

## Customer & Market Due Diligence Of Electrical Test & Measurement Equipment Company: Establishing Competitive Positioning And Growth Opportunity

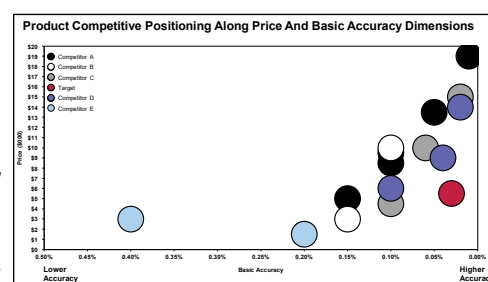
**The Challenge:** Our client, a lower-middle-market PE firm, was pursuing an entrepreneurial designer and manufacturer of highly technical electrical test & measurement equipment for electrical safety, precision voltage measurement, and power analysis. The target served several niche test & measurement applications across many industry sectors, including cable, electrical component, switchgears, medical equipment, laboratory, lighting, industrial equipment, power, and appliance companies. Our client was excited about the target's products and market presence and asked Gotham to conduct a 2-phased customer & market due diligence to establish: (1) the target's growth opportunity; and (2) its competitive positioning.

**2-Phased Niche Market Growth Opportunity and Competitive Positioning Assessment:** To minimize due diligence expenses, our client wanted to make an early go/no-go decision, so Gotham began with a rapid 1-week effort to establish market size of the target's 3 core product categories along with the target's competitive positioning in these markets. To this end, in 1 week Gotham:

- Conducted 30 anonymous interviews with customers, distributors, and competitors to understand market and competitive dynamics
- Conducted extensive secondary research to develop an assessment of: electrical safety regulation and technologies; applications and end-markets for the target's products; and competitive products and their specifications in each of the 3 product categories
- Built preliminary market size models to estimate the target's addressable market size in each of the 3 niche product categories
- Participated in on-site management sales & marketing discussions.

After our client decided to move forward, Gotham:

- Conducted 68 additional interviews (55 anonymous and 13 "warm introduction") with equipment users to pin down equipment usage and requirements, target's competitive positioning, users' purchasing process, threat of Chinese competitors, and market and product trends
- Profiled key competitors and analyzed their products to establish price/features/performance value proposition of target's products
- Built market size/growth models for each of the 3 niche product categories
- Determined sales & marketing effort/approaches required for the target to capture growth opportunity.



### Target's Competitive, Well-regarded Electric Safety Test Products Should Offer Growth Opportunity with a Well-crafted Sales & Marketing Effort

Gotham established that the niche market for electrical safety test equipment was stable due to the need to test electrical products at high voltage to ensure compliance with electrical safety standards during design, qualification testing, and production. Customer interviews revealed that after standards are met, programmability, accuracy, and automation are the next important technical capabilities and target's products offered competitive test capabilities, a user-friendly interface, and an industry-leading 0.5% accuracy. Affordable Chinese brands have not gained traction in the market due to their lack of history/credibility. We established that purchasing decisions are primarily made by engineers who tend to go back to their existing vendor but are open to alternatives that offer an attractive price-performance value proposition. We concluded that the target can grow its market share with a well-crafted sales & marketing strategy and identified key necessary components of that strategy.

### Precision Voltage Measurement Market is Small with Limited Growth Opportunity

Target's precision voltage measurement product offered superior accuracy performance and faced limited direct competition. However, Gotham established that: the market for this product was very small as only niche applications (e.g., calibration of high-voltage equipment, semiconductor/proton beam fabrication equipment, power supplies, high voltage industrial/commercial equipment/devices, power generation & transmission applications) required the accuracy level of target's product; and replacement cycle for this equipment was long. We determined that the target could easily sell to the narrow user base for this product through a direct marketing effort and gain some incremental growth.

### Target's High-accuracy, Attractively-priced Power Analyzer Product Affords Significant Growth Opportunities

Gotham established that the power analyzer market growth was being driven by: increasing power efficiency requirements across industries; growth of solar power and smart grids; and stricter industry standards on power distortions. Power analyzer products are highly versatile test & measurement equipment that measure magnitude and quality of voltage, current, and power for several inputs at the same time and offer functions such as power factors, harmonic distortion, and effective power. A new entrant in this market, the target offered a high-accuracy product but at a fraction of the price of comparable products. Customers value the target's product due to its wide range of functionality, a user-friendly interface, and multiple communication interface options. Non-customers indicated a higher likelihood of switching when presented with target's value proposition. We established that the target's product had an opportunity in this growing market due to its combination of features, accuracy and low price points. The target can not only gain market share but can also pursue additional applications that rely on general purpose test & measurement equipment (e.g., oscilloscopes).

**The Outcome:** Gotham's customer & market due diligence effort provided our client clarity on the market size and growth potential, target's competitive positioning, and required sales & marketing effort to capture growth. Our client was excited about the opportunity to professionalize and grow the business and closed the transaction successfully.