

PM 1600

POWER MANAGER



Features

- Widely used for power monitoring and control in factory and building
- Manage up to 16 units of electricity transducers
- Communication interface, CANBus Ethernet or RS-485
- Communication protocol DeviceNet or ModBus
- Integrate with factory and building control system
- Remote data monitoring and control via intranet
- Electricity demand control
- Multi-tariff management with TOU (Time-of-Use rate)
- Built-in web server and FTP server for remote monitoring, control & data download
- Automatic sending report and alarm status by e-mail
- Front USB Host port used with flash drive, mouse or keyboard





Overview and Function

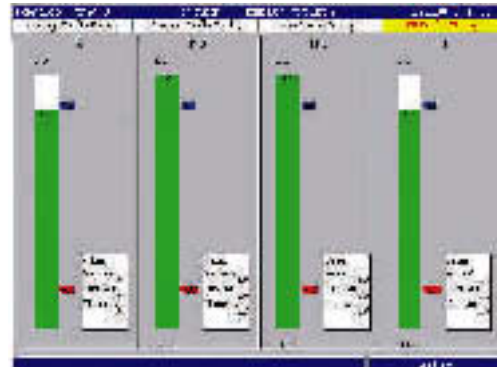
The Power Manager is used to integrate the power system in factory or building via the electricity transducers. The user can use it to remotely monitor and control the demand for electricity consumption in efficient and cost effective way. It also can notify the user by sending report and alarm status via e-mail.

Transducer Group Digital Display



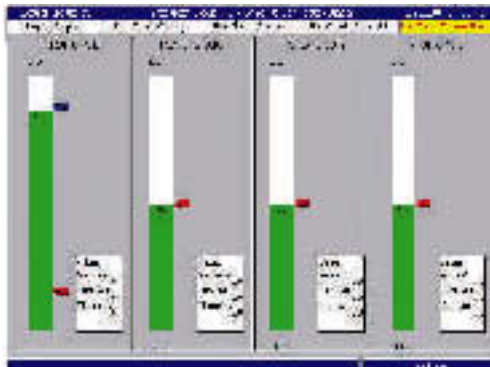
- Display the group of transducer data for analysis.
- Single key for easy viewing different transducer groups
- Auto unit conversion for easy reading

Transducer Bar Chart Display



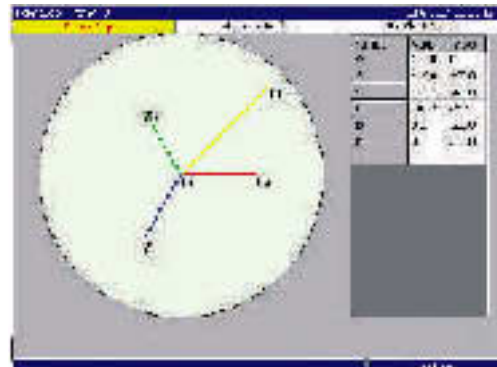
- Display important electricity data and variety in digits and Bars.
- Dynamic scale of Bars for precise indication

Transducer Group Bar Chart Display



- Simultaneous Digital and Bar graph display
- Dynamic scale of Bars for precise indication

Transducer Phasor Display



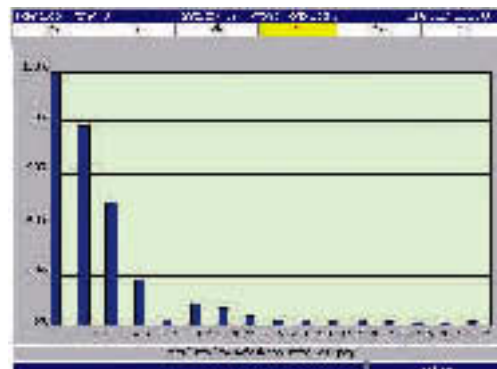
- Phase graph dynamically display the variety of voltage and current of each phase.
- Values on chart indicates accurate electricity consumption.

Transducer Digital Display



- Main page displays important electricity data, and sub page displays details.
- Single key for easy viewing different transducer data
- Cover electricity data of each phase.

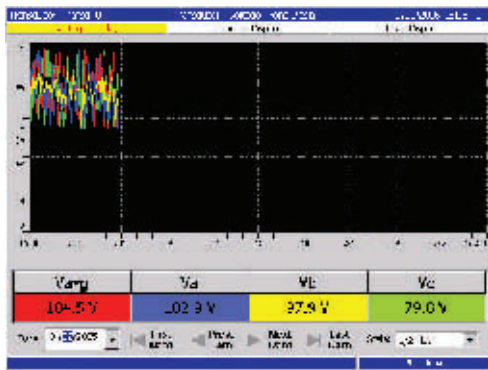
Transducer Harmonic Display



- 32 levels of Harmonic display
- Display the whole voltage and current values of each phase.

