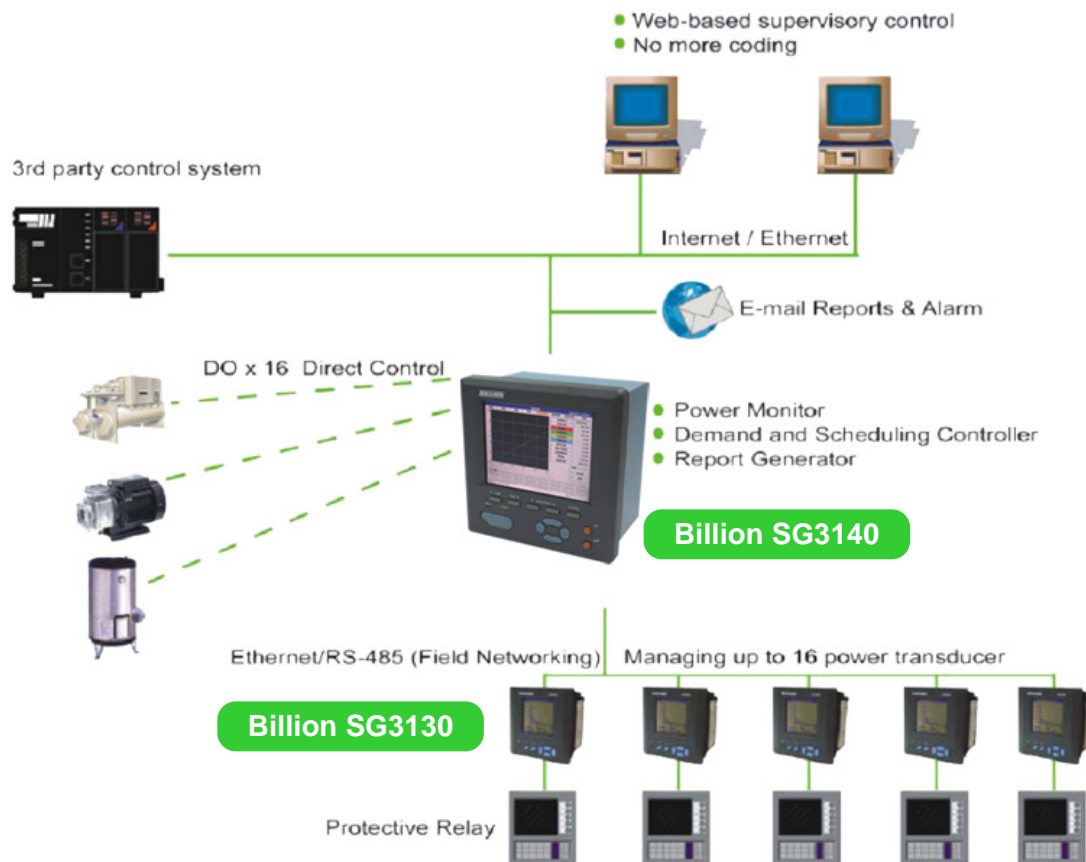


**Billion SG3140****Smart Power Master****Web-based Mini-SCADA for Power Monitoring, Demand Control and Report Generation**

- Widely used for power monitoring and control in factory and building
- Manage up to 16 units of power transducer
- Flexible field communication interfaces (Ethernet and RS485) for different power transducer connection
- Rich electricity parameters and power quality display for main and sub-feeder transducers
- Easy integrated with 3rd party supervisory control systems
- Remote power monitoring and control via intranet/internet
- Electricity demand control with 16 channel load shedding
- Multi-tariff management with TOU (Time-of-Use rate)
- Built in web server remote monitoring and control & data download
- Automatic report and alarm status sending by E-mail
- Front USB host port for data backup and program download

## Application Architecture



## Specifications

### Power

- 85~240VAC, 47~63Hz, 60VA, Maximum 23W

### Display

- 6.4" TFTLCD, 640 x 480 pixel resolution, 24 bits colors

### Memory

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

### Interface

- USB: Host Port x 1
- Keypad: Function Key x 7 and Arrow Key x4
- Digital Output x 16
- LED x 2

