

SPECIFICATION SHEET

JFW MODEL 50P-2138

4 CHANNEL USB CONTROLLED SOLID STATE PROGRAMMABLE ATTENUATOR

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

Frequency Range	1-1000 MHz
Impedance	50 Ohms nominal
Attenuation Range	0-95 dB in 1 dB steps
Attenuation Steps	1, 2, 4, 8, 16, 32 and 32 dB
VSWR	1.7:1 maximum
Attenuation Accuracy (guaranteed monotonic)	± 0.50 dB 1-7 dB ± 1.00 dB 8-11 dB ± 1.25 or 3% 12-95 dB (whichever is greater)
Insertion Loss	4 dB maximum
Isolation (channel-to-channel)	> 120dB typical
RF Input Power	+18 dBm (1-10 MHz) +25 dBm (10-100 MHz) +27 dBm (100-1000 MHz)
DC Bias on RF	± 0.2 Vdc maximum on RF connector (recommend external DC block for protection if needed)
Switching Speed	4 microseconds maximum (after command is received and processed) (1 millisecond typical processing time)
DC Supply	+5 Vdc @ 400mA typical (Powered via USB)
Control	USB control (CDC-ACM Serial Device)
Test Software (Microsoft .NET 4.0+) (Windows Vista or greater)	The included JFW software allows control of multiple USB devices. Unit is also compatible with Python, C#, PuTTY (any development tool with COM Port interfacing).
DC Connector	USB-C 2 meter USB A Male to USB-C Cable Included
RF Connector	SMA female
Operating Temperature Range	-40°C to +85°C
Physical Size	See outline drawings 092-9250

ECR/ECN #	DATE	REV	APPR / DATE	ECR/ECN #	DATE	REV	APPR / DATE
	06/27/2024		TRS 06/27/2024				
34482	12/18/2025	A	BAC 12/18/2025				