FUNCTIONAL SUMMARY

	IN	OUT
#	1	1
TYPE	USB Zigbee® Radio Module	2 Wire
FORM	---	A

MPG-3ES

MPG-3ES WIRELESS PULSE GENERATOR

DESCRIPTION

The MPG-3ES Wireless Meter Pulse Generator is part of SSI's third generation Zigbee Pulse Generator family. It integrates AMI smart meters with legacy KYZ pulse metering. Using Zigbee® radio technology, the MPG-3ES receives usage data from the meter's HAN network, interprets power usage, and converts it into KY pulses. With the MPG-3ES, pulses are synthesized without having an actual KYZ output in the meter. By using the MPG-3ES, utilities and energy management contractors, value-added resellers and consultants can quickly and easily provide pulses to customer equipment.

The low-cost "bare bones" MPG-3ES features integral Zigbee radio module and one KY (Form A, 2-Wire) pulse output. The MPG-3ES has a low-voltage AC or DC power supply input for use with other control products having a low voltage source already available. No line voltage source is required.

As the MPG-3ES receives periodic data from utility's meter, the data is read and interpreted to obtain the current demand information. Accumulated energy is computed, and pulses are outputted according to a selected pulse value.

All system settings are accomplished through a USB programming port using the SSI Universal Programmer software. Programmable settings are available for pulse value, meter multiplier, output mode, pulse timing and several other system settings.

An output pulse value is selectable from 1 to 99999 watt-hours per pulse, while a meter multiplier of 1 to 99999 may be programmed. The output mode is selectable as either Form A (momentary) or Form C (toggle). The momentary mode has six pulse width time settings: 25mS, 50mS, 100mS, 200mS or 500mS and 1000mS. The toggle mode toggles on and off in a 50/50 duty cycle format. A red LED indicates the pulse output status. A 30mS fixed minimum-off time delay prevents pulses from occurring too rapidly. Bright red, yellow and green LEDs monitor the system communications status and provide an easy and immediate visual system check without test equipment.

The Zigbee module must be paired or "provisioned" with the AMI meter with a HAN network radio, a process that is performed by the participating utility or on the utility's website. Once paired with the meter, the MPG-3ES will begin receiving information from the meter and generating pulses.

The MPG-3ES is compatible with both Self-contained or Instrument-rated electric meters. In addition, unidirectional and bi-directional energy flow applications can be accommodated with the MPG-3ES by selecting Normal mode (kWh delivered only) or Signed mode (kWh delivered and received) in the configuration.

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MPG-3ES WIRELESS PULSE GENERATOR

SPECIFICATIONS

ELECTRICAL

Power Input:	10-60VDC, 12-48VAC
Input:	Zigbee HAN Network with AMI meter
RF:	Zigbee Module
Output:	One Form A (2-Wire) Solid State dry-contact output rated at 100mA at 120V, 800mW maximum, fused at .1A
Maximum Pulse Output Rate:	≈15 Pulses per second (Form C) ≈8 pulses per second (Form A)
Minimum Time between Output Pulses:	30ms
Form A Pulse Width:	25, 50, 100, 200, 500, 1000 mS
Output Pulse Values:	1-99999 Wh/pulse

MECHANICAL

Mounting:	Any position; Four Mounting tabs provided
Size:	4" wide, 4" high, 2" deep
Weight:	1 pound

TEMPERATURE

Temperature Range:	-38° C to +70° C, -36.4° F to +158° F
Humidity:	0 to 98% non-condensing