



D1 International, Inc.

**UP416ACF**

## DIGITAL AC LINE FREQUENCY METER

30.0 Hz - 80.0 Hz

110/220VAC LINE POWERED



### FEATURES:

The UP416ACF is a precision digital panel meter used for monitoring AC power line and portable generator frequencies. It is powered from a single phase 120/220VAC 50/60Hz power source. a compact DIN size case, snap-in panel mounting, and terminal blocks for electrical connections make this meter simple and economical to use.

### SPECIFICATIONS:

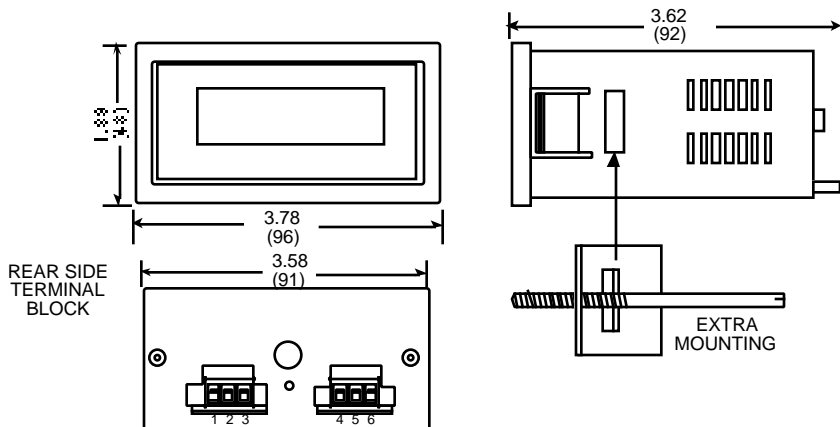
Measuring Range:	30.0Hz to 80.0Hz
Accuracy:*	0.5% $\pm$ 1 count
Input Impedance:	10K Ohms
Power Input:	1220VAC $\pm$ 10%, 60Hz or 220VAC $\pm$ 10%, 50Hz
Power Consumption:	<5 Watts
Conversion Rate:	Approx. 2.5 times/second
Temperature Coefficient:	110 ppm/ $^{\circ}$ C
Operating Humidity:	Up to 85%, noncondensing
Readout:	Three digit, 0.8" red LED
Input Connections:	Two 3 position terminal blocks
Weight:	10.6 oz. (300gm)
Panel Cutout:	3.8"W x 1.78"H (91.8mm x 45.2mm)

\* Accuracy specified at 25 $^{\circ}$ C  $\pm$ 3 $^{\circ}$ C

### WARNING:

This meter involves AC voltages that can be dangerous. A qualified electrician should be used for installation.

### OUTLINE DIMENSIONS:



Hardware supplied to mount meter on thicker panels.  
**DIMENSIONS IN INCHES (MM)**

NOTE: Basic information and Input Connections are printed on a Guide Label attached to meter.

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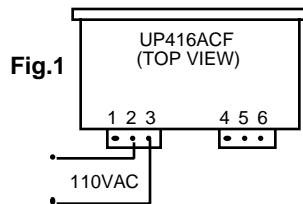


# UP416ACF

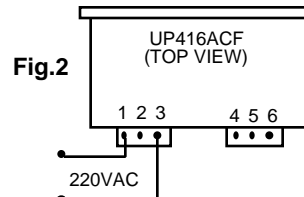
## UP416ACF CONNECTIONS

### TURN OFF ALL POWER BEFORE PROCEEDING

#### CONNECTING METER TO POWER LINE



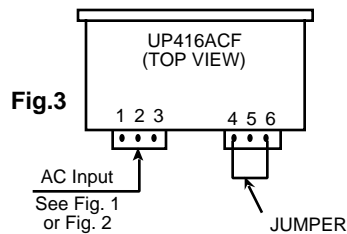
110VAC Input power hook-up



220VAC Input power hook-up

### TURN OFF ALL POWER BEFORE PROCEEDING

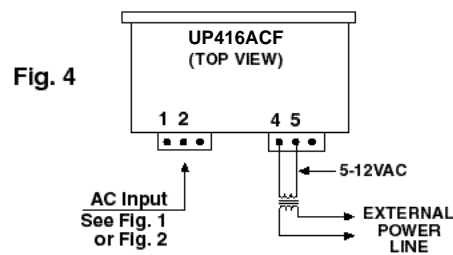
#### MONITORING INPUT LINE FREQUENCY



#### MONITORING INPUT LINE FREQUENCY

To Monitor line frequency of the AC voltage powering the UP416ACF (110 or 220VAC) connect an insulated jumper wire between terminals 4 and 5. Turn on UP416ACF AC power line voltage. Meter will read power line frequency (30.0 - 80.0Hz)

#### MONITORING EXTERNAL AC LINE FREQUENCY



#### MONITORING EXTERNAL AC LINE FREQUENCY

Use a step-down transformer between the external AC voltage source and the input of the UP416ACF.

Connect step-down transformer output (5-12VAC)\* to terminals 4 and 5. Turn on UP416ACF power line voltage. Meter will read external power line frequency (30.0-80.0Hz).

#### NOTE:

•AC voltage input to UP416ACF terminals 4 & 5 **must not** exceed 12VAC. Voltages in excess of 12VAC will cause permanent meter damage that **is not** covered by meter warranty.