

Key Features

- 63 dB Range, 0.25dB Steps
- Extremely Low Insertion Loss
- Front Panel OLED Display
- 100MHz to 6GHz
- Standalone Operation, no PC needed
- Programmable via USB virtual COM port
- Ultra Compact
- Affordable & Reliable
- Audio Feedback

DS Instruments



DAT64F

Programmable RF Attenuator - 63 dB Range, 0.25dB Steps



The DAT64F Fine-step RF Attenuator

The DAT64F is a stand-alone wide-band precision attenuator instrument with attenuation range from 0 to 63 dB and a **0.25dB** step size. Insertion loss is below 6dB. Control of the attenuation setting can be accomplished both by the user interface OR via USB port.

DAT64F Applications

- Internet-of-things development
- Automated testing environments
- General RF lab use
- Control systems
- Cellular equipment testing
- Production verification
- Educational / university lab use
- Aerospace / defense research
- Wireless infrastructure

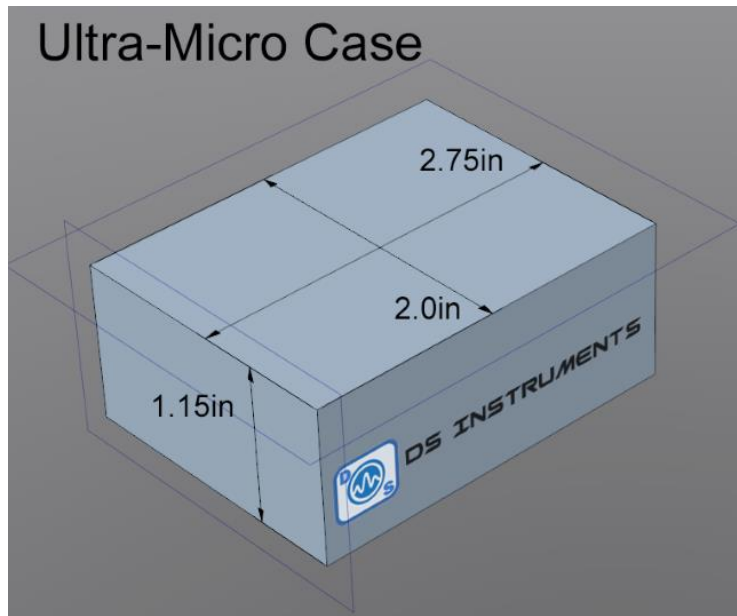
Remote Operation

Industry standard SCPI commands allow the DAT64F to be controlled by any host system with a USB interface.

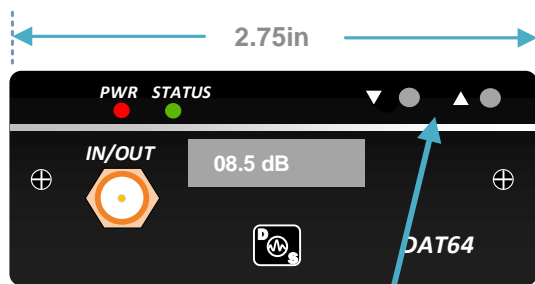
The USB port is configured as a virtual COM port allowing user software to access the DAT64F as if it were a standard serial COM device without any additional drivers.

DAT64F

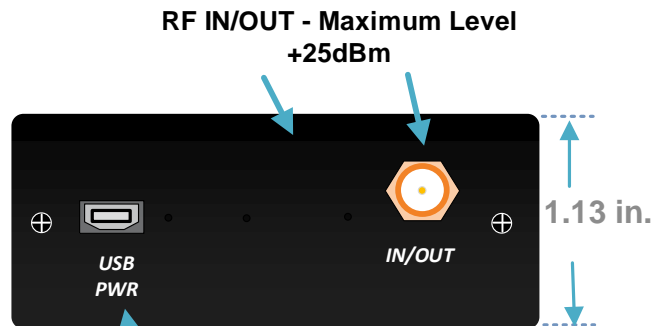
MECHANICAL



CASE DIMENSIONS:
1.13(H)x2.75(W)x2.0(L) in.



