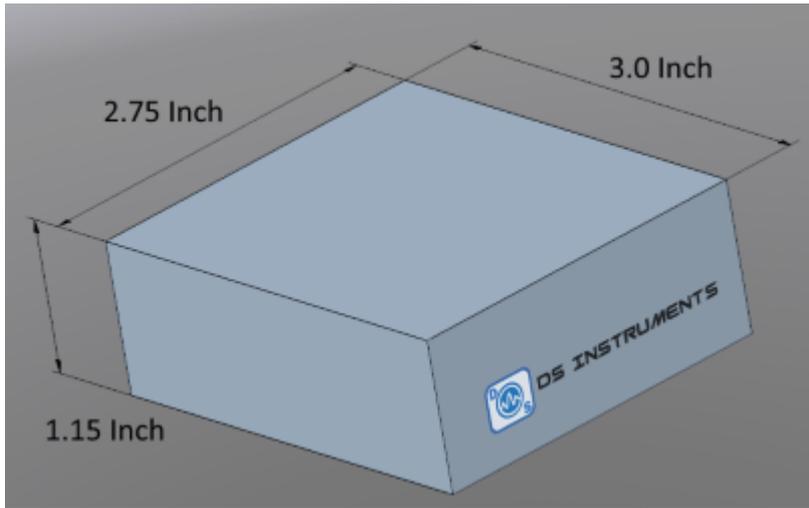
- SCPI command support via USB COM port
- Front buttons and display for stand-alone use
- Standard micro USB powered
- Premium Gold SMA RF connectors
- Tiny, rugged, and cost-saving!
- Low insertion loss

### Common RF Applications:

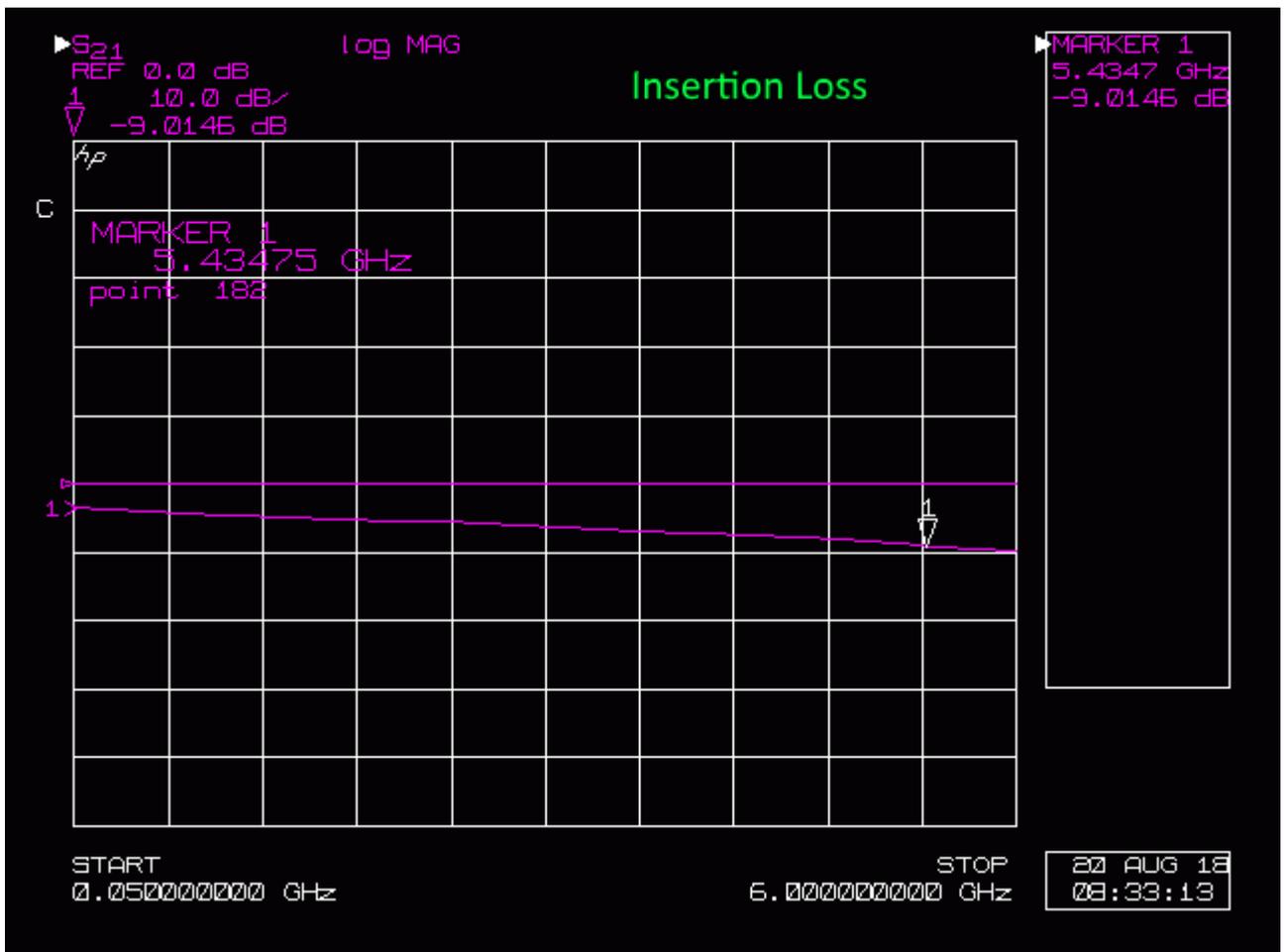
- Automated testing environments
- General RF Lab use
- Control Systems
- Cellular equipment testing
- Production verification
- Educational / university lab use
- Aerospace / Defense Research

