

**SPECIFICATION SHEET**

**JFW MODEL 50PA-1147-XX**

**PROGRAMMABLE ATTENUATOR ASSEMBLY**

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

|  |  |
|--|--|
| Frequency Range                                | 200-6000 MHz   |
| Attenuation Range                              | 0-95.5 dB in 0.5 dB steps  |
| Configuration                                  | Individually controlled solid-state programmable attenuators. Number of attenuators can be selected from 1 to 8 attenuators.   |
| Enclosure Type                                 | 19 inch rack mount<br>(2RU high for 1-8 attenuators)   |
| Impedance                                      | 50 Ohms nominal  |
| Startup/Default States<br>(configurable)       | Attenuators to 95.5dB at startup (see ATTEN command)<br>DHCP enabled (see NET command)<br>4 Ethernet users (see NET command)<br>Prompts off (see PROMPT command)                           |
| VSWR   | 2.0:1 maximum<br>< 1.6:1 typical   |
| Attenuation Accuracy<br>(guaranteed monotonic) | $\pm 0.25$ dB      0.5-1.0 dB<br>$\pm 0.50$ dB      1.5-8.0 dB<br>$\pm 0.75$ dB      8.5-16.0 dB<br>$\pm 1.00$ dB or 4%    16.5-95.5 dB<br>(whichever is greater)                          |
| Insertion Loss                                 | 8.8 dB maximum<br>2.9 dB typical @ 200 MHz<br>3.5 dB typical @ 700 MHz<br>4.8 dB typical @ 3000 MHz<br>8.2 dB typical @ 6000 MHz   |
| RF Input Power                                 | +27 dBm average<br>+33 dBm no damage   |
| Switching Speed                                | 4 microseconds typical<br>(after command is received and processed)<br>(3 milliseconds typical processing time)  |
| Manual Control                                 | 20-Button Keypad and LCD display<br>(IP Address configurable via keypad)<br>(Net mask configurable via keypad)<br>(Gateway configurable via keypad)<br>(Baud rate configurable via keypad) |
| Remote Control                                 | Ethernet (DHCP, TCP/IP, 10/100, up to 12 users)<br>RS-232 (up to 115200 Baud)  |

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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

N or SMA female

Operating Temperature Range

0°C to +50°C

AC Supply

100-240 VAC @ 47-63 Hz

Outline Drawing Numbers

092-8262 (SMA female, 1-8 attenuators)  
092-8261 (N female, 1-8 attenuators)

Example Model Numbers

50PA-1147-01 SMA (1 attenuator)  
50PA-1147-02 SMA (2 attenuators)  
50PA-1147-03 SMA (3 attenuators)  
50PA-1147-04 SMA (4 attenuators)  
50PA-1147-05 SMA (5 attenuators)  
50PA-1147-06 SMA (6 attenuators)  
50PA-1147-07 SMA (7 attenuators)  
50PA-1147-08 SMA (8 attenuators)  
50PA-1147-01 N (1 attenuator)  
50PA-1147-08 N (8 attenuators)

| ECR/ECN # | DATE       | REV | APPR / DATE    | ECR/ECN # | DATE | REV | APPR / DATE |
|-----------|------------|-----|----------------|-----------|------|-----|-------------|
|           | 05/31/2019 |     | CLK 05/31/2019 |           |      |     |             |
| 32077     | 08/18/2022 | A   | TRS 08/18/2022 |           |      |     |             |