



642 E. 39<sup>th</sup> Place Yuma, Arizona 85365 1-928-344-9008

## Specifications PQSim™ Model 100

PQSim™ 100 is a purpose built function generator that produces the most common Power Quality anomalies at the push of a button.

### Typical values

#### Outputs

##### Nominal voltage:

100; 115; 120 VAC +/- 5 %, 50/60 Hz select nominal voltage and frequency when ordering

Nominal THD 6% to 8% Odd THD Even THD < 1%

Neutral to ground voltage 0.7 vac +/- 10%

Output connector standard 4mm safety banana jack.

##### Nominal Current:

Current output is 0 to 1.5vac for direct connection to PQmeter under test.

Current: (voltage) 0.3 vac +/- .1 vac nominal voltage at 240Vac

Current: (voltage) THD 7% to 10% ODD THD 7 to 8% Even 0.5%

Current Output connector; BNC adapter cables to TR or user specified

### Single phase output of PQ events;

#### Phase to Neutral

**Sag;** user selection for duration and magnitude

Magnitude; -10 %, -25 %, -50 %

Duration; 0.05 cycle (notch); 0.5 cycle; 1 cycle; 5 cycle; 11 cycle

**Swell;** user selection for duration

Magnitude fixed at +10% +/- 2%

Duration ; 0.05 cycle; 0.5 cycle; 1 cycle; 5 cycle; 11 cycle

#### Neutral to Ground

**Swell:** Magnitude fixed 2.5 vrms + transient ; includes Voltage sag phase to neutral

Duration 0.05 cycle; 0.5 cycle; 1 cycle; 5 cycle; 11 cycle

### Transients (See user guide for examples)

#### Phase to neutral

Unipolar fast transient

Decaying Ring wave

Bipolar fast transient

#### Neutral to Ground

Transient: Unipolar fast transient

### Odd Harmonics;

(note: The PQsim is not intended as a precision harmonic generation. Harmonic values will vary with nominal voltage selection and nominal frequency selection)

3<sup>rd</sup>, 6% to 8%; 5<sup>th</sup>, 1.5% ; 7<sup>th</sup>, 0.7% ; 9<sup>th</sup> 0.1%



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### **Auto Sequence function**

#### **Sample of each PQ event as test for quick test of PQmeter and user setup**

1 event per 30 seconds

Sag 10%

Sag 25%

Swell Phase to Neutral

Swell Neutral to Ground (simultaneous Voltage Sag Phase to neutral and Current surge)

Transients Phase to neutral

    Unipolar fast transient

    Decaying Ring wave

    Bipolar fast transient

Transient Neutral to Ground

    Fast Unipolar

ODD harmonics

Note: Specifications and characteristics to improve performance subject to change without notification.

Specifications based on June 1, 2016; Firmware 151008B

To Order contact

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PQSim™ 100

