



## SPECIALTY DEVICES

# WPG-1E WIRELESS PULSE GENERATOR

## DESCRIPTION

The WPG-1E Wireless Meter Pulse Generator is identical to the WPG-1 but features an 9" x 8" x 3" NEMA 4X enclosure for direct outdoor mounting. Like the WPG-1, the WPG-1E uses periodically received data from a Wi-Fi enabled electric meter to interpret power usage and generate KYZ pulses.



WPG-1E features programmable pulse outputs enabling kWh, kVAh or kVARh pulses for both delivered and received quantities. Configuring the WPG-1E is fast and easy using the SSI Universal Programmer software, available on the Solid State Instruments website as a free download.

The WPG-1E incorporates a Wi-Fi radio module and two independent KYZ pulse outputs. As the WPG-1E receives periodic data from utility's meter, the data is read and interpreted to obtain the current demand and energy information. Accumulated energy quantities are 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 outputs are individually configurable as Form A (2-Wire) or Form C (3-Wire) and can operate 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, emulating the classic KYZ Pulse output. There are four LED's show the pulse output status.

The output pulse value is selectable from 1 to 99999 watt-hours, va-hours or var-hours per pulse. Each of the two outputs may be set independently for type and value of the 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 WPG-1E's Wi-Fi module must first be paired with the meter, a process generally performed by the participating utility supplying the meter. Once paired, the WPG-1E's Wi-Fi module will begin receiving information from the meter and generating pulses. The WPG-1E is compatible with Self-Contained or Instrument-rated electric meters. The WPG-1E's USB programming port is used to enter the specific site's meter multiplier from 1 to 99999.

# WPG-1E

#

TYPE

FORM

### FUNCTIONAL SUMMARY

| IN                        | OUT              |
|---------------------------|------------------|
| 1                         | 2                |
| Wifi interface with Meter | 2 Wire or 3 Wire |
| ---                       | A or C           |



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## SPECIFICATIONS

### ELECTRICAL

|                                     |                                                                                                                            |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Power Input:                        | 120-277 VAC Autoranging; Burden: 10 VA typical                                                                             |
| Input:                              | Wi-Fi From Wi-Fi Compatible Meter (ITRON Gen5 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)<br>≈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:     | 8" wide, 9" high, 3" deep |
| Weight:   | 2 pounds                  |

### 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 |
|-----------------|-----------------|

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