

# THREE PHASE BIDIRECTIONAL POWER/ENERGY METERING IC WITH INSTANTANEOUS PULSE OUTPUT

## FEATURES

- Performs bidirectional one, two or three phase power and energy measurement
- Meets the IEC 521/1036 Specification requirements for Class 1 AC Watt hour meters
- Operates over a wide temperature range
- Uses current transformers for current sensing
- Excellent long term stability
- Easily adaptable to different signal levels
- Precision voltage reference on-chip
- Two pulse output formats available
- Protected against ESD

## DESCRIPTION

The SAMES SA9105F Three Phase bidirectional Power/Energy metering integrated circuit generates pulse rate outputs for positive and negative energy directions, the frequency of which is proportional to the power consumption. The SA9105F performs the calculation for active power.

The method of calculation takes the power factor into account.

Energy consumption is determined by the power measurement being integrated over time.

This innovative universal three phase power/energy metering integrated circuit is ideally suited for applications such as residential and industrial energy metering and control.

The SA9105F integrated circuit is available in 40 pin dual-in-line plastic (DIP-40), as well as in 44 pin plastic leaded chip carrier (PLCC-44) package types.

## PIN CONNECTIONS