User Interface
Control Buttons



Micro USB Interface to PC
and DC Power Input



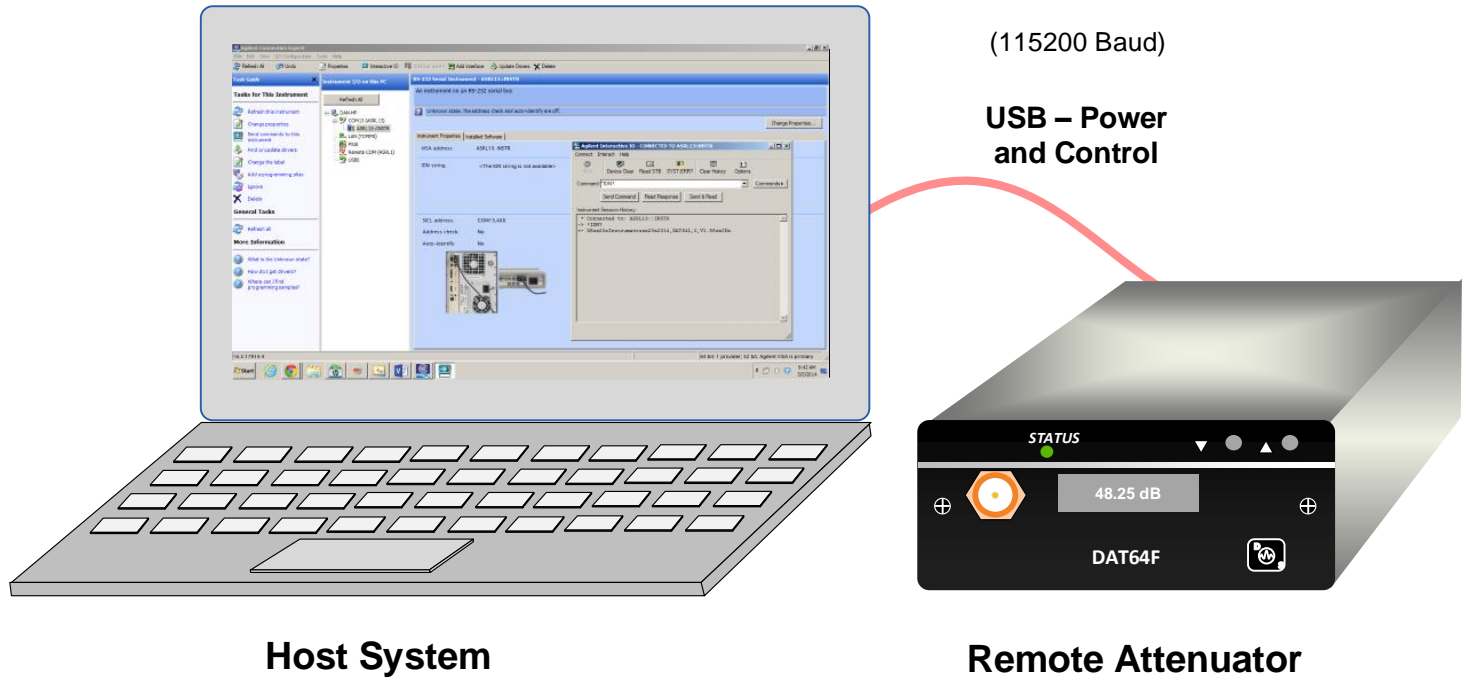
DAT64F

SPECIFICATIONS

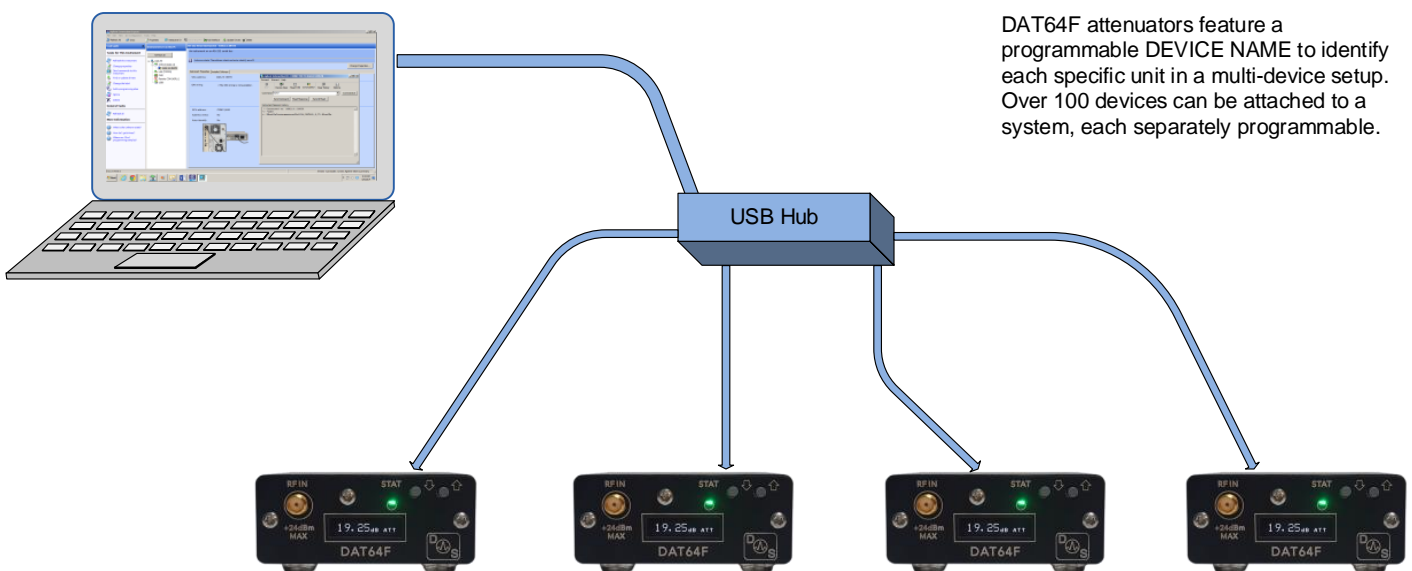
Parameter	Min	Max	Typ	Units
Frequency Range	100	6000		MHz
Insertion Loss, 1 to 3000MHz	2	4	3	dB
Insertion Loss, 3 to 4.5GHz	3	6	5	dB
Insertion Loss, 4.5 to 6GHz	4	7	5.5	dB
In/ Out VSWR	1.25:1	1.4:1	1.3:1	-
Attenuation Range	0	63		dB
Min Step Size	0.25			dB
Step Size Error		+/- 0.1		dB
Maximum Input Power		+25		dBm
Third Order Intercept		+55		dBm
Atten. Accuracy, All Atten. States (Referenced to Insertion Loss)	DC-0.8GHz 0.8GHz – 6GHz	$\pm (0.1) + 4\%$ $\pm (0.1) + 4\%$	Setting) Max. Setting) Max.	
DC Power Input thru USB Port	4.75	5.2	5.0	vdc

