SPECIALTY DEVICES

WPG-1 WIRELESS PULSE GENERATOR

WPG-1

FUNCTIONAL SUMMARY

	IN	OUT
#	1	2
TYPE	Wifi interface with Meter	2 Wire or 3 Wire
FORM	---	A or C

DESCRIPTION

The WPG-1 wireless meter pulse generator integrates ITRON's Gen 5 Riva advanced meter with legacy KYZ pulse metering. Using Wifi radio technology, the WPG-1 receives usage data from the meter's Wifi interface, interprets power usage, and converts it into KYZ pulses. With the WPG-1, pulses are synthesized without having an actual KYZ output at the meter. By doing this, the utility can implement the new advanced AMI meters and still provide pulses to customers that may need them.

The WPG-1 incorporates a Wifi module and two KYZ pulse outputs. As the WPG-1 receives periodic data from utility's meter, the data is read and interpreted to obtain the current demand and energy information. Accumulated energy is computed and pulses are outputted according to a selected pulse type and value.

All system settings are accomplished through a USB programming port that provides for pulse type, pulse value, meter multiplier, output mode, and pulse timing. The output is selectable as either Form A (2-Wire) or Form C (3-Wire) and operates in either the momentary or toggle mode, respectively. The momentary mode has six pulse width time settings: 25mS, 50mS, 100mS, 200mS or 500mS and 1000mS. The toggle mode toggles back and forth to the opposite state upon each new pulse being generated which emulates the classic KYZ pulse output. There are four LED's, one red and one green for each output, which show pulse output status.

The output pulse value is selectable from 1 to 99999 watt-hours per pulse. A meter multiplier of 1 to 99999 may be programmed into the WPG-1 using the SSI Universal Programmer software. 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 Wifi module must first be paired with the meter, a process that is performed by the participating utility. Once paired with the meter, the module will begin receiving information from the meter and generating pulses.

The WPG-1 is compatible with Self-Contained or Instrument-rated electric meters that are equipped with a Wifi interface. The WPG-1's USB programming port is used to enter the specific site's meter multiplier from 1 to 99999. Each output of the WPG-1 can be configured to generate kWh, kVAh or kVARh pulses in either delivered (positive or forward) or received (negative or reverse) quantities.

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SPECIFICATIONS

ELECTRICAL

Power Input:	120, 208-277 VAC. Burden: 10 VA
Input:	Wifi From ITRON Gen 5 Riva
Output:	Two Form A (2-Wire) or Form C (3-wire) Solid State dry-contact outputs rated at 100mA at 120V, 800mW maximum, fused at .1A
Maximum Pulse Output Rate:	≈15 Pulses per second (Form C) ≈10 pulses per second (Form A) *50 mS or less
Minimum Time between Output Pulses:	30ms
Form A Pulse Width:	25, 50, 100, 200, 500, 1000 mS
Output Pulse Values:	1-99999 Wh/pulse, VAh/Pulse or VARh/Pulse

MECHANICAL

Mounting:	Any position
Size:	3.1'' wide, 7.2'' high, 1.5'' deep
Weight:	1 pound

TEMPERATURE

Temperature Range:	-38° C to +70° C, -38.4° F to +158° F
Humidity:	0 to 98% non-condensing

AVAILABLE OPTIONS

Input Voltages:	Contact factory
Enclosures:	NEMA 4X lockable raintight and dustproof enclosure available. 10.0" high, 8.0" wide, 4.0" deep, includes mounting plate

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