

## - Key Features -

- Front Panel OLED Display
- 63 dB Range, 0.5dB Steps
- 100MHz to 12GHz
- Standalone Operation, no PC needed
- Can be used as programmable attenuator using USB port/PC
- Tiny all-aluminum case
- Micro USB Powered
- Unquestionably Reliable

# DS Instruments

# DAT64H

## 63 dB Programmable Ultra-wideband RF Attenuator with OLED Display and User Interface



### DAT64H, A Programmable Attenuator with User Interface

The DAT64H is a fully self contained attenuator instrument. The attenuation range is 0 to 63 dB with 0.5dB step size. Control of attenuator setting can be accomplished both by the user interface and via computer using the USB port.

The user interface has UP/ DOWN buttons and an OLED type display. The display indicates the current attenuation value as well as other instrument information.

### Ease of Use

The user can control the DAT64H attenuation both from front panel buttons or remotely and from the USB port. **No PC is needed to operate the DAT64H as step attenuator.**

### Remote Operation

Industry standard SCPI commands allow the DAT64H to be controlled by any PC with a USB interface.

The micro USB port is configured as a COM port. This allows third party software to access the DAT64H as if it were a standard COM device with no additional drivers, software, or API.

All power required by the device is supplied by the USB connection.

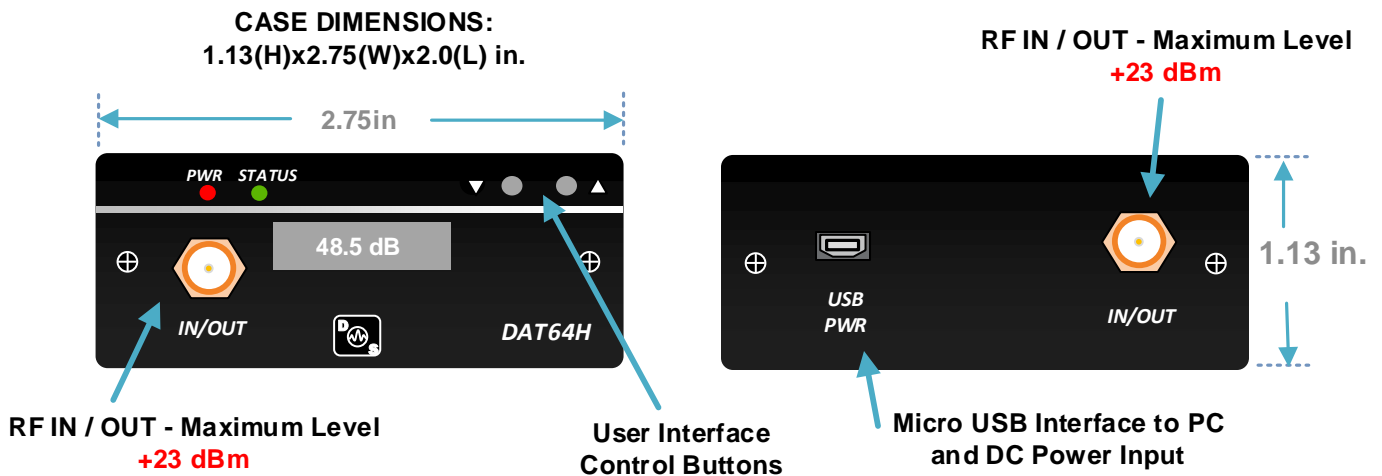


# DAT64H

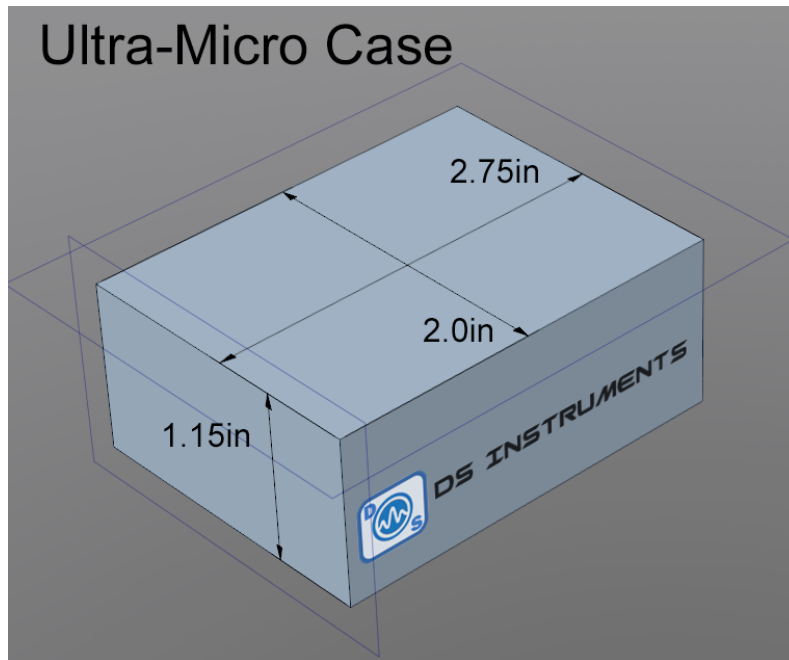
## SPECIFICATIONS

Parameter	Min	Max	Typ	Units
DAT64H Frequency Range	100	12000		MHz
Insertion Loss, 100 to 2000MHz	5	7	6	dB
Insertion Loss, 2 to 6GHz	6	9	7	dB
