



TESCO METERING

Reliable Results. Every Meter. Every Time.



925 Canal Street, Bristol, PA 19007  
• 215.228.0500  
• tescometering.com

## Field Equipment

Catalog No.

# 3PVS

## Three-Phase Voltage Synthesizer

### PRODUCT INTRODUCTION

In field metering environments, accurate testing becomes a constraint when sites are de-energized or when utility voltage is unavailable. Traditional meter testing methods depend on live system voltage, which limits the ability of technicians to validate meter performance, particularly in disconnected locations or during commissioning and maintenance scenarios. This creates a gap in achieving reliable, standards-compliant testing, especially for applications like intertie testing, where precise voltage conditions are critical to verify bidirectional energy flows and system accuracy.

The TESCO 3PVS Three-Phase Voltage Synthesizer addresses this by providing a portable, isolated, and programmable three-phase voltage source that replicates real-world electrical conditions anywhere in the field. It delivers consistent, low-distortion voltage (69V–480V) with  $\pm 0.02\%$  accuracy, enabling utilities to perform precise meter verification without reliance on grid power. This makes it particularly effective for intertie testing, where dependable voltage simulation is required to ensure accurate measurement and compliance. The unit's rugged, field-ready design and digitally controlled architecture ensure stable, repeatable performance across a wide range of metering applications.

### AT-A-GLANCE SUMMARY

- **Accuracy:** +/- 0.02% voltage setting accuracy from no load to 100VA per phase ensures dependable intertie verification.
- **Innovation:** Digitally controlled, fully isolated Class-D amplifier system with FPGA-driven DACs for precision voltage synthesis.



- **Responsiveness:** Designed directly from VOC (Voice of Customer) to solve an emerging need in intertie testing.

### SPECIFICATIONS

#### ELECTRICAL

- Voltage Output:** 69V – 480 volts AC, 100 VA per phase isolated output
- Voltage Setting Accuracy:** +/- 0.02%
- Voltage Harmonic Distortion:** Less than 1% THD
- Aux Power Input:** 85 – 305 VAC, NEMA 5-15 Power Cord
- Protection:** 10A Fused (5x20mm)
- Frequency:** 50/60 Hz
- Topologies:** 69/120 WYE, 120/208 WYE, 120/240 DELTA, 277/480 WYE, 240/480 DELTA



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### MECHANICAL & ENVIRONMENTAL

**Operating Temp:** -10F to 140F

**Case Size:** 18.2" x 13.9" x 6.7"

**Weight:** 24.8 lbs.

- Safety fuses, surge protection, PE chassis ground
- Fan-cooled, ruggedized for field environments

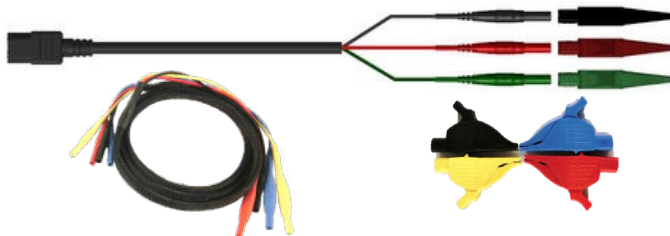
### INCLUDED ACCESSORIES

- **Included:** Power Cord



### OPTIONAL ACCESSORIES

Field Test Power Cord, Voltage Cable Set, Dolphin Clips



### ABOUT TESCO

Since 1904, TESCO has been the trusted partner of electric utilities worldwide, delivering durable, precise, and innovative metering solutions designed for the real-world demands of the field and the laboratory. Our products are engineered and manufactured in the USA and backed by world-class technical expertise and support.

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### ORDERING INFORMATION

- **Catalog Number:** 3PVS
- **Warranty:** 1 Year (Contact your TESCO Sales Representative to inquire about our Diamond Level Support for extended warranty coverage).

Contact TESCO Sales for configuration support and quoting.