### COMM Module

- Interface: RS-485 x 1
- Protocol: ModBus over serial line

### Standard Ethernet Communication

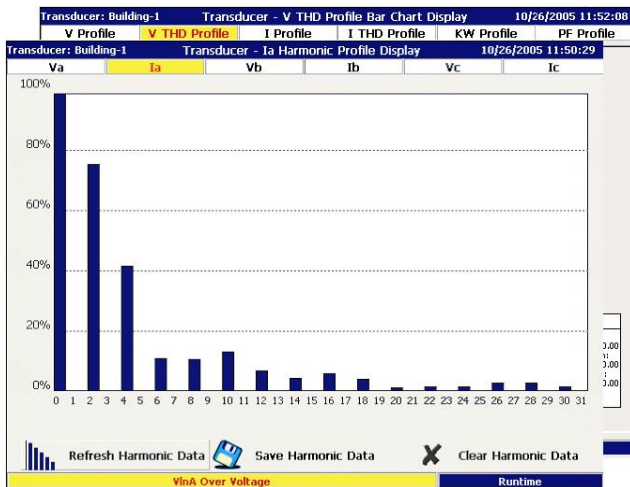
- Ports: Ethernet = 10/100Mbps Base T x 2
- Protocol: ModBus over TCP/IP, http, SMTP

### Environmental & Physical

- Operation Temperature: 5°C to 50°C
- Storage Temperature: -25°C to 60°C
- Humidity: 20 to 80% RH (non-condensing)
- Dimensions: 196 (W) x 196 (H) x 135mm (D) for panel mount

## Software Functions

### ► Power Quality Monitoring



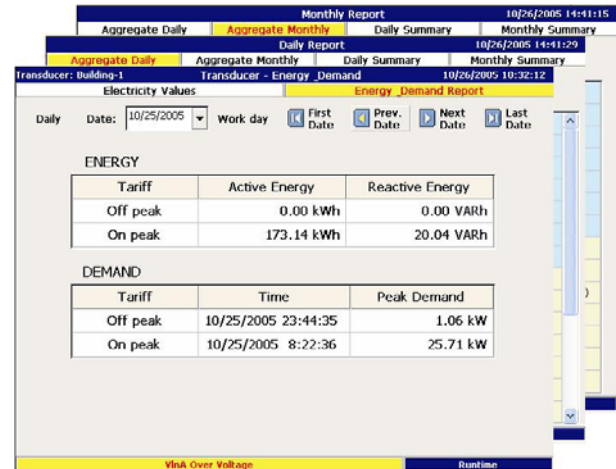
- Displays the voltage THD and the current THD in digits and bars
- 32 levels of harmonic display (depends on Transducer)

### ► Historical and Real Time Trend

Alarm/Event List						
Group Display	Trans. Display	Demand Ctrl	TOU Display	Alarm/Event	Report	
<input type="checkbox"/>	VlnA Over Voltage	Alarm	Building-1	Normal	10/26/2005 11:58:05	10/26/2005 12:15:00
<input type="checkbox"/>	Voltage Unbalance	Alarm	Building-1	Normal	10/26/2005 11:58:00	10/26/2005 11:58:05
<input type="checkbox"/>	VlnA Over Voltage	Alarm	Building-1	Normal	10/26/2005 11:53:39	10/26/2005 11:58:00
<input type="checkbox"/>	DO Off	Event	Relay #0	Cleared	10/26/2005 11:19:31	
<input type="checkbox"/>	Demand Overload	Alarm	Building-1	Normal	10/26/2005 11:18:31	10/26/2005 11:19:31
<input type="checkbox"/>	DO On	Event	Relay #0	Cleared	10/26/2005 11:18:31	
<input type="checkbox"/>	VlnA Over Voltage	Alarm	Building-1	Normal	10/26/2005 11:18:13	10/26/2005 11:53:22
<input type="checkbox"/>	VlnA Over Voltage	Alarm	Building-1	Normal	10/26/2005 11:09:14	10/26/2005 11:18:03
<input type="checkbox"/>	VlnA Over Voltage	Alarm	Building-1	Normal	10/26/2005 11:07:42	10/26/2005 11:08:00
<input type="checkbox"/>	Power On	Event	System	Cleared	10/26/2005 11:04:44	
<input type="checkbox"/>	Power Off	Event	System	Cleared	10/26/2005 11:04:33	
<input type="checkbox"/>	Power On	Event	System	Cleared	10/26/2005 11:02:30	
<input type="checkbox"/>	Power Off	Event	System	Cleared	10/26/2005 11:02:20	
<input type="checkbox"/>	VlnA Over Voltage	Alarm	Building-1	Normal	10/26/2005 10:58:16	10/26/2005 10:59:31
<input type="checkbox"/>	Voltage Unbalance	Alarm	Building-1	Normal	10/26/2005 10:58:09	10/26/2005 10:58:16

