

# SSR-6000

## Demand Recorder & Pulse Totalizer

*Advanced Load Profiling Recorder for Substation, Revenue Metering and Load Survey Applications*

**Smart Grid Certified**



The SSR-6000 Fulfills a Wide Range of Interval Data Recording and Pulse Totalizing Requirements for Metering Applications

- ▶ Records, Profiles and Totalizes Pulse Data from Electricity, Gas and/or Water Meters
- ▶ Provides 8-Channels of Load Profile Data for Demand Recording Applications
- ▶ Available Digital Cellular, Ethernet, Telephone Modem or RS232 Communications
- ▶ Totalizes up to 12 Channels of Pulse Data with Individually Scalable Pulse Inputs
- ▶ Multi-Level Password Protection Supports Advanced Metering and Read-Only Applications



*Manufactured and Tested in  
the United States of America*

## General Description

The SSR-6000 is an 8-channel solid-state interval data recorder used for collecting, profiling, totalizing and communicating pulse data received from electricity, gas and/or water meters. The SSR-6000 can be utilized in a wide range of pulse recording applications and provides a secure data back-up point for critical revenue metering installations.

The SSR-6000 features a switch selectable 120-240-277 volts AC power supply and cover-mounted optical port. Remote data retrieval and programming can be accomplished through its digital cellular modem, Ethernet, telephone modem and RS232 serial port options. An available pulse I/O option set provides additional status and control functionality with the capability of providing a totalized KYZ pulse output.

The SSR-6000 accepts four sets of Form-C KYZ (3-wire) pulse inputs or eight sets of Form-A KY (2-wire) inputs with programmable 1 to 60 minute fixed or rolling block demand interval periods. The large capacity 128K memory provides ample data storage capacity for advanced load profiling applications.

## Product Applications

### Interval Data Recorder

The SSR-6000 generates load profile data for non-IDR equipped meter sites and serves as a secondary data storage device to back-up data at critical revenue metering sites to eliminate estimated billing in the event of a catastrophic revenue meter failure. When equipped with a remote communications option, the SSR-6000 transmits load profile data and can alarm the data collection system of a meter failure.

### End User Monitoring and Energy Management

The SSR-6000 collects and profiles energy pulse data received from the utility's billing meter and offers a secure point of contact for end users and third-party energy management companies to obtain consumption data without directly accessing the revenue meter.

### Pulse Accumulating Totalizer

For aggregated demand and billing applications at sites where multiple revenue meters are installed, the SSR-6000 has the capability to totalize up to 12 pulse input streams with scaleable pulse weighting and optional totalized KYZ pulse outputs.

## Specifications

Recorder Pulse Input Channels	1 to 8 Programmable, up to 4 KYZ Form-C (three wire) or 8 KY Form-A (two wire) contact inputs
Note - All Pulse Inputs are Common Grounded	
Pulses per Interval	65,535 with status codes disabled 8191 with status codes enabled
Maximum Pulse Rate	30 transitions per second
Minimum Pulse Width	30 milliseconds
Contact De-Bounce	16mS to 4 Sec. (default @ 50mS)
Memory Type	128K Li-RAM
Data Capacity	4 channels, 149 days @ 15 minutes 8 channels, 74.5 days @ 15 minutes
Backup Carryover Rating	10 years cumulative, 20 year life
Clock	Line Frequency or Crystal
Case Type	NEMA 3R, Fiberglass Polyester
Dimensions	8.5"H x 6.5"W x 4.25D
Weight	6 lbs

### Operating Range

Temperature Range	-40°C to +85°C
Humidity Range	0 to 95% non-condensing
Power Supply	120, 240, 277 VAC Switch Selectable
Power Supply Range	±15% of Selected Voltage
Frequency	60Hz, 50Hz, Auto-sensing
Burden	< 5VA typical

### Maximums

Overload	120% of Input
Surge Withstand (SWC)	5000 Volts (exceeds IEEE #472)
Dielectric Isolation	2500 VRMS Input to all I/O

### Auxiliary Pulse Input/Output Options

Pulse/Status Inputs	4 Form-A contact closure inputs
Excitation Voltage	5 VDC @ 0.5mA,
Resistance	1000 ohms maximum
Control/Alert Outputs	4 Form-A isolated contact outputs
Operating Voltage	250 Volts maximum
Operating Current	100mA maximum
Rating	10 billion operations

## SSR-6000 Ordering Information

EMS60LPR - A1 - J2 - MP

### Display Options

A1 - No Display  
D1 - LCD Display

### Communications (select one)

J2 - CDMA Digital Cellular Modem  
T2 - Telephone Modem, 2400 baud  
T3 - Telephone Modem, 56K baud  
G - Ethernet 10/100 Base-T  
R - RS232 Serial Interface

### Additional Options

MP - Auxiliary Pulse Inputs/Outputs  
(required for totalizing applications)