



# Customer Experience Center Experience Excellence

# Experience Excellence

PolyPhaser and Transtector Systems engineering and technical service teams demonstrate Mission-Critical systems, products and capabilities that provide the **Right Surge Technology for the Job** through our Customer Experience Center.

Our West Coast center is scenically located within the foothills of the Rockies in Hayden, Idaho and is uniquely equipped to provide a live venue that facilitates custom design discussions, demonstrates technology expertise, and provides actual product displays as well as live test demonstrations for a variety of protection solutions ensuring the “right” technology match for each application.



Our engineering teams develop critical communications solutions that provide reliable performance from the tower to the core.

## Technical Expertise

Experience, industry knowledge, and specialized analysis and design skills – all of these set us apart from our competition. Our engineering teams are comprised of Electrical, Mechanical, RF, Software, Manufacturing and Test Engineers with over 300 years of combined experience.

## Comprehensive Capabilities

From surge protection, power quality, grounding and EMI/EMC assessment to data on RF filtering, our capabilities cover the full range of power management and protection applications.

## Emphasis on Technology

Our footprint is innovation. We continually strive to incorporate the latest technological advances, patent our innovation, incorporate test lab environments and prototyping technologies to address the ever-changing demands of today’s applications.

## Built to All Relevant Standards

Our engineers serve on several international standards boards, and industry standards are key to everything we design

- ANSI
- AREMA
- DOE
- NEMA
- CSA
- IEEE
- IEC
- MIL-STD
- Motorola R56
- NEC
- UL
- RoHS



## Test Laboratory

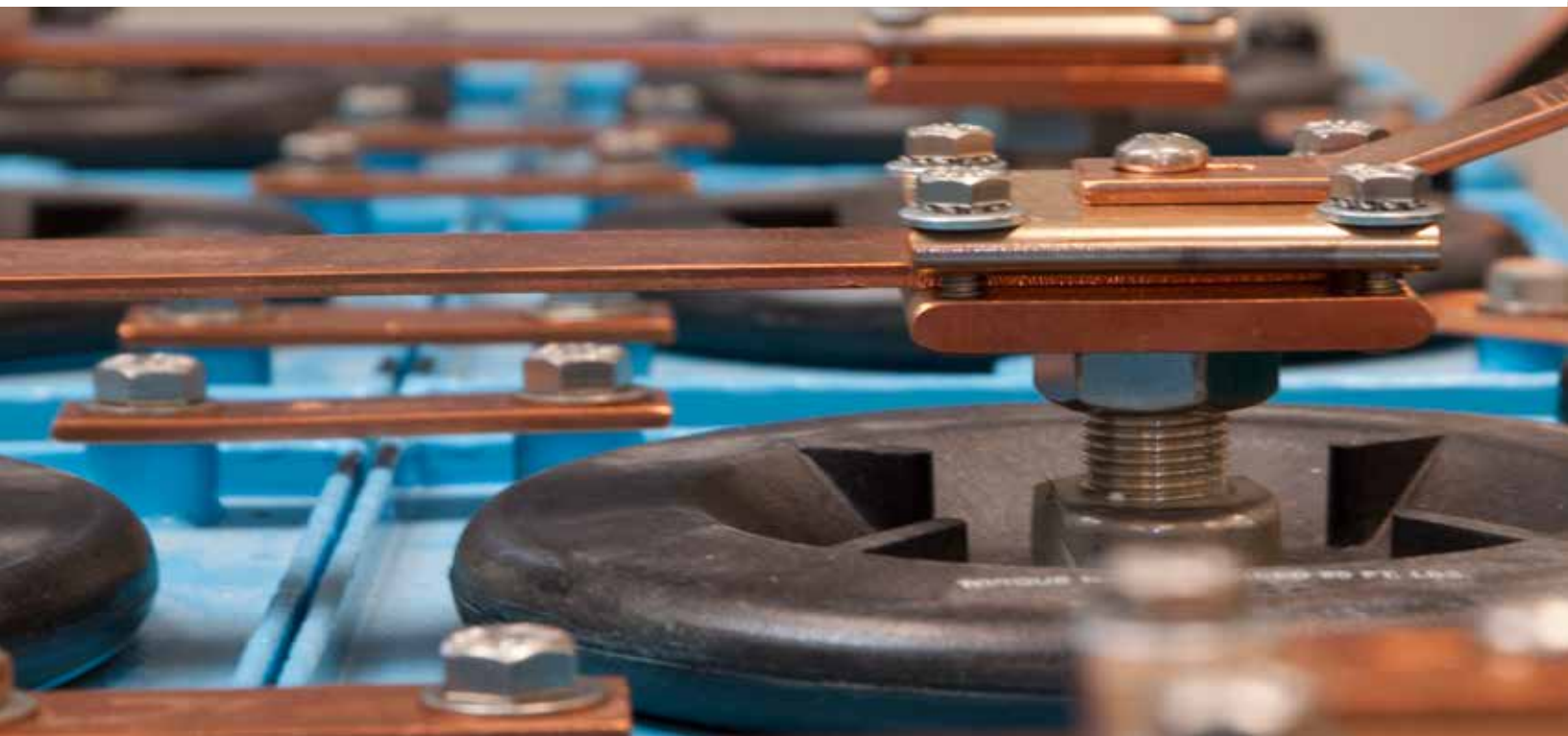
We offer engineering services for standard and custom transient and surge immunity testing requirements. Our dedicated test lab facility provides in-house verification using state of the art equipment to clearly certify and demonstrate product capabilities, technology advantages and transient damage.

