



ACCURATE ELECTRONICS INC

PO BOX 1654 97075-1654 8687 SW HALL BLVD 97008 BEAVERTON OR USA 503.641.0118 FAX 503.646.3903

WWW.ACCURATE.ORG

Practice Section 108048B0 Rev A

SCADA RTU MODEM SHELF MODEL 108048B0



Switching Frequency:	50 kHz typical
Efficiency:	75 % typical
Isolation (input-output-case):	50M ohm (500VDC)
Output:	25 watts
	+/- 15 VDC
voltage adjustment:	+/- 5%
line regulation: (full input range)	0.8%
load regulation: (no load-full load)	0.9%
ripple and noise (DC-100MHz):	0.5% of volt & 50mV p-p
overvoltage protection:	zener diode

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2.02 Environmental

Operating Temperature:	0 - 55° C
Humidity:	up to 95% R.H. / no condensation

2.03 Physical

Dimensions:	17.500"W x 3.500"H x 12.875"D
	44.450 cmW x 8.890 cmH x 32.703 cmD
Weight:	3.1 lbs. / 1.4 kg.
Finish:	black anodized / white lettering
Mounting Hole Configuration:	18.310"W x 3.000"H
	46.507 cmW x 7.620 cmH
	(1.25" EIA spacing)
Ship-with-kit:	(4) 12/24 x 3/4 phillips screws, (4) #12 hex nuts, (4) #12 flat washers

1. GENERAL

1.01 This practice provides application, specification, circuit and mechanical description, maintenance, installation, and warranty information relating to Accurate Electronics' SCADA RTU Modem Shelf, Model 108048B0.

1.02 Accepts two (2) Modem Cards.

1.03 Internal power supply provides input of 120VDC and outputs of +15VDC and -15VDC.

1.04 Shelf provides mounts in 19.00", 3.5" position. A clear, plastic front cover folds down for easy module insertion.

1.05 Rear of panel provides both +/- switched, fused power input. Both modems have 25-pin D-sub connectors provided. Terminal block outputs are provided to facilitate RXT, RXR, TXT and TXR connections.

2. SPECIFICATIONS

2.01 Electrical

Number of Circuits:	2
Input Voltage Range:	120V nominal
	(85-140 VAC/VDC, 25 watts)
Input Fuse:	3A, 200V, two (2), single barrel type

3. CIRCUIT DESCRIPTION

3.01 See FIGURE 1.

4. MECHANICAL OUTLINE

4.01 See FIGURE 2.

5. INSTALLATION

5.01 Four (4) 12/24 x 3/4 phillips screws, four (4) #12 hex nuts and four (4) #12 flat washer are furnished with each shelf to mount it firmly to the relay rack.

5.02 Reversible and adjustable mounting ears allow for the shelf to be mounted in either 19" or 23" wide relay racks. The mounting ears also allow for the unit to be mounted in the flush, or 1.75 and 3.50 forward positions. Please see FIGURE 2.



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5.03 Wire-wrap terminals are provided as connecting points for the diode circuits. See FIGURE 2 for circuit terminals assignments.

6. TESTING AND TROUBLESHOOTING

6.01 The shelf should be thoroughly physically inspected before mounting, however, to ensure that there are no bent or broken connector pins or other visible defects. If trouble is encountered in an operational shelf, ensure that all modules are seated properly and operating correctly and that all wiring is correct. If a shelf is suspected of being defective, a new one should be substituted and the tested conducted again. If the substitute operates correctly, the original should be considered defective and returned to Accurate Electronics for repair or replacement as directed below. We strongly recommend that no internal (component-level) testing or repairs be attempted on Accurate Electronics' equipment. Unauthorized testing or repairs may void its warranty. Note: If equipment must be marked defective or bad, we recommend that it be done on a piece of tape or on a removable stick-on label.

TECHNICAL ASSISTANCE

6.02 Contact Accurate Electronics, Inc. 503.641.0118, FAX: 503.646.3903; Mail: PO Box 1654, Beaverton OR 97075-1654.

RETURN PROCEDURE (FOR REPAIR)

6.03 To return equipment for repair, first contact Accurate Electronics, Inc. Enclose an explanation of the malfunction, your company's name and address, the name of a person to contact for further information, and the purchase order number for the transaction. Accurate Electronics will inspect, repair, and retest the equipment so that it meets its original performance specifications and then ship the equipment back to you. If the equipment is in warranty, no invoice will be issued.

7. MAINTENANCE

7.01 No preventive maintenance is required. General care is recommended.

8. WARRANTY

8.01 All Accurate Electronics Inc. products carry a full FIVE (5) YEAR warranty on materials and workmanship. See WARRANTY in front of catalog.

8.02 If a situation arises that is not covered in the checklist, contact Accurate Customer Service as follows (telephone number are given below):

Contact Accurate Electronic Customer Service

8.03 If a product is diagnosed a defective, follow the replacement procedure in paragraph 8.04 when a critical service outage exists (e.g., when a system of a critical circuit is down and no spares are available). If the situation is not critical, follow the repair and return procedure in paragraph 8.05.

