

MODEL ACT PSU ADVANCED COMMUNICATIONS TERMINAL POWER SUPPLY UNIT INSTALLATION/MAINTENANCE

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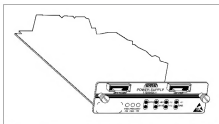


Figure 1. ADTRAN ACT PSU

2. INSTALLATION

2.1 Inspect the unit for shipping damage immediately after unpacking it. If damage is discovered, file a claim immediately with the carrier; then contact ADTRAN Customer Service (see **subsection 6.2**).

2.2 The ACT PSU plugs directly into the common card area in the positions marked POWER SUPPLY A or POWER SUPPLY B. To install the ACT PSU, grasp the unit by the faceplate and push it firmly into the backplane connector until the unit is seated. Lock the unit in position using the two faceplate screws.

2.3 There are no adjustments or options for the ACT PSU.

1. GENERAL

1.1 This practice provides installation and maintenance information for the ADTRAN Advanced Communications Terminal Power Supply Unit (ACT PSU). **Figure 1** is a drawing of the unit. A detailed product description and specifications can be found in the ADTRAN ACT PSU Description Practice, Section 61150052L1-2. The part number and basic features for the unit are provided in **Table A**. The specifications for the ACT PSU are shown in **Table B**.

1.2 Revisions to this practice will be summarized in this paragraph.

1.3 The ADTRAN ACT PSU is a common module plug-in used in the ACT 2300, 1900, and 1950 channel banks. The unit converts the -48 VDC input to +5 VDC, +12 VDC, and -12 VDC output voltage levels to be used by other common equipment and channel units. The unit is also designed to operate in a parallel, redundant fashion for increased system reliability.

Table A. Basic Features

Unit	Part No.	Features
ACT PSU	1150052L1	<p>Fuses incoming -48 V and 20 Hz ringing voltage.</p> <p>Converts -48 VDC to regulated +5 VDC, +12 VDC, and -12 VDC.</p> <p>Outputs individually diode isolated to allow redundant operation.</p> <p>Front panel test points for all voltages.</p> <p>Front panel indicators showing the status of the unit.</p> <p>Filters -48 V to provide -48 F for the rest of the system.</p>

Table B. ACT PSU Specifications

Input	DC Voltage	-42.25 VDC to -56.00 VDC, -48 VDC, nominal
	Current	3.0 A
	Ringing Voltage	0 Vrms to 120 Vrms
	Current	105 Vrms, nominal 0.25 A
Output	+5 V	+5 VDC \pm 5% 4 A, maximum
	+12 V	+12 VDC \pm 10% 1 A, maximum
	-12 V	-12 VDC \pm 10% 1 A, maximum
	-48 V filtered	-42.25 V to -56.00 V 2 A, maximum
	20 Hz	0 to 120 Vrms 105 V, nominal 0.25 A, maximum

3. CONNECTIONS

3.1 Figure 2 shows the ACT PSU connector pin assignments. All inputs and outputs to the ACT PSU are made through the backplane. No additional backplane wiring is necessary for normal operation.

MAD0	28	1	TPSS
MAD1	29	2	TSPV
MAD2	30	3	RSPV
	31	4	PFAIL
	32	5	
	33	6	
20 Hz FUSED RET	34	7	20 Hz FUSED
20 Hz IN RET	35	8	20 Hz IN
	36	9	
	37	10	GND
GND	38	11	GND
-12 V	39	12	-12 V
+12 V	40	13	+12 V
GND	41	14	GND
GND	42	15	GND
+5 V	43	16	+5 V
+5 V	44	17	+5 V
-48 FRT	45	18	-48 F
-48 FRT	46	19	-48 F
-48 VRT	47	20	-48 V
-48 VRT	48	21	-48 V
-48 IN RT	49	22	-48 V IN
-48 IN RT	50	23	-48 V IN
FRM GND	51	24	FRM GND
	52	25	
	53	26	
	54	27	

Figure 2. Connector Pin Assignments**4. FACEPLATE INDICATORS**

Table C shows the status indicators for incoming power, ringing voltage, and outgoing voltages.

Table C. Faceplate Indicators

Indicator	Description
PWR ON, 20 HZ ON	Indicator turns On whenever incoming power or ringing voltage is present.
PWR FAIL	Indicator turns On whenever one of the outgoing voltages of the individual PSU has failed.

5. MAINTENANCE

5.1 The ACT PSU requires no routine maintenance to operate properly.

The faceplate has two faceplate fuses. If a fuse blows, a colored pin becomes visible from the front of the channel bank. To remove a fuse, grasp it and firmly pull it from the holder. To insert a fuse, push it into the holder until it firmly seats.

5.2 ADTRAN does not recommend that repairs be performed in the field. Repair services may be obtained by returning the defective unit to the ADTRAN Repair Department (see **subsection 6.2**).

6. WARRANTY AND CUSTOMER SERVICE

ADTRAN will replace or repair this product within five years from the date of shipment, if the product does not meet its published specifications or if it fails while in service. For detailed warranty, repair, and return information, refer to the ADTRAN Equipment Warranty and Return Policy Procedure.

6.1 Return Material Authorization (RMA) is required prior to returning equipment to ADTRAN.

6.2 For service, RMA requests, or further information, contact one of the following numbers.

ADTRAN Customer Service:

RMA	(205) 971-8722
Technical Support	(800) 726-8663
Applications Engineering	(800) 615-1176
Sales	(800) 827-0807

Repair and Return Address:

ADTRAN, Inc.
Customer Service Department
901 Explorer Boulevard
Huntsville, Alabama 35806-2807



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