SPECIFICATION SHEET

JFW MODEL 50PA-1019-XX

PROGRAMMABLE ATTENUATOR ASSEMBLY

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 16 attenuators.
Enclosure Type	19 inch rack mount 2RU high(for 1-16 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)	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)

--CONTINUED--

JFW FORM E-7-F REV F

SPECIFICATION SHEET

JFW MODEL 50PA-1019-XX

PROGRAMMABLE ATTENUATOR ASSEMBLY

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

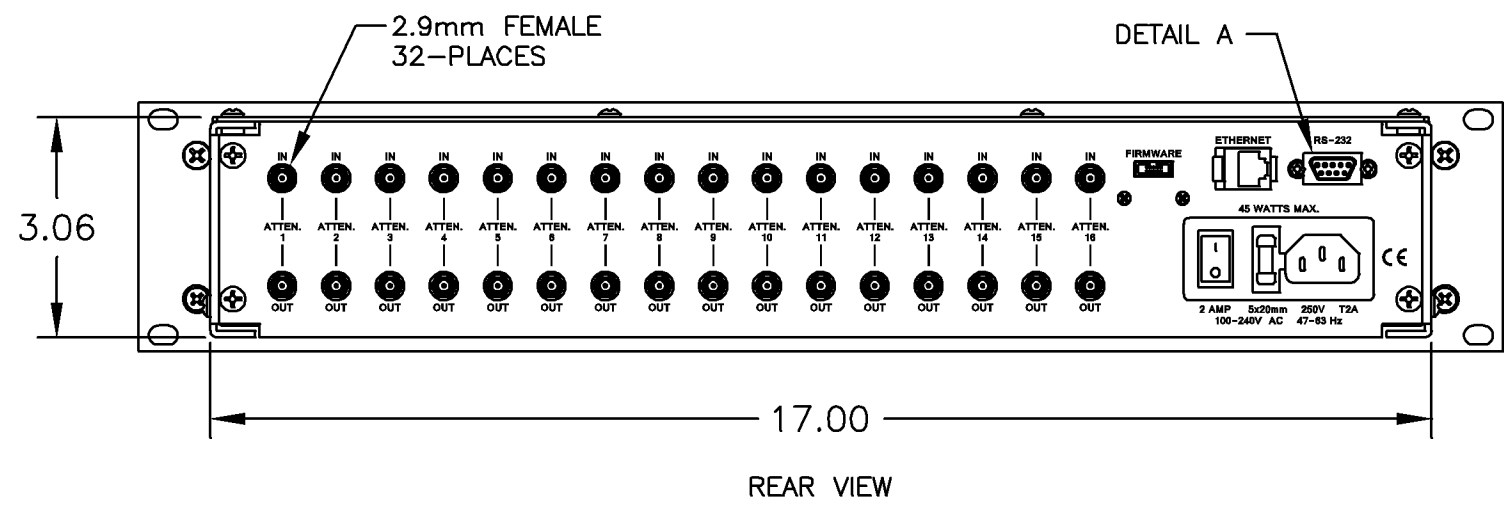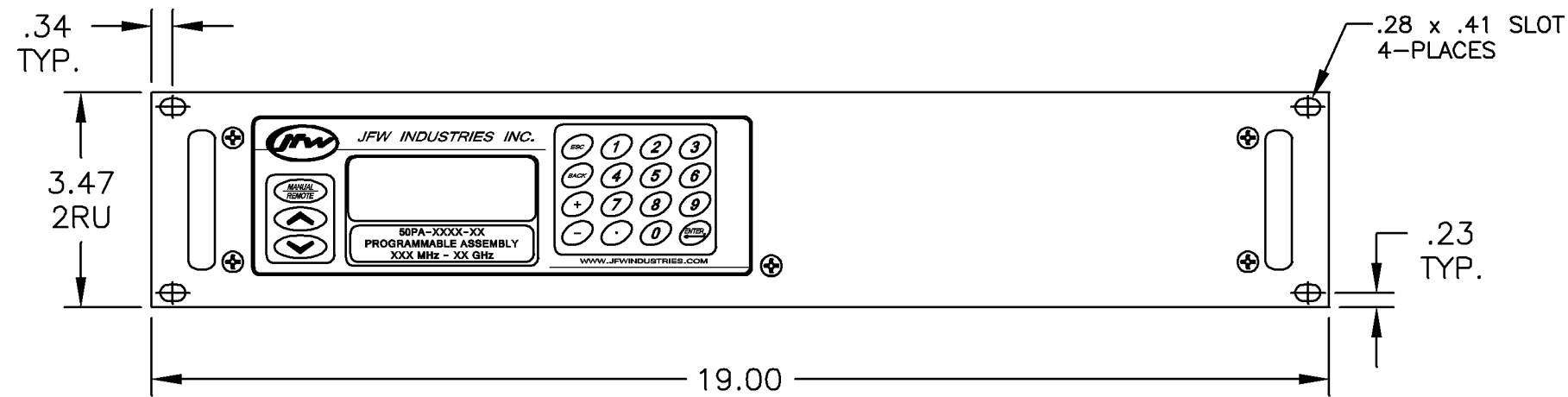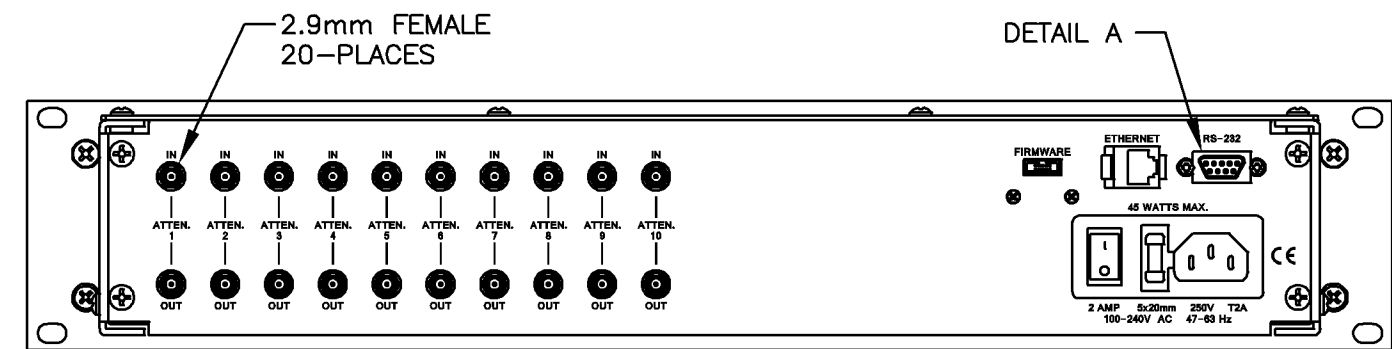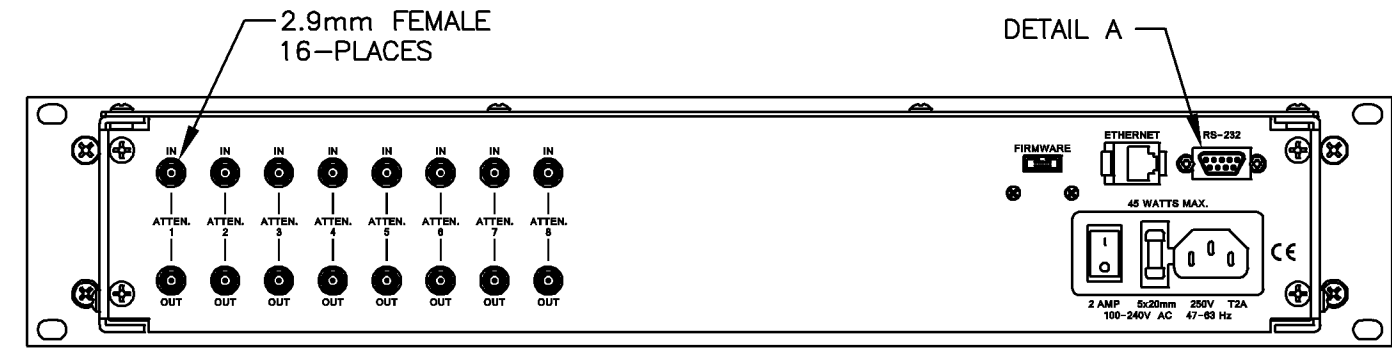|	
Switching Speed	1 microsecond typical (after command is received and processed) (3 milliseconds typical processing time)
Manual Control	20-Button Keypad and LCD display (IP Address configurable via keypad) (Net mask configurable via keypad) (Gateway configurable via keypad) (Baud rate configurable 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