Replacement

8.04 To obtain a replacement, notify Accurate Electronics. Be sure to provide all relevant information, including the part number that indicates the issue of the product in question. Upon notification, we shall ship a replacement product to you. If the product in question is in warranty, the replacement will be shipped at no charge. Pack the defective product in the replacement product's carton, sign the packing slip included with the replacement, and enclose it with the defective product (this is your return authorization). Affix the preaddressed label provided with the replacement product to the carton being returned, and ship the module prepaid to Accurate Electronics.

Repair and Return

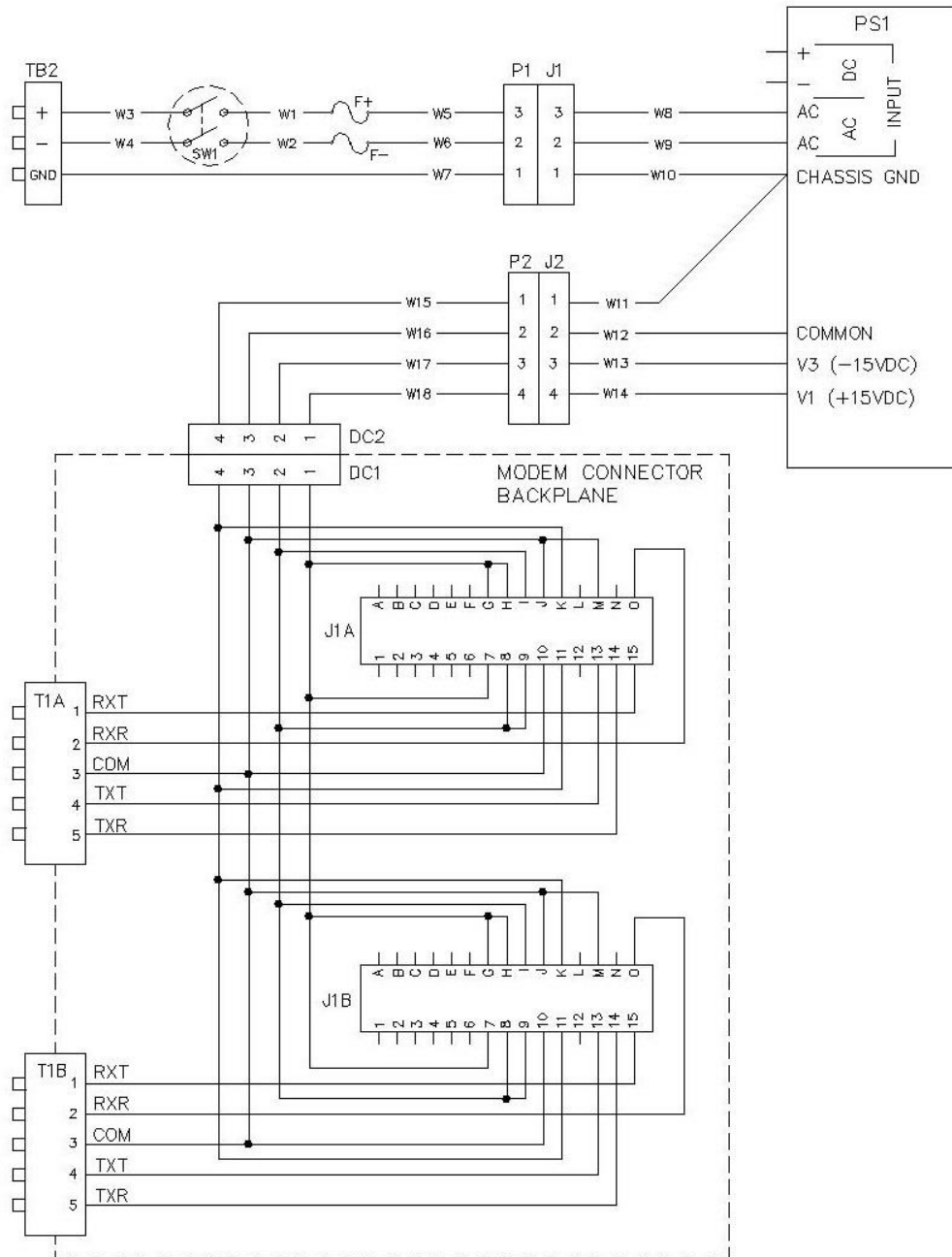
8.05 Return the defective product, shipment prepaid, to Accurate Electronics Inc. :

ACCURATE ELECTRONICS INC.
ATTN: REPAIR AND RETURN
8687 SW HALL BLVD. #100
BEAVERTON, OREGON 97008 USA

FIGURE 1. Circuit Description.

NOTES

- 1.) SEE ASS'Y DWG (AEI DWG # 39223465) FOR PARTS LIST.
- 2.) WIRING SHOWN FOR 117 VAC INPUT.
FOR 120 VDC INPUT CONNECT:
W8 TO PS1 +DC INPUT TERMINAL
W9 TO PS1 -DC INPUT TERMINAL





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FIGURE 2. Mechanical Outline.