Insertion Loss, 6 to 10GHz	7	14	10	dB
Insertion Loss, 10 to 12GHz	11	15	12	dB
In/ Out VSWR	1.25:1	1.6:1	1.35:1	-
Attenuation Range	0	63.0		dB
Min Step Size	0.5			dB
Step Size Error		+/- 0.4		dB
Maximum Input Power		+23		dBm
Third Order Intercept		+38		dBm
Atten. Accuracy, All Atten. States (Referenced to Insertion Loss)	$\pm (0.30 + 5\% \text{ of Atten. Setting}) \text{ Max dB}$			
DC Power Input thru USB Port	4.75	5.2	5.0	vdc

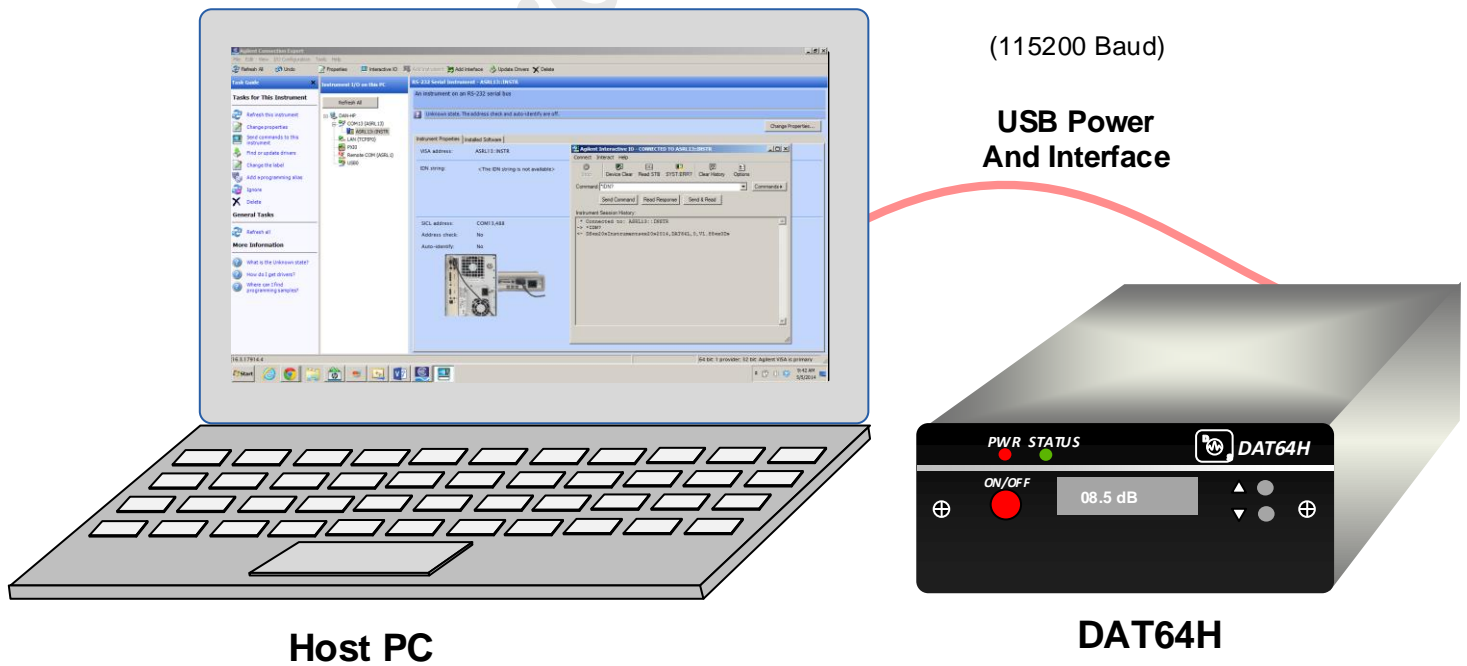
## DAT64H Front and Rear Panel Features



# DAT64H



## Typical User connections for Remote Operation from PC Using Agilent Connection Software



# DAT64H

## Device Front and Rear I/O Ports

---



## Typical Insertion Loss

---



# DAT64H

## USB COM Port SCPI Commands

---

INPUT:ATT xyz	- Set attenuation to “xyz”
INCR	- Increase attenuation by step size
DECR	- Decrease attenuation by step size
INCR x	- Increase attenuation by “x”
DECR y	- Decrease attenuation by “y”
STEP xy	- Set the step size to “xy”
*IDN?	- Return standard identification string
*RST	- Reset device
*SAVSTATE	- Save current attenuation as default boot up value

(115200 bps – 8 Bits – Parity: none – Stopbits: 1 – Flowcontrol: none)

## Windows GUI

---



# DAT64H

## ***Ordering Information***

---

- |  |          |
|--|----------|
| • Model DAT64H, 0- 63dB, 100 to 12000MHz<br>Attenuator with OLED Display and Control Buttons | \$799.00 |
| • Option 1 – No display or buttons   | \$739.00 |

## ***Contact Information***

---

[www.ds instruments.com](http://www.ds instruments.com)

[support@ds instruments.com](mailto:support@ds instruments.com)

call us: (805) 242-6685