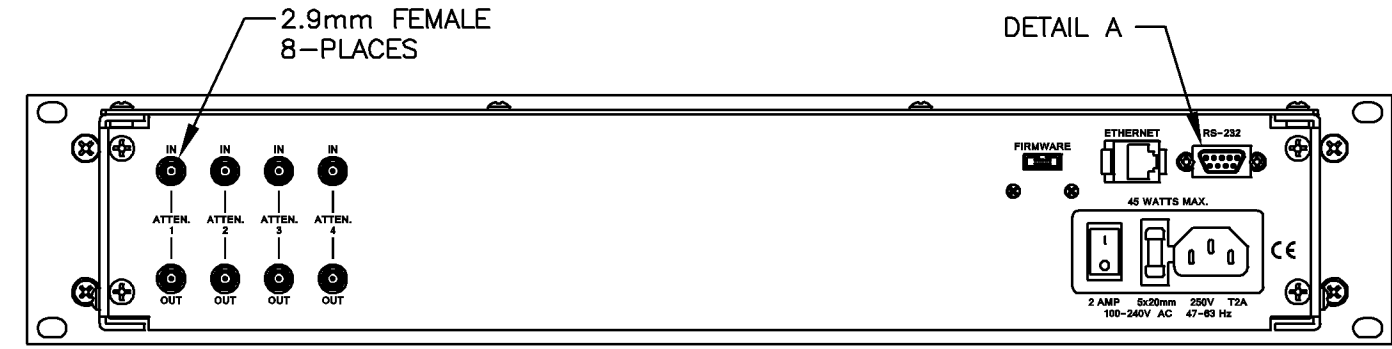| ECR/ECN # DATE	REV APPR / DATE	ECR/ECN # DATE	REV APPR / DATE
11/11/2016	BAC 11/11/2016		

JFW FORM E-7-F REV F

.34 TYP.

3.47 2RU

JFW INDUSTRIES INC.

50PA-XXXX-XX PROGRAMMABLE ASSEMBLY XXX MHz - XX GHz

www.jfwindustries.com

.28 x .41 SLOT 4-PLACES

.23 TYP.

19.00

-10 (i.e. 10 ATTENUATORS)
2.9mm FEMALE 20-PLACES — DETAIL A

-08 (i.e. 8 ATTENUATORS)
2.9mm FEMALE 16-PLACES — DETAIL A

2.9mm FEMALE 32-PLACES — DETAIL A
3.06
17.00
REAR VIEW
-16 (i.e. 16 ATTENUATORS)

