

Model A17

Universal Power Supply

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PRODUCT WARRANTY

Analytical Technology, Inc. (Manufacturer) warrants to the Customer that if any part(s) of the Manufacturer's equipment proves to be defective in materials or workmanship within the earlier of 18 months of the date of shipment or 12 months of the date of start-up, such defective parts will be repaired or replaced free of charge. Inspection and repairs to products thought to be defective within the warranty period will be completed at the Manufacturer's facilities in Collegeville, PA. Products on which warranty repairs are required shall be shipped freight prepaid to the Manufacturer. The product(s) will be returned freight prepaid and allowed if it is determined by the manufacturer that the part(s) failed due to defective materials or workmanship.

This warranty does not cover consumable items, batteries, or wear items subject to periodic replacement including lamps and fuses.

Gas sensors carry a 12 months from date of shipment warranty and are subject to inspection for evidence of misuse, abuse, alteration, improper storage, or extended exposure to excessive gas concentrations. Should inspection indicate that sensors have failed due to any of the above, the warranty shall not apply.

The Manufacturer assumes no liability for consequential damages of any kind, and the buyer by acceptance of this equipment will assume all liability for the consequences of its use or misuse by the Customer, his employees, or others. A defect within the meaning of this warranty is any part of any piece of a Manufacturer's product which shall, when such part is capable of being renewed, repaired, or replaced, operate to condemn such piece of equipment.

This warranty is in lieu of all other warranties (including without limiting the generality of the foregoing warranties of merchantability and fitness for a particular purpose), guarantees, obligations or liabilities expressed or implied by the Manufacturer or its representatives and by statute or rule of law.

This warranty is void if the Manufacturer's product(s) has been subject to misuse or abuse, or has not been operated or stored in accordance with instructions, or if the serial number has been removed.

Analytical Technology, Inc. makes no other warranty expressed or implied except as stated above.

A17 UNIVERSAL POWER SUPPLY

The power supply module used in the **GasSens** system (part #00-0055) is a self-adjusting supply that will accept the AC power provided in virtually every country in the world. Any AC (50-60 Hz.) or DC voltage from 85 volts to 270 volts can be connected to the power input terminals on TB4. There are no adjustments of any kind required.

The output of the power supply is a regulated 13.7 VDC. There are 3 sets of DC terminals at the top of the module for connection to receivers and external battery back-up unit. This voltage permits float charging of a an optional separate 12 volt lead acid battery for detector system back-up.

Power supply modules are rated for 1 ampere output, and will deliver higher current for periods. Each optional receiver module draws a maximum of 300 mA, and will normally draw about 125 mA. The optional external battery back-up unit can draw up to 750 mA for a few hours if the battery is deeply discharged, which will drop sharply as the battery approaches full charge. The audible horn draws less than 10 mA average current, and an optional strobe will draw approximately 400 mA when activated.

The power supply is internally fused at 2 Amps. The fuse is not user replaceable. (Note: Only Qualified Service Personnel will replace the fuse, using the same type and rating as indicated on the fuse.)

The power supply has a power-on indicator LED and provides a SPDT relay to indicate power failure. The relay coil is energized by power from the input power terminals and will de-energize if power is lost. This relay is convenient for input to telemetry systems to indicate loss of power at a remote site.

