

WATTHOUR DEMAND METERS

KW DEMAND/KWH ENERGY MONITOR

MODEL 408 / 408WL

METERMATE MODEL 408 KW DEMAND/KWH ENERGY MONITOR

a microprocessor based single channel monitor with the following capabilities:

- Continuous monitoring of KW rate
- Alarm setpoint/ relay output
- Stores max KW demand
- Stores KWH usage
- RS232 Serial interface
- Easy keypad programming
- LED displays - 5 digit data, 4 digit identifier



Model 408



Model 408WL

OPTION 408WL

8" X 10" X 6" ENCLOSURE WITH
WL40R or WL45R
WATTHOUR TRANSDUCER
MOUNTED.

The Model 408 accepts either 2 or 3 wire pulse inputs from KWH meters or KWH transducers and converts this data to KW rate for monitoring and alarm purposes. A relay output provides the monitor with the ability to either alarm remotely or directly control a load. The alarm restore is unique in that it is programmable in KW. The Model 408 has an RS232C serial interface that can be connected directly to a PC or through modems to a remote PC for programming or retrieval of data and reset of Max demands & KWH's usage.

METERMATE® WIN408

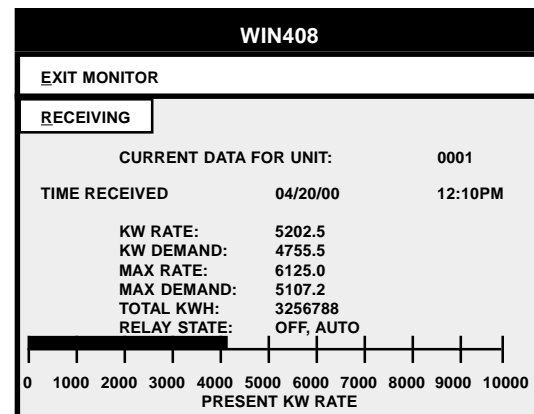
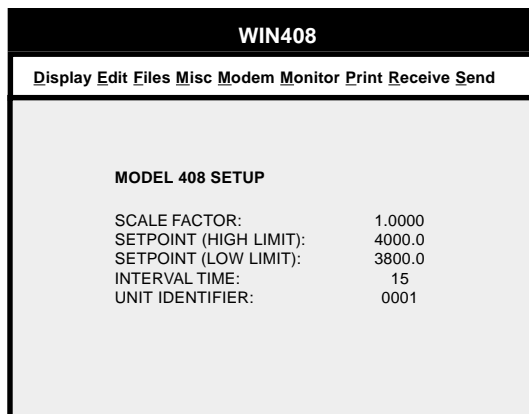
WIN408 is the **software program** which allows the IBM™ or compatible PC to communicate with the METERMATE® 408 monitor. The PC may be connected directly to the unit, or indirectly from a remote location by the use of modems.

- Allows programming and interrogation of the Metermate® 408.
- Maintains backup files containing user programmed database.
- Simple up-load and down-load database procedures.
- Telephone number for calling Metermate® 408 unit.
- Full screen editing for clear and simple operator interface.
- Continuous Monitor to display real time data and bargraph.



KWH Meter Model 408 PC

Typical Model 408 Application



Typical PC Screens

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WATTHOUR DEMAND METERS

SPECIFICATIONS

MODEL 408

INPUT POWER:

120 Vac, (+ 10%, -15%), 60 Hz., 10VA

ENCLOSURE:

Type JIC, DustTight
Material Steel, Painted beige
Height 10 Inches
Width 8 Inches
Depth 4 Inches
Weight 7 Lbs.

ENVIRONMENTAL:

Operating temperature ... 20 to 55° C.
Relative humidity 15 to 95%, non condensing

INPUTS:

One Pulse Input (Either 2 Wire or K-Y of 3 Wire)
One Timing Reference Input
Inputs derived from isolated relay contacts
Max input rate 10 pulses/sec.
Min. pulse width 50 mS
Input drive sourced at unit... 12Vdc nominal
Short Circuit current 10mA
Terminal Block Interface

OUTPUTS:

Alarm Relay Output
Rated 120Vac, 5A Plug in
Relay energizes at alarm setpoint,
Deenergizes at restore programmed value
Terminal Block Interface

COMMUNICATION PORT:

Modular RJ11 6 Pin female connector
RS232C Compatible
Asynchronous serial communication
Baud Rate 1200 Baud

SCALE FACTORS

Scale Factor Range 0.0001 To 9999KWH/Pulse

NON VOLATILE MEMORY

No Batteries Required

DISPLAY

9 Digit LED Display
5 Digits Numeric Data
4 Digits Alpha-Numeric Identifier

INTERNAL SWITCHES:

Four position dip switch
Position 1: Selects RUN/PROGRAM Mode
Position 2: Selects 2-wire/3-wire metering
Positions 3 & 4: .. No Function
Reset pushbutton switch
Program Mode:
Clears maximum demand
Clears maximum rate
Clears accumulated KWH's

FRONT PANEL PUSHBUTTON SWITCHES

Three pushbutton switches are used to select parameters to be displayed and to program the unit

FRONT PANEL

PROGRAMMABLE PARAMETERS

Scale Factor (.0001 to 9999 KWH/Pulse)
Interval Length (1 to 60 minutes, fixed interval)
Alarm Setpoint (0.0001 to 99,999 KW)
Alarm Restore (0.0001 to 99,999 KW)

FRONT PANEL LED DISPLAY

(5 Digit-Data) (4 Digit-Identifier)
KW Rate
KW Demand Last Interval
Max KW Rate (One Minute Average)
Max KW Demand Since Reset
Accumulated KWH Since Reset

COMMUNICATIONS

RJ11 6 Pin Connector
RS232C Compatible

RESET BUTTON

Clears Max KW Demand and KWH Usage

◆ PROGRAM MODE

(SW5-1 ON)

SCAN KEY:

Mode 1: Cycles through displays:
Scale Factor (SCAL)
Alarm Setpoint (ALM^)
Alarm Reset (ALM_)
Interval Time (INTV)
Mode 2: Increments blinking digit
Mode 3: Has no effect

MODE KEY: Cycles through modes:

Mode 1: No blinking digit or decimal point
Mode 2: Blinking digit
Mode 3: Blinking decimal point

NEXT KEY:

Mode 1: No operation
Mode 2: Selects next digit
Mode 3: Moves blinking decimal to next digit

◆ RUN MODE

(SW5-1 OFF)

SCAN KEY:

Cycles through displays:
Current rate (kW)
Demand last interval (DMD)
Max rate since reset (MXkW)
Max demand since reset (MXDM)
kWh total since reset (kWh<)
(top 5 digits)
kWh total since reset (kWh>)
(bottom 5 digits)

MODE KEY:

No operation during run mode

NEXT KEY:

No operation during run mode

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