

TOP 10 TEST AND MEASUREMENT SOLUTION PROVIDERS - 2019

est engineers in industries ranging from aerospace and defense to consumer electronics are facing the challenge of testing increasingly complicated designs with shrinking timelines and budgets. To address these issues, engineers and scientists are incorporating new test and measurement technologies that are capable of meeting complex design requirements without raising costs. One issue facing test engineers is that test instrumentation is not updated as rapidly as the devices being tested. The functionality of these complex devices is being defined by the software embedded in them, such as most smartphones, which gives design engineers the ability to add features faster than ever before. This is increasingly challenging for many test engineers because most stand-alone instruments often lack the measurement capabilities of the most recent standards due to the fixed user interface and firmware that must be developed and embedded in them.

To continue realizing performance gains without increased clock rates, processor manufacturers are developing processors with multiple cores on a single chip. With multicore processors, test engineers can develop automated test applications capable of achieving the highest possible throughput through parallel processing. To enable parallel processing, engineers traditionally had to learn complex constructs such as threading libraries and mutexs to achieve parallel programming in a text-based programming language.

All of this leads to innovative thinking on how to test and measure even better by taking advantage of rapidly growing trends such as digitization, software, additive manufacturing, the Internet of Things (IoT), and new sensing applications that are driving advances in T&M.

We present to you "Top 10 Test and Measurement Solution Providers - 2019."



Intepro Systems Simplifies the Testing Of Complex Power Devices



telecommunications, rom automotive to military organizations, everyone needs power electronics applications and power conversion systems (energy sources) to operate effectively and efficiently. As power is the base to manage all the electronic devices, the process of power testing proves to be imperative to maintain a consistent power range and distribution. However, in today's power electronics industry, the diversification of applications, operations across a wide temperature range, lack of power testing engineers, and shortage of effective tools has significantly impacted the power quality. What organizations require is a reliable partner that can deliver superior power testing systems, which support Green Energy initiatives and provide clear insights into risks.

Set against this backdrop, Californiabased Intepro Systems emerges as the trouble-shooter with its wide range of test and measurement systems. Intepro Systems designs and manufactures ATE solutions, Programmable DC and AC Power Supplies, Regenerative Loads and Test Sequence Software for power test. From catalog products to integrated solutions, Intepro simplifies the testing of complex power devices to ensure your products meets or exceeds the performance and reliability needed for demanding power applications. "By utilizing our expertise in high energy and analog environments, we create affordable solutions for aerospace, renewable energy, military and OEM power industries," states Joe Engler, President of Intepro Systems.

Established in 1981, Intepro Systems specializes in power test system design and integration services. The company has gained immense popularity among its customer base



for delivering customized Automated Test systems that fit the unique requirement of every client. The test systems featured in Intepro Systems' portfolio is based on open architecture for hardware and software, which enable a flexible configuration and integration with off the shelf instrumentations. The firm also works majorly on energy conversion and has recently included wind and solar energies into its AC/DC, DC/AC, and DC/DC conversions.

Besides power testing, another focus area for Intepro Systems is energy recovery to support the zero-carbon footprint initiative launched by many enterprises. Intepro Systems integrates all of the energy recoveries techniques into its test equipment, allowing companies to test their power units and products. "Organizations are now able to take all the energy and recover it for effective use in the factory instead of wasting it," mentions Engler.

The firm has constantly demonstrated its energy recovery potential by partnering with many organizations. In one particular success story, Intepro Systems performed an energy recovery installation to test the efficiency of one of the power units of a client. The client wanted to have an AC input and AC output for the power distribution by loading the recycled output AC energy as the input. "It was a continuous loop that we kicked-off and recycled it back in. We were recovering 80 to 90 percent of energy in a single loop. So, why to waste all the energy in heat when we are here to recover it?" asks Engler.

In the last three decades and more, many such customer success stories have propelled Intepro Systems toward success and global reach. From the military and aerospace industry to electric vehicle (EV) and computer sector, the firm has established longlasting partnerships with numerous esteemed clients. The company dedicates all of its accomplishments to its passionate team of employees that come up with great ideas and innovations and also bring them to

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reality. "Our team interacts with the clients, listens to their requirements, and formulates the right power testing solution for them as per their unique needs," says Engler.

For the future, Intepro Systems envisions filling the impending gap in the marketplace that exists due to a lack of integration between test equipment and power units for energy conversion test. The firm is exploring opportunities to specifically design equipment that works in favor of integration.