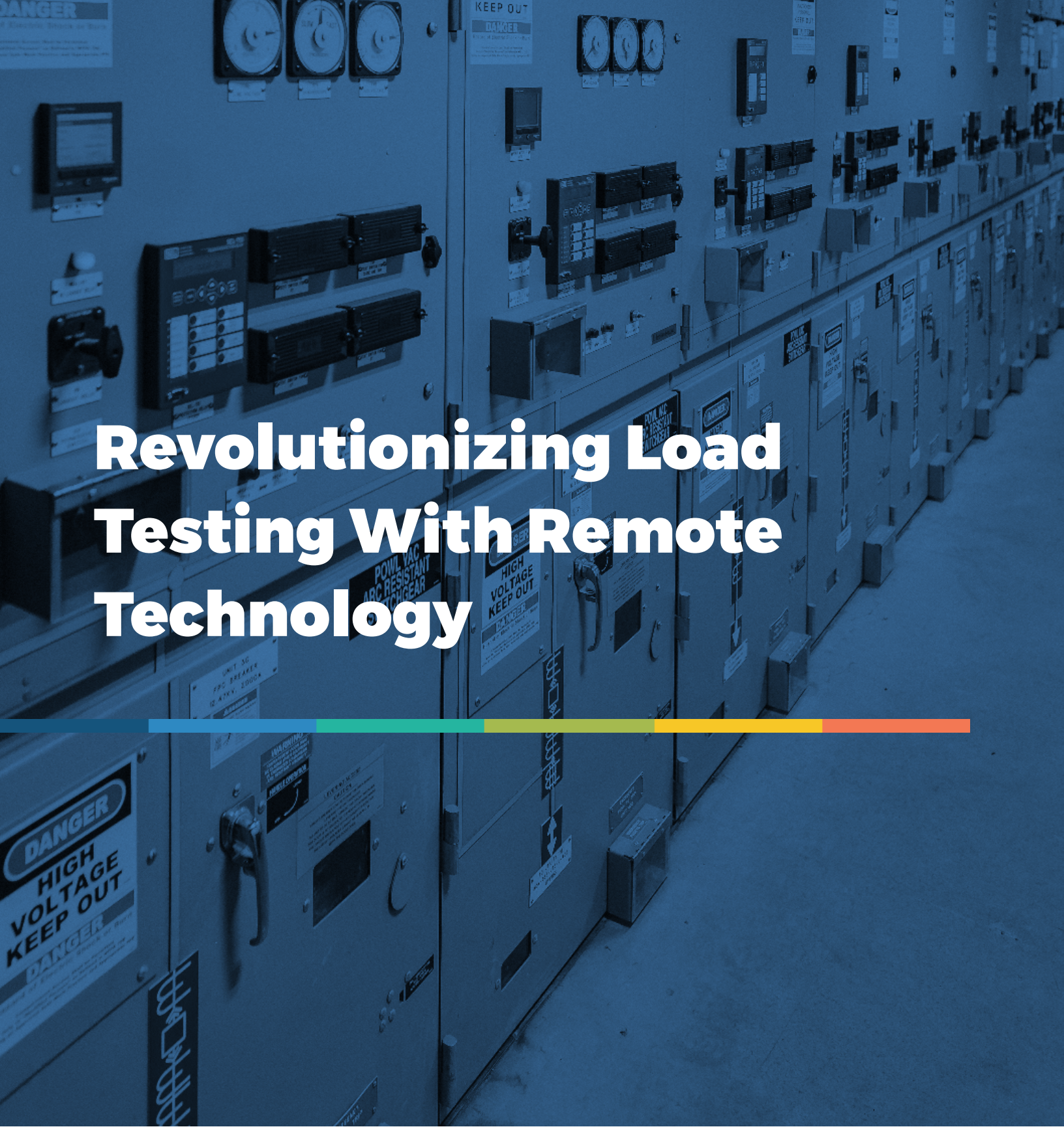


Revolutionizing Load Testing With Remote Technology

ComRent®
LOAD BANK SOLUTIONS

The Remote Technology Revolution

When remote load bank testing made its way to the marketplace, it changed the game. Testing became more streamlined and accurate, time and money was saved, and safety increased. This white paper explains how remote technology continues to revolutionize load testing.

What Is Remote Technology?

Today's advanced remote load bank testing technology puts a substantial amount of power into the hands of test operators.

Traditional load testing can be a labor intensive and time-consuming process. It is best practice that every critical power system be tested as an individual component and within the system as a whole. In an effort to optimize the load testing process, ComRent has taken the reins in advanced remote technology innovation. By working closely with cutting-edge software developers, they have introduced new technologies that provide the most accurate, user-friendly, and safe remote load banks.

Remote and traditional load banks have the same basic operations. All unit ratings, circuit calculations, and basic protocols for bringing each load bank online are the same. The differences come into play when focusing on efficiency, safety, and connectivity.