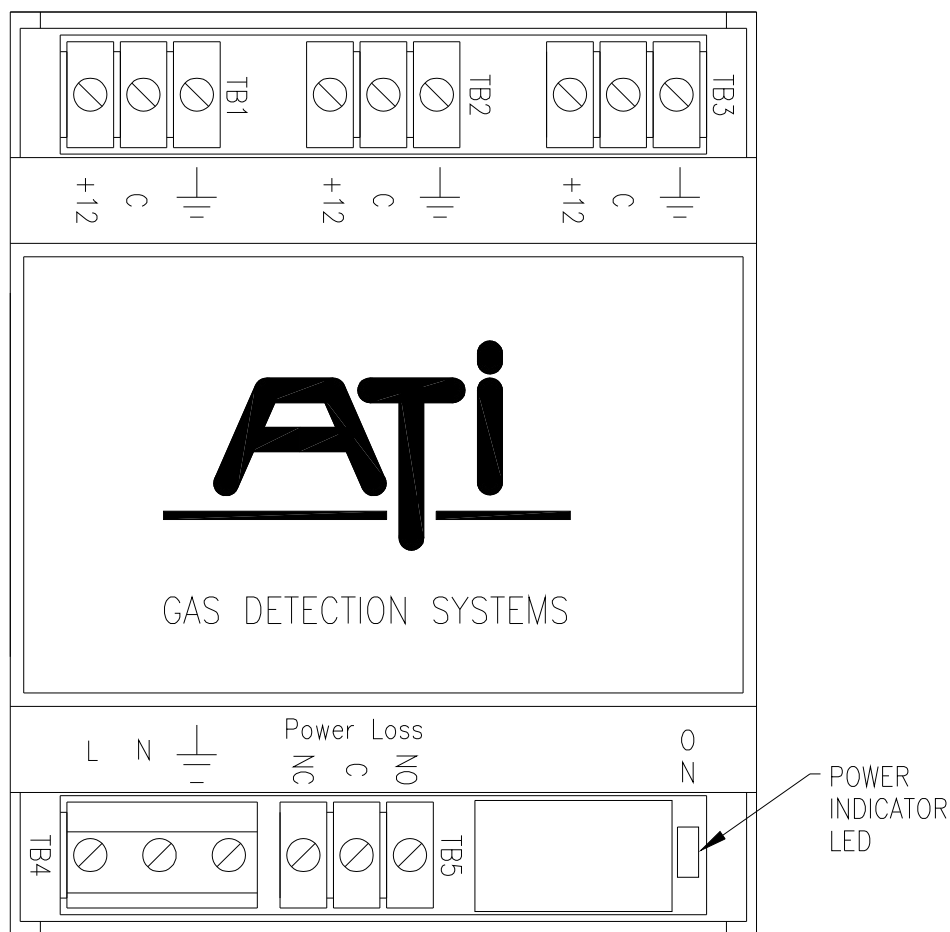
Mounting of power supply modules is done by clipping them to a standard 35 x 7.5 mm DIN rail. A spring loaded clip holds the module to the rail and is used for mounting and removal. From the front, the clip is seen as a black loop at the top rear of the module. To remove from a rail, place a small screwdriver into the opening in the black loop and pull outward until the module releases from the rail. Reverse the procedure to mount the module.

CAUTION

The power supply module is sealed, and the seal should not be broken. Never attempt to disassemble or service the power supply module. Service on this module should only be done only by a qualified service technician familiar with the circuit design and equipped with the proper service equipment. Severe electrical shock may result from touching internal components with input power applied.

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Figure 3-1 provides detailed information on the terminals provided on the power supply. All terminal blocks are plug-in type, and can be easily unplugged should removal of the module be necessary.



TB1 (12V Battery only)

- 1: +12 External Battery (+)
- 2: C External Battery (-)
- 3: Earth Ground

TB2

- 1: +12 Receiver Module (+)
- 2: C Receiver Module Common
- 3: Earth Ground

TB3

- 1: +12 Receiver Module (+)
- 2: C Receiver Module Common
- 3: Earth Ground

TB4

- 1: L AC power hot (85-255 VAC)
- 2: N AC power neutral
- 3: AC power ground (earth ground REQUIRED)

TB5

- 1: NC Power failure normally closed contact
- 2: C Power failure common
- 3: NO Power failure normally open contact

NOTE: AC power input must be properly earth grounded for safe operation. 220 VAC power without a neutral line may not be used with this power supply.

Figure 3-1: Power Supply Terminal Connections (ATI-030)

POWER SUPPLY PARTS LIST

<u>Part Number</u>	<u>Description</u>
00-0055	Complete power supply module
81-0064	Module enclosure (top and bottom)
34-0011	Front panel
38-0061	AC power terminal block plug, 3 position
38-0004	Power failure relay & DC terminal block plug, 3 position