

**SPECIFICATION SHEET**

**JFW MODEL 50PA-1019-XX**

**PROGRAMMABLE ATTENUATOR ASSEMBLY**

JFW Industries, Inc.  
Phone: 317-887-1340  
sales@jfwindustries.com  
www.jfwindustries.com

Frequency Range	100 MHz-40 GHz
Attenuation Range	0-62 dB in 1 dB steps
Configuration	Individually controlled solid-state programmable attenuators. Number of attenuators can be selected from 1 to 20 attenuators.
Enclosure Type	19 inch rack mount 2RU high(for 1-20 attenuators)
Impedance	50 Ohms nominal
Startup/Default States (configurable)	Attenuators to 62dB at startup (see ATTEN command) DHCP enabled (see NET command) 4 Ethernet users (see NET command) Prompts off (see PROMPT command)  All of these default settings can be changed by user. Unit can be configured for up to 12 Ethernet users.
VSWR	1.6:1 typical 100MHz-18 GHz 1.8:1 typical 18-26.5 GHz 2.2:1 typical 26.5-40 GHz 2.8:1 maximum 100MHz-40 GHz
Attenuation Accuracy (Referenced to Insertion loss) (typically monotonic)	0-31dB ± 1.0 dB typical 100MHz-18 GHz ± 1.5 dB typical 18-26.5 GHz ± 2.0 dB typical 26.5-40 GHz ± 3.5 dB maximum 100MHz-40 GHz  31-48dB ± 2.0 dB typical 100MHz-18 GHz ± 2.0 dB typical 18-26.5 GHz ± 4.0 dB typical 26.5-40 GHz ± 5.0 dB maximum 100MHz-40 GHz  49-62dB ± 3.0 dB typical 100MHz-18 GHz ± 3.0 dB typical 18-26.5 GHz ± 4.0 dB typical 26.5-40 GHz ± 8.0 dB maximum 100MHz-40 GHz
Insertion Loss	4.0 dB typical @ 100MHz 5.5 dB typical @ 3 GHz 8.0 dB typical @ 8 GHz 11.5 dB typical @ 18 GHz 15.0 dB typical @ 26.5 GHz 18.0 dB typical @ 40 GHz
RF Input Power	+20 dBm average +25 dBm (0.1dB compression) Warning: DC voltage not allowed on RF connections

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Switching Speed 1 microsecond typical  
(after command is received and processed)  
(3 milliseconds typical processing time)

Manual Control 20-Button Keypad and LCD display  
(IP Address configurable via keypad)  
(Net mask configurable via keypad)  
(Gateway configurable via keypad)  
(Baud rate configurable via keypad)

Remote Control Ethernet (DHCP, TCP/IP, 10/100, up to 12 users)  
RS-232 (up to 115200 Baud)

Remote Commands Attenuator Control Commands:  
Atten, Set Attenuator, Read Attenuator, Set All  
Attenuators, Read All Attenuators, Read All Extended,  
Fade Attenuator, Variable Attenuator Handover, Block,  
Set Block, Read Block, Read All Blocks, Fade Block,  
Variable Block Handover

System Commands:  
Help, Identification, Store, Recall, Pause, Net,  
Serial, Close, Disconnect, MOTD, Date, Message,  
Restrict, IDENT, Name, Show Users, Reboot, Uptime,  
Prompt

RF Connector 2.92mm female

Operating Temperature Range 0°C to +50°C

AC Supply 100-240 VAC @ 47-63 Hz

Physical Size See Outline Drawing 092-8602 (1-16 Attens)  
See Outline Drawing 092-10438 (20 Attens)

Future Expansion If your testing needs change, you can have your 50PA-  
1019-XX upgraded to have additional attenuators. If  
you have a model with less than 16 attenuators, it can  
be sent back to JFW to have additional attenuators  
added up to 16 total attenuators.

However, the 20 Attenuator version uses custom metal  
work and models with less than 16 can not be upgraded  
to 20 attenuars without changing the entire chassis.

ECR/ECN #	DATE	REV	APPR / DATE	ECR/ECN #	DATE	REV	APPR / DATE
	11/11/2016		BAC 11/11/2016	33255	03/15/2024	C	BAC 03/15/2024
29166	11/16/2018	A	TRS 11/16/2018	34053	03/27/2025	D	BAC 03/27/2025
29850	09/30/2019	B	TRS 09/30/2019				