## RF Testing

PIM or Passive Intermodulation testing is key to the engineering and design process for ultra-low PIM RF products at the 400 MHz, 800 MHz and 1900 MHz levels.

Network Analyzers are used by PolyPhaser to characterize two-port networks such as amplifiers and filters critical for the measurement of network parameters of electrical networks.

- 50 Ohm impedance, 9 kHz-8.5 GHz
- 50 Ohm Impedance, 300 kHz- 20 GHz
- 75 Ohm Impedance, 300 kHz – 3 GHz



## Surge Test Capabilities

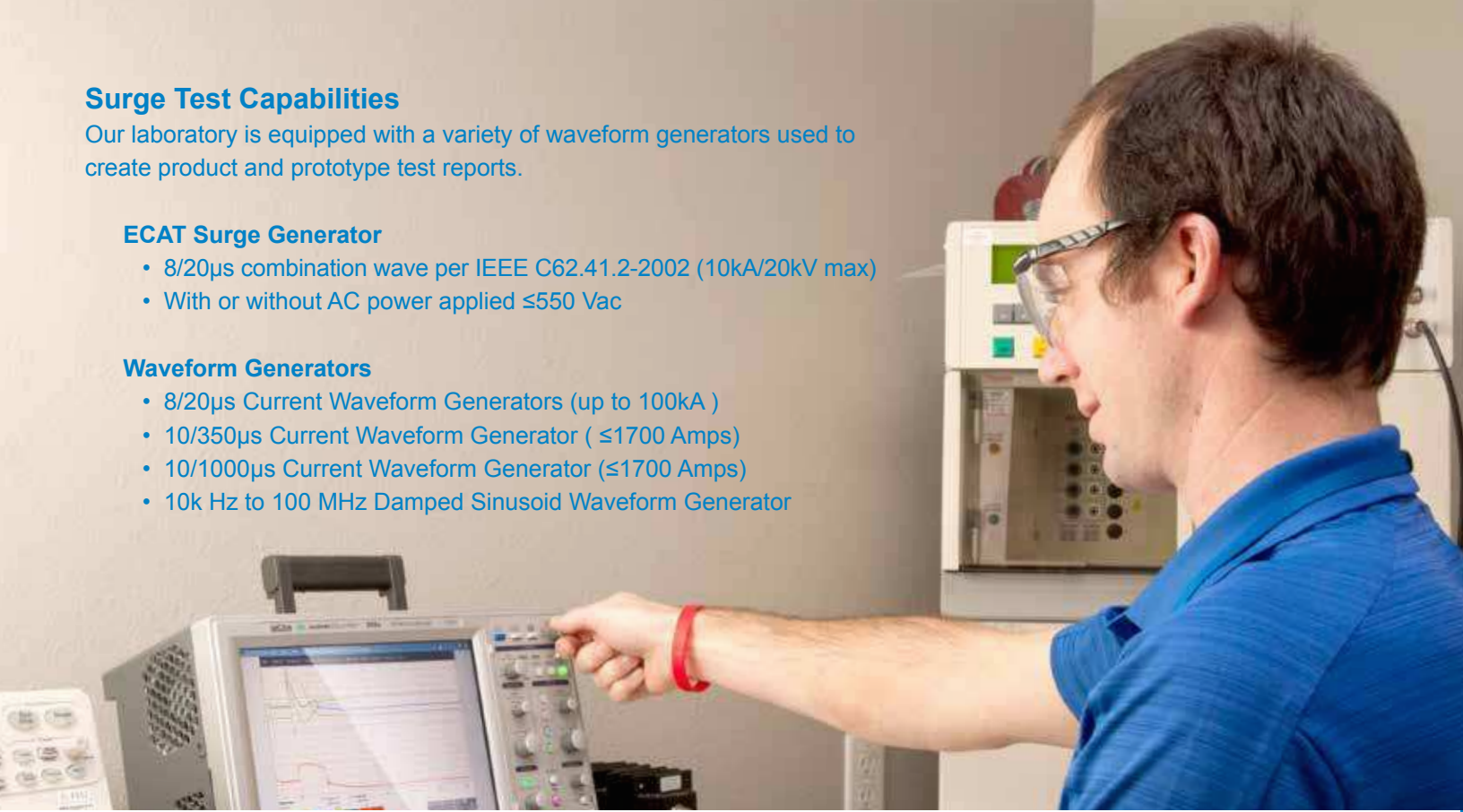
Our laboratory is equipped with a variety of waveform generators used to create product and prototype test reports.