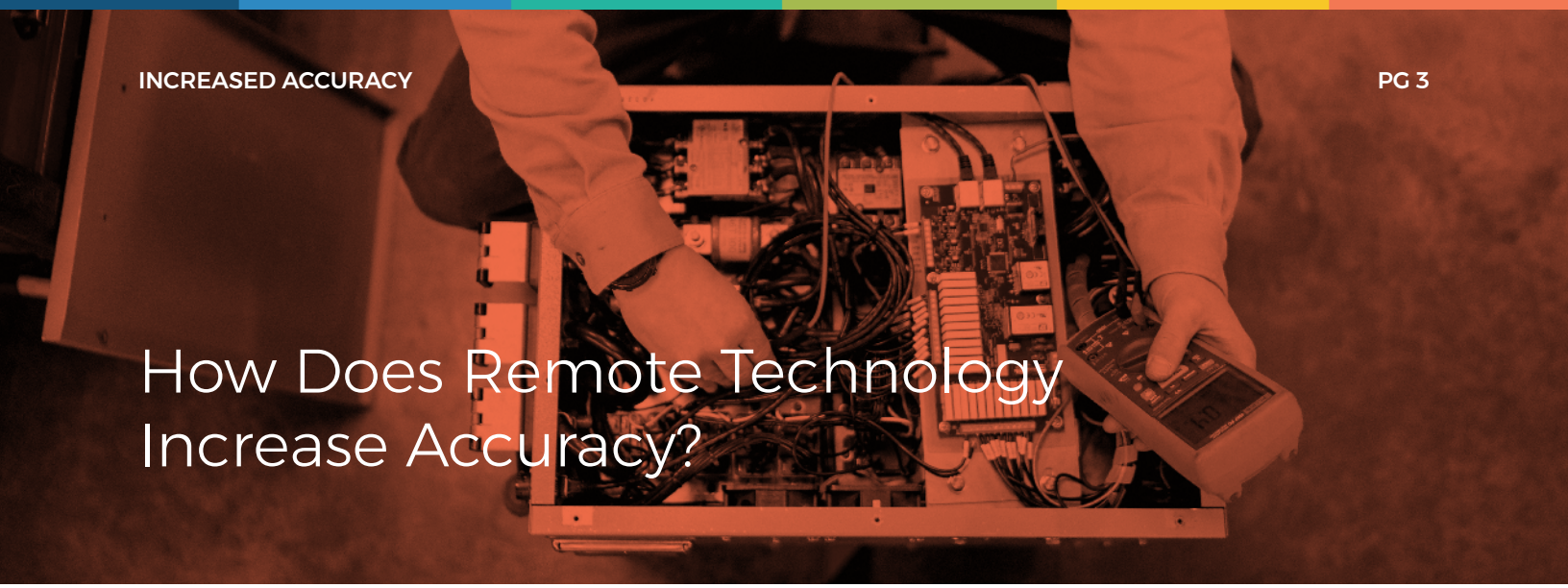
With a single remote load bank, a technician can control and monitor up to 250 load banks at the same time. The remote operates as a universally-integrated platform by connecting across all load bank functions, controls, and operations to remotely control them from a centralized platform. Technicians are able to activate fans, run pre-established scripts, control loads and review results, all at the touch of a button.

With an intuitive user interface, the customizable testing platform (which can be used from a touch-screen or computer platform) produces fast connectivity to achieve efficient load changes and reliable testing. Operators of all technical levels can effortlessly operate remotes with basic training.

Benefits of Remote Load Banks

Before remote load banks, testing complex critical power systems required dozens of technicians, an array of equipment, and long hours. Remote technology has eliminated the manual process of load bank testing, resulting in a significant reduction in labor costs with the need for fewer technicians and less testing time. Only one technician is required to control multiple load banks at once, allowing for testing to take place over a shorter period of time.

While load testing does involve several important steps, remote load banks streamline the process. Once the network of load banks is established, the operation is virtually seamless with the rest of the testing operation. Another added benefit is that once the load test is underway, a remote load bank will display live statistical feedback as well as collect and store all data in its 64-gigabyte internal hard drive.



How Does Remote Technology Increase Accuracy?

Improved latency standards, custom software scripts, and customizable naming capabilities make remote load bank testing the most accurate form of load testing.

Latency refers to the length of time it takes between an initial input signal received by a UPS system and the UPS system's ability to begin handling the electrical load necessary to continue data enter operation. The Information Technology Industry Council (ITIC) recommends latency below 16.6 milliseconds per cycle of AC wave. Industry averages of most remotes, however, lag behind that standard at approximately 120 milliseconds per cycle. The best remote load banks are able to achieve a latency response as low as 20 milliseconds, producing a more accurate simulation of real-world standards.

Custom software scripts allow test operators to pre-program complex, multi-stage tests coordinated between dozens to hundreds of load banks. These customizable software solutions enable technicians to work with greater precision to emulate real-world conditions. Intricate scenarios involving voltage sag and other highly nuanced conditions can now be implemented into testing protocols.

Remote load banks offer the option to add or remove load banks easily and customize the "name" of each load bank to make testing simple. These naming capabilities allow for better organization, letting test operators designate individual or groups of load banks for staged testing. This method of identification helps to cut costs by improving communication and allowing technicians to isolate various sections of the circuit and identify the location of outages, should a portion of the circuitry fail at any time during equipment commissioning.

ComRent's History with Remote Load Banks

ComRent has always been more than just a load bank rental company. With innovation ingrained into their culture, ComRent has been committed to continuously improving the load testing experience. That is why ComRent has been at the forefront of remote load bank technology since 2017.

In early 2017, ComRent launched the XS665 with CR Remote Technology©. This powerful load bank offered a continuous load at various voltages specifically designed for data center commissioning. By syncing the digital meter with ComRent's patented remote technology, operators could, for the first time, control and monitor up to 50 load banks at once.

With a focus on innovation and reimagining the load testing process, ComRent continued to elevate remote load testing. In September of 2017, ComRent expanded their remote equipped fleet to the LPH500 and LPH400 load banks.

By 2018, ComRent was able to take remote technology to the next level. With the release of the CR Remote 2, operators were now able to control and monitor up to 250 load banks at once. The CR Remote 2 is compatible across all ComRent's load testing solutions.

ComRent's team of load bank experts continue to innovate and are currently testing future evolutions of their remote technology.

If you are ready to elevate your load testing process, one of our load bank experts is ready to help. Contact us for a complimentary consultation.

ComRent Corporate Headquarters

10901 W. 120th Ave., Suite 150
Broomfield, CO 80021

888.881.7118

www.ComRent.com