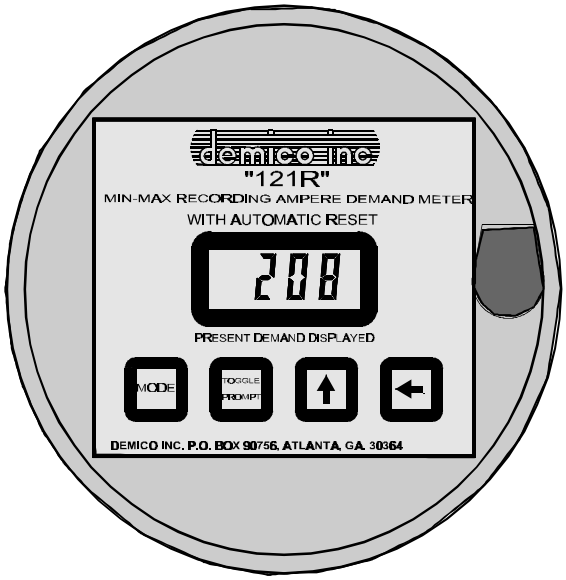
AD121R

AMPERE DEMAND METER



- **FRONT PANEL OPERATION**
- **MANUAL OR AUTOMATIC RESET**
- **EVENTS TIME-STAMPED TO 1 MIN**
- **STORES 13 MONTHS DATA**
- **STORES TIME OUTSIDE OF SETPOINTS**
- **CLOCK RUNS THROUGH OUTAGES**
- **POWER = 120 - 240 Vac OR 100 -300 Vdc**
- **200mA, 5A, and 10A INPUT AVAILABLE**
- **ACCURATE, STABLE, TRUE RMS**
- **FREE FAST INTERFACE PROGRAM**
- **REA LISTED**

The single phase AD121R is designed to emulate the "Lincoln" thermal Ampere Demand meter that has been used since about 1919. The digital logarithmic averaging produces the same thermal response as the original meter, but with vast improvements in accuracy, stability and features. It can be set up and operated from the front panel or with a computer. The REA listed AD121R-912 Recording Ampere Demand meter can automatically collect and store monthly Ampere Demand data to help maintain good customer service. Peak Demand can be recorded accurately with the internal real time clock's one minute resolution time-stamping. Instantaneous and average minimums and maximums are recorded. Minutes above a high setpoint, and below a low setpoint are counted and can be used to further identify problem areas in a distribution system. Setpoints are user selected. Monthly data is stored in the meter at the end of each month and retained for thirteen months before being overwritten. The previous month's data can be compared to the same month the year before as recorded in the meter. The meter can be reset manually from the front panel, or consistent monthly data will be recorded using the automatic reset feature. Monthly average minimum and maximum can be read from the front panel. A free, powerful MS-DOS**E** computer interface program allows easy setup and data retrieval. An Optional front panel Port with a waterproof cover allows easy access.

The meter is housed in a rugged high impact polycarbonate case that is ultraviolet light resistant. The state of the art electronics are temperature stable over a wide temperature range and computerized calibration gives high accuracy true rms readings. An optional heater extends operation to - 40º. The meter can be powered from AC or DC supplies. It can use 120 VAC, 240 VAC, 125 VDC or 250 VDC. Other power supplies are available. Current inputs can be ordered for 200 mA, 5A, and 10A CTs. The real time clock can correct itself for daylight savings time and is powered by a capacitor during power outages for up to 30 days. The minimum and maximum is stored in a nonvolatile memory that requires no power to retain

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Since 1978

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Front Panel Features

The front panel of the meter has a 4 digit 1/2" high liquid crystal display for high visibility in outdoor applications. Four sealed pushbuttons are used to manually control the display and reset the meter.

The setup parameters that can be changed from the front panel are:

1. The integration time constant
2. The meter address number
3. The date and time of day

A front panel security feature, when used, makes parameters tamper resistant.

The data available from the front panel is:

1. Ampere Demand (default reading)
2. Instantaneous Amperes
3. Minimum Ampere Demand
4. Min. Ampere Demand during period before last reset
5. Maximum Ampere Demand
6. Max. Ampere Demand during period before last reset

Computer Interface Features

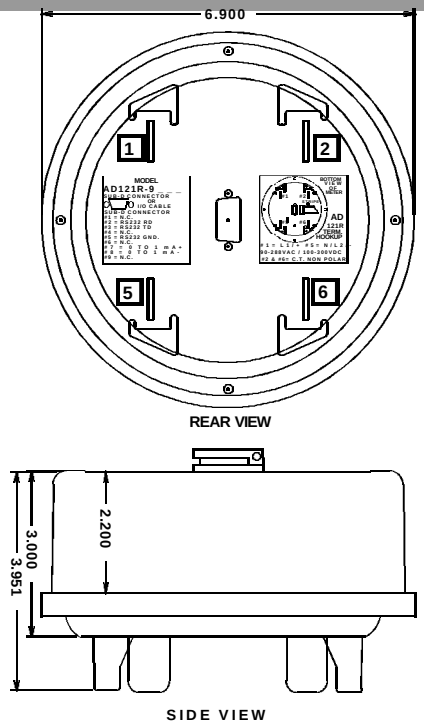
The computer setup and operation requires a standard null modem cable and the Demico MSDOS**E** interface program. An optional front panel communication port has a spring loaded, gasketed cover. A special cable, (C9-J) interfaces your notebook computer's RS232 serial port to the meter. The **free** software allows easy setup and retrieval of all the data available from the front panel plus:

1. 13 months of time-stamped Minimum and Maximum data
2. Minutes the Ampere Demand was above a user selected high setpoint
3. Minutes the Ampere Demand was below a user selected low setpoint
4. Choice of either Front Panel or Automatic Reset. The automatic reset feature, when used, will maintain an accurate, consistent record of Ampere Demand data.

The 13 months of data can be retrieved from the meter, saved to disk and imported into spreadsheets for reports, graphs and further evaluation.

Specifications

Power Supply	**90-290Vac &100-300Vdc**
Surge Withstand	**ANSI C37.90.1-1989**
Display	**4 Digit 1/2" LCD**
Temperature	**-30 TO 70° C**
Accuracy	**± 0.5 % Over Temp Range**
Clock Accuracy	**± 1 Minute Per Month**
Calibration	**Not Required**
Time Constant	**10 to 9999 Seconds**
Enclosure	**High Impact Plastic**
Communications	**RS232C**
Baud Rate	**1200,2400,9600,19200**
REA Listing	**ga-6**



ORDERING INFORMATION

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Power Supply
Options
Monitoring Range
H = LCD Heater if Needed
J = Front Panel Jack

Order Cable C9J When Using Front Panel Jack

Power Supply	Options	Input Range
1 =12V AC/DC	1 = NONE	1 = 0 - 5A
2 = 24V AC/DC	2 = SCADA	2 = 0 - 10A
3 = 48V AC/DC		3 = 0 - 200mA
9 = 120-290V AC/DC		