### Attenuator Images:





RF Performance Plots:

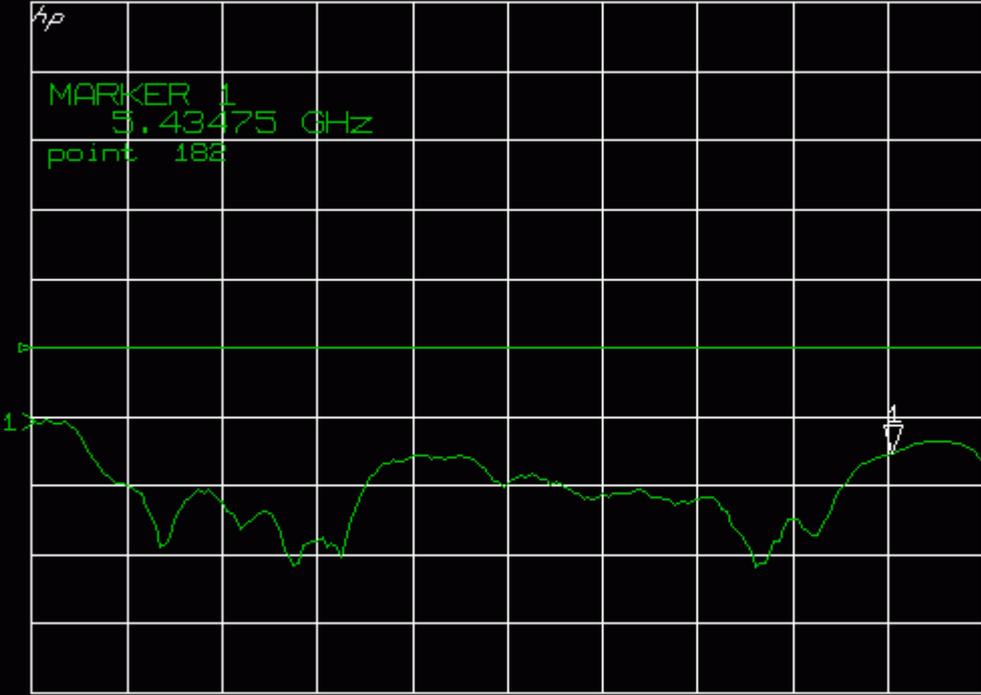


S<sub>11</sub>  
REF 0.0 dB  
1 10.0 dB/  
-15.219 dB

Log MAG

### Return Loss

MARKER 1  
5.4347 GHz  
-15.219 dB



START  
0.050000000 GHz

STOP  
6.000000000 GHz

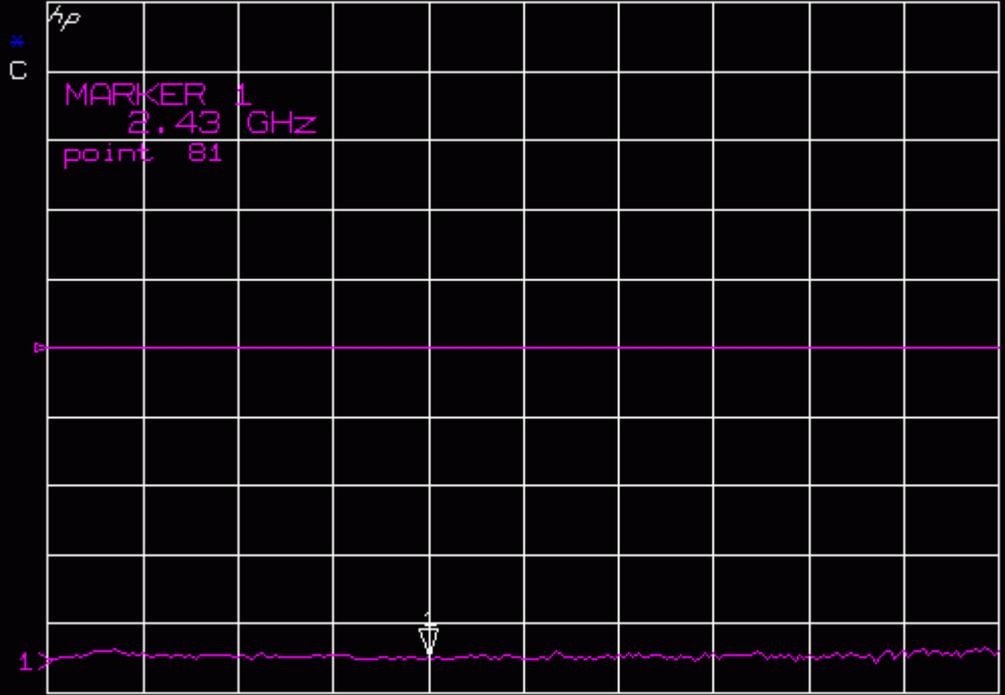
20 AUG 18  
08:34:33

S<sub>21</sub>  
REF 0.0 dB  
10.0 dB/  
-44.85 dB

Log MAG

45dB Setting

MARKER 1  
2.43 GHz  
-44.85 dB



START  
0.050000000 GHz

STOP  
6.000000000 GHz

20 AUG 18  
08:36:13