-04 (i.e. 4 ATTENUATORS)
2.9mm FEMALE 8-PLACES — DETAIL A
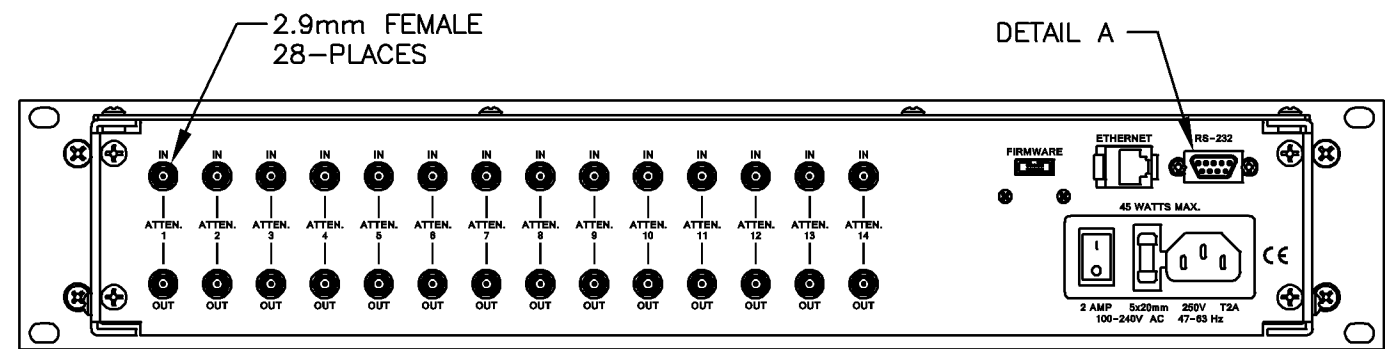
2.9mm FEMALE 28-PLACES — DETAIL A
-14 (i.e. 14 ATTENUATORS)