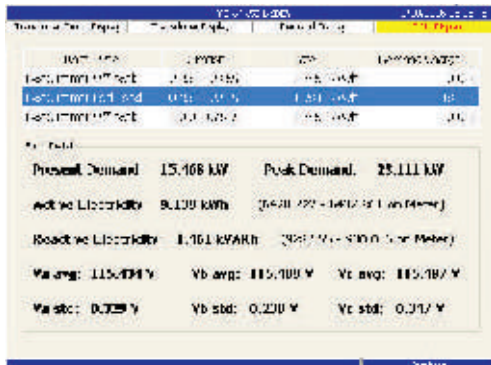
Wiring Diagrams

Transducer Trend Display



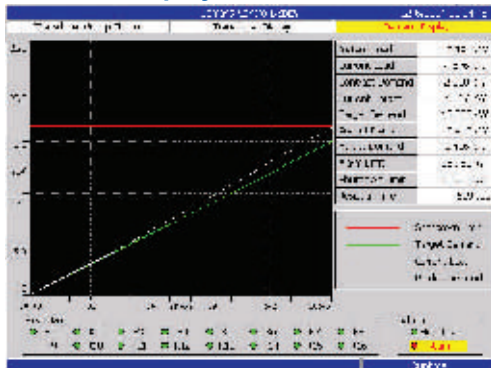
- Display the electricity data of each phase in different colors.
- Clear digital indication

TOU Display



- Instantly display electricity consumption and charge of each Time-of-Use.
- Supply the average and the deviation of voltage for analysis.

Demand Display



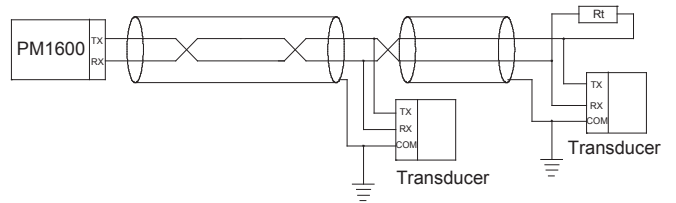
- Important control parameters in different colors
- Well covering of parameters of demand control and measurement data
- Dynamic adjustment for vertical scale for better graph display

Alarm List Display

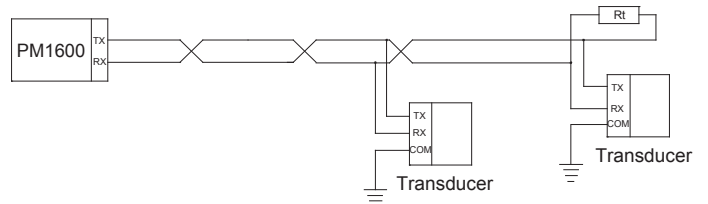


- Display the report and alarm status
- The report and alarm status automatically been sent to the user by e-mail

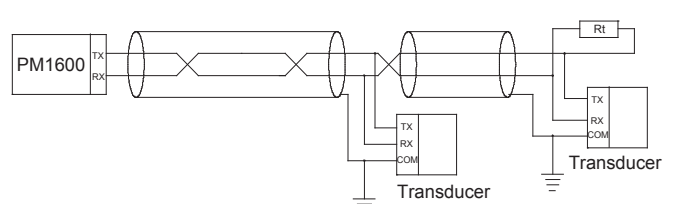
RS-485 (Shielded):



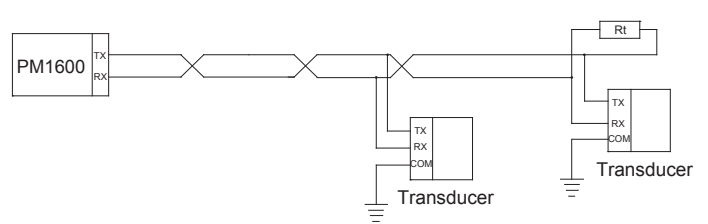
RS-485 (Non-Shielded):



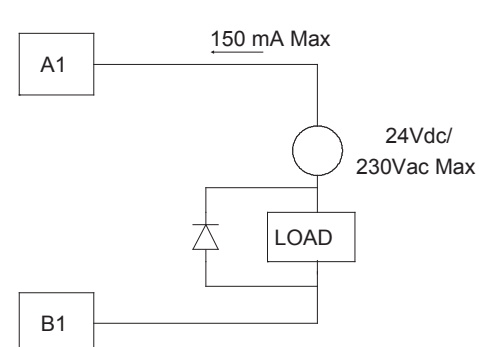
CAN Bus (Shielded):



CAN Bus (Non-Shielded)



Digital Output:



Specifications

Power

Input: 85~240VAC, 47~63Hz
Output: 12VDC, 5VDC, 3.3VDC, Power < 20 W

Display

6.5" TFT LCD, 640X480 pixel resolution, 24 bits colors

Memory

64 MB RAM, 32 MB Flash, 16 MB DOC, RTC
(Battery back-upped)

Interface

USB: Host Port x1
Keypad: Function Key x7, Arrow Key x4
Digital Output x16
LEDx2

COMM Module

Interface: CANBus, RS-485
Protocol: ☐ a. CANBus: DeviceNet
☐ ☐ b. RS-485: ModBus

Standard Ethernet Communication

Protocol: ModBus TCP/IP, 10/100Mbps Base T
Ports: AUI (Attachment Unit Interface) and
RJ-45 Auto-detect capability

Environmental & Physical

Operation Temperature: 5°C to 50°C
Storage Temperature: -25°C to 60°C
Humidity: 20 to 80%RH (non-condensing)
Dimensions: 192mm(W) x 192mm(H) x 154mm(D)
for panel mount

Ordering Code

PM1600 - ☐ ☐ ☐ ☐ ☐

Power

- 1: 90-250 VAC 47-63Hz
2: 11-18VDC
3: 18-36 VDC

Digital Output

- 0: None
1: 8 Channels
2: 16Channels

Communication

- 0: Ethernet + CANBus
1: Ethernet + CANBus + RS485

Data Storage

- 1: 16MB
2: 32MB
3: Other options

Software Functions

- 0: Basic Function
1: Report, Alarm Email
2: Remote Monitoring From PC

Note: Standard Model PM1600-10010