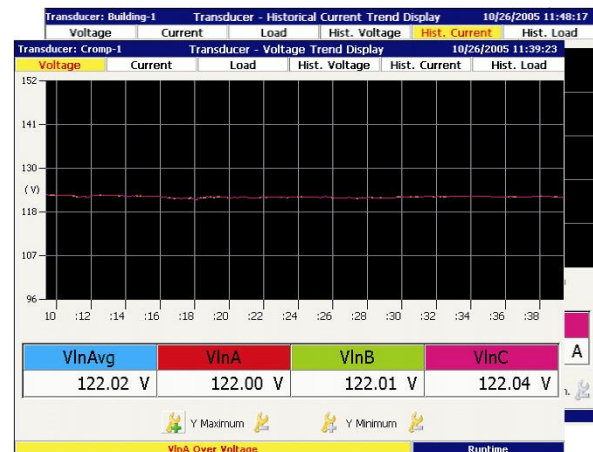
- Displays the voltage, the current and the load in different color for each phase
- Specify the time period to show historical data

### ► Report Generation System



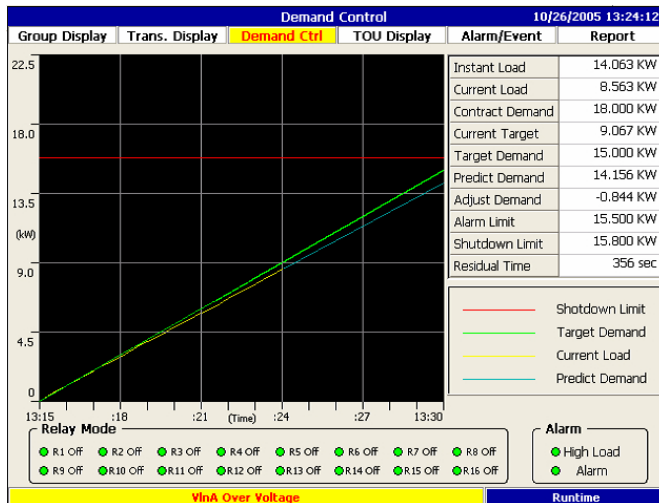
- Daily and monthly aggregate reports for the main loop
- Daily and monthly detail reports for each sub-loop

### ► Alarm and Event Report



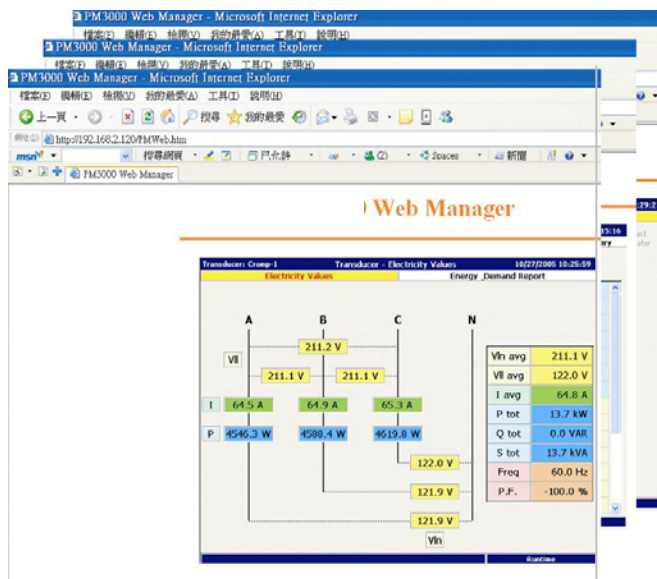
- Displays alarms and events in different colors
- The status of alarms will be updated dynamically.
- Sends instantaneous alarm message by e-mail.

## ► Demand Control



- Well covering of parameters of demand control and measures
- Show important control parameters in different colors.

## ► Remote Monitoring



- Use web browsers to view real time electricity data
- Sends daily and monthly report automatically via e-mail

\* Notes:  
Specifications in this datasheet are subject to change without prior notice.

V.03012010