### ECAT Surge Generator

- 8/20 $\mu$ s combination wave per IEEE C62.41.2-2002 (10kA/20kV max)
- With or without AC power applied  $\leq$ 550 Vac

### Waveform Generators

- 8/20 $\mu$ s Current Waveform Generators (up to 100kA )
- 10/350 $\mu$ s Current Waveform Generator (  $\leq$ 1700 Amps)
- 10/1000 $\mu$ s Current Waveform Generator ( $\leq$ 1700 Amps)
- 10k Hz to 100 MHz Damped Sinusoid Waveform Generator



## Data Network Testing

Accurate data network compliance testing is another key capability. We support digital data throughput and BERT testing up to 1 GB to standards including RFC 2544, Y.1564 and also twisted pair cable sweeps up to 10 GB.

## Environmental Chamber Testing

Testing the environmental influences is a key component for evaluation when ensuring reliability of your network. PolyPhaser and Transtector Systems climatic chamber is used to test the effects of specified environmental conditions at the material, component and device level.

- Without Humidity Control -70°C to +200°C
- With Humidity Control +20°C to +85°C
- 10% Relative Humidity to 95% Relative Humidity

“ Seeing first-hand the devastation of transients as well as the durability of our custom solution under repeated strikes in the test lab provided us with the assurance that we found the right partner in PolyPhaser and Transtector. ”



Interested in learning more? Contact us at 1.208.772.8515



As part of the collaboration process PolyPhaser and Transtector Systems welcome customers to our Customer Experience Center to discuss current network configurations, begin the design process for custom solutions or engage in next generation application discussions to ensure each network is ready to go live within specific timeline parameters and budgets.

Meetings are planned to maximize each customers time and often include:

- Systems Testing and Analysis
- Compliance Requirements
- Determining the Right Technology for the Application
- Design Review
- Budget Parameters

“ The face to face discussions with Transtector we found critical to our Small Cell solution development. Working with the engineering and design teams provided us with new insight into standards, technologies and installations that we had overlooked. ”

## Experience Custom Engineering and Design





[polyphaser.com](http://polyphaser.com) | [transector.com](http://transector.com) | 1.800.882.9110 | +1.208.772.8515