-02 (i.e. 2 ATTENUATORS)
2.9mm FEMALE 4-PLACES — DETAIL A
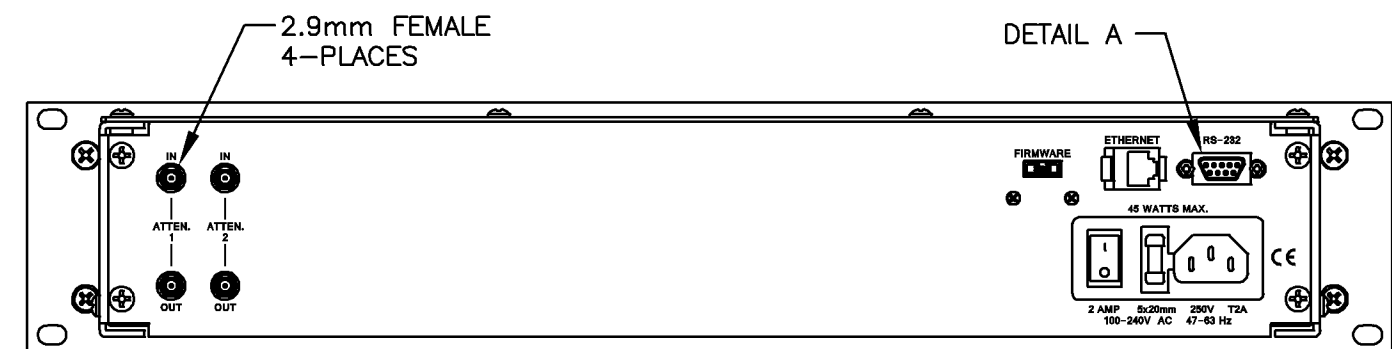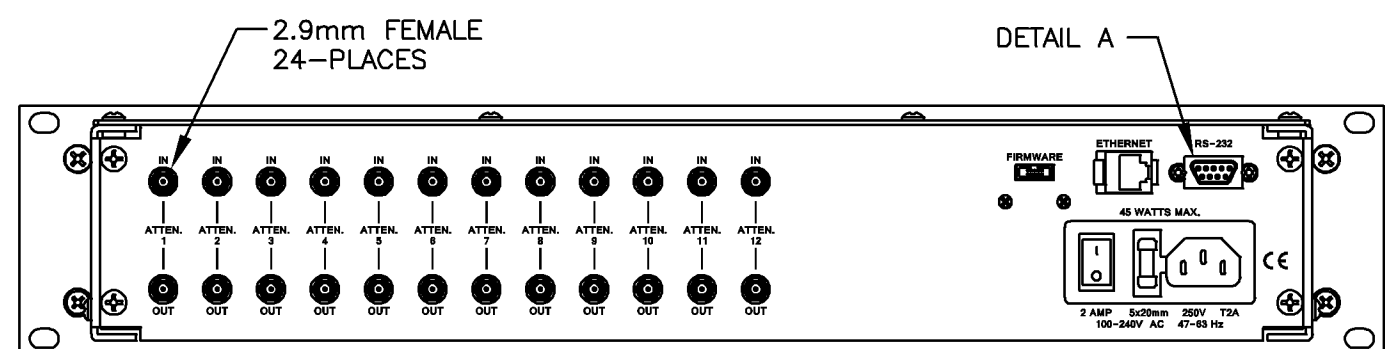
2.9mm FEMALE 24-PLACES — DETAIL A
-12 (i.e. 12 ATTENUATORS)
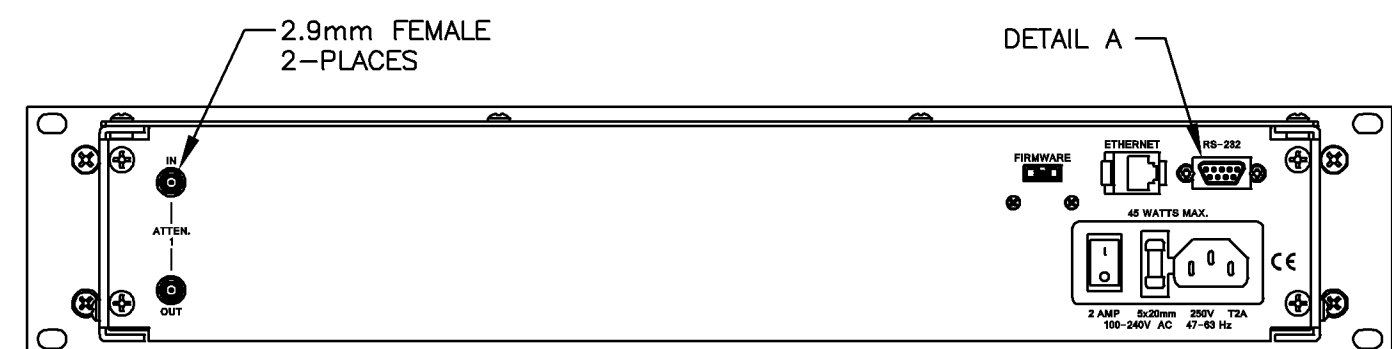
-01 (i.e. 1 ATTENUATORS)
2.9mm FEMALE 2-PLACES — DETAIL A

PIN	FUNCTION
1	CHASSIS GROUND
2	RECEIVED DATA
3	TRANSMITTED DATA
4	NO CONNECTION
5	SIGNAL GROUND
6	NO CONNECTION
7	RTS
8	CTS
9	NO CONNECTION

DETAIL A
DE-9S

CHASSIS DEPTH = 17.22 INCHES

NOTE:
ALL REAR PANELS ARE SCREENED FOR SIXTEEN ATTENUATORS TO ALLOW FOR FUTURE EXPANSION. ONLY USED SECTIONS ARE SHOWN FOR CLARITY.

REV	ECN	DATE	BY	APPR
–	ISSUED	4-1-16	DTS	TRS
A	27610	11-17-17	JZ	TEZ

MATERIAL: ALUMINUM ALLOY
FINISH: CHEMFILM TCP / FRONT: BLACK
MODEL: 50PA-XXXX-XX   SCALE 3/8
DESCRIPTION: PROGRAMMABLE ASSEMBLY

PROPRIETARY INFORMATION
ALL SURFACES ARE TO BE FREE OF BURRS, PITS, & SCRATCHES
TOLERANCES
.XX±.010 .XXX±.005 XX±.5°

DWG # 092-8602