DAT64F

Typical User connections for Remote Operation from PC



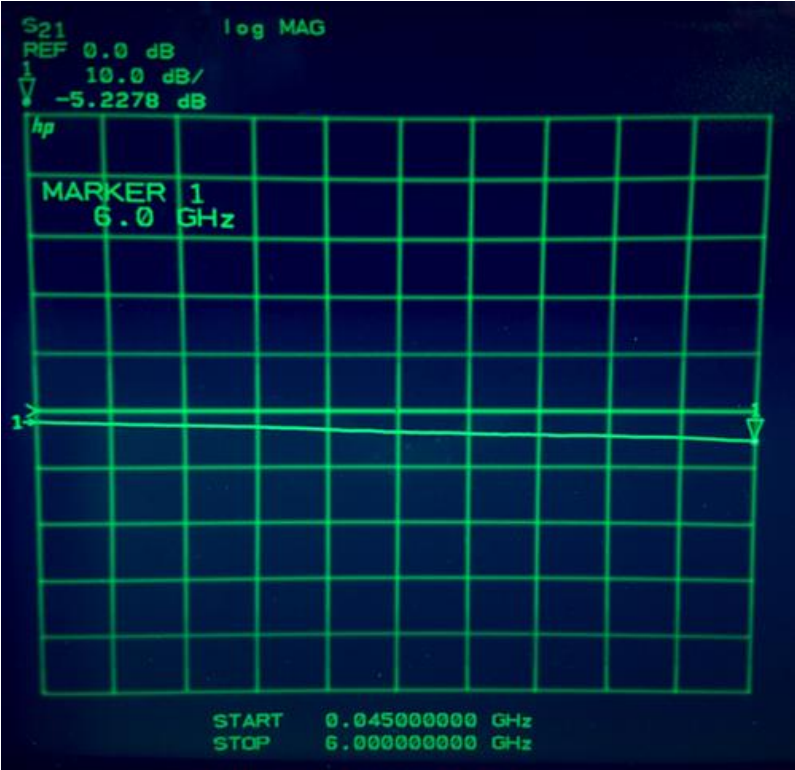
Multiple DAT64 Attenuator Setup



DAT64F attenuators feature a programmable DEVICE NAME to identify each specific unit in a multi-device setup. Over 100 devices can be attached to a system, each separately programmable.

DAT64F

Typical Frequency Response: 0 dB Attenuation



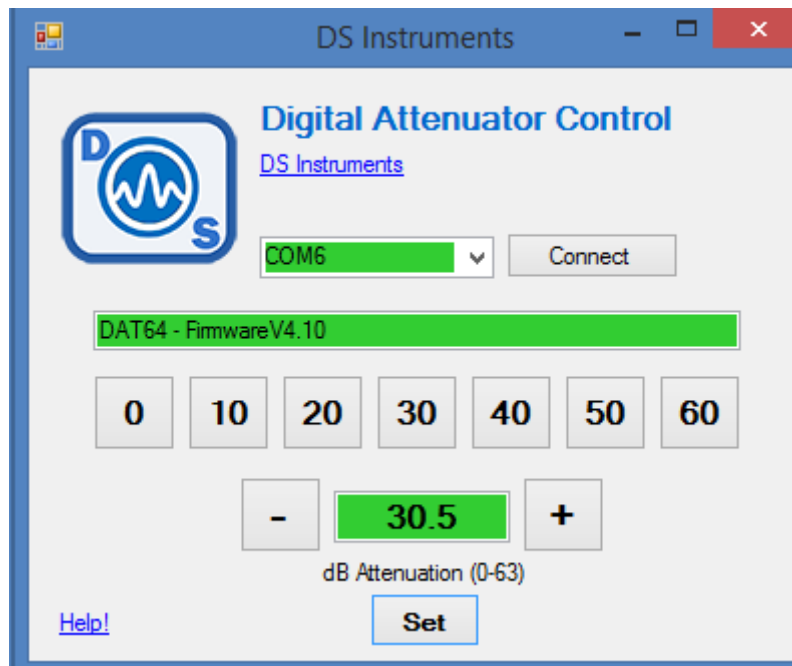
DAT64F

USB COM Port SCPI Commands

INPUT:ATT xyz	- Set attenuation to "xyz"
INCR	- Increase attenuation by stepsize
DECR	- Decrease attenuation by stepsize
INCR x	- Increase attenuation by "x"
DECR y	- Decrease attenuation by "y"
STEP xy	- Set the stepsize to "xy"
*IDN?	- Return standard identification string
*RST	- Reset device

(115200 Baud)

Free Windows GUI



DAT64F

Ordering Information

DAT64F, 0- 63dB, 100 to 6000MHz Attenuator (OLED Display and Control Buttons)	\$595.00
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DAT64FN, 0- 63dB, 100 to 6000MHz Attenuator (No Display / USB only)	\$535.00
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Contact Information

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