

CABLE-BASED LAND SYSTEM & VIBRATOR ELECTRONICS

528 & VE564

Advanced Solutions for Efficient Land Seismic Acquisition.

Solving your toughest land seismic operational and subsurface imaging challenges.

The 528/VE564 acquisition system and vibrator electronics represent a significant advance in cable-based land solutions, addressing critical operational and geophysical challenges to enhance recording capacity, reliability, productivity, and data fidelity.

The 528 system draws on the proven strengths of the widely used 508^{XT} technology while also introducing new enhancements and features, making it the most advanced cable-based land system for high-channel, high-density projects on the market today. Its scalable and adaptable architecture also makes it ideal for smaller projects.

Sercel's vibrator electronics are regarded as the industry standard and boast the largest number of installations in the market. The VE564 is a new, cuttingedge version of vibroseis source management and electronics, replacing the market-leading VE464 system. It is embedded within the 528 but can also be easily reconfigured for efficient operations with the WiNG system.

THE SERCEL ADVANTAGE

- High Productivity fault-tolerant, robust, flexible, and reliable technologies with the best MTBF in the market.
- · Reduced Costs and Industry**leading Efficiency** – the lowest power consumption and weight, utilizing the fewest field control units and batteries.
- Standard-setting Data Integrity and Quality - TrueBroadband seismic throughout the entire project lifecycle.
- Sustainability eco-conscious design and improved safety.
- Unique Land Services technologydriven expertise to ensure that projects meet technical specifications and are delivered on time and within budget.
- MetaBlue Land data-driven collaboration solution.



E&P companies and seismic contractors rely on our industry-leading land imaging systems and services to collect high-quality data in complex terrain safely and efficiently.



HIGH PRODUCTIVITY

System reliability is critical to achieving high productivity. The 528 and the VE564's robust and rugged components can withstand the harshest conditions. The system's inherent reliability, durability, and spread redundancy features reduce the risk of equipment failure and unnecessary downtime, resulting in uninterrupted data acquisition. With the latest software upgrades, Sercel brings the highest level of quality, stability, and performance to system operation.

- The best Mean Time Between Failure (MTBF) in the market.
- · Automatic self-testing assures VE564 electronic's readiness for production.
- Stringent manufacturing processes ensure equipment reliability in the field.

The 528 and VE564 ground electronics excel in mega-crew and high-density surveys, managing configurations of over 200,000 channels with up to 100 fleets of single or multiple vibrators while ensuring continuous recording. The scalable 528 also adapts to smaller projects.

- The simultaneous daily test and spread configuration feature enables the deployment and set-up of additional line equipment without impacting production.
- Field-proven and cost-effective radio repeater functionality to assure vibrator communications across large and obstructed areas.
- The VE564 source control is easily configurable with the WiNG nodal system.
- Revised radio protocol for bandwidth optimization and the monitoring of radio link quality.
- 528 Lite, available for small configurations of <3,000 channels.
- 528TZ, developed for transition zones and featuring a tough submersible cable.







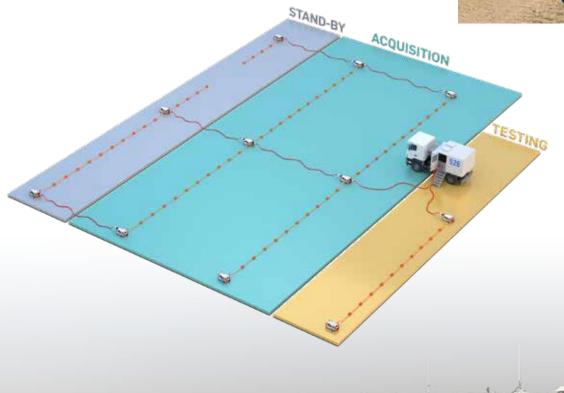


REDUCED COSTS AND INDUSTRY LEADING EFFICIENCY

Operational efficiency and cost management are imperative during large, high-trace-density surveys. Sercel's new system provides an integrated view of production related activities and increased levels of automation, reducing resource consumption, avoiding expensive reshoots, and streamlining data management in the field. The 528 and VE564 have industry-leading low power consumption and weight, with the fewest field control units and batteries required.

- Integration of line, source, data, and QC management within a single server.
- Fast and secure process to output deliverables for source and acquisition data.
- Streamlined file exchange: a new tablet application facilitates file exchange between the recorder and vibrator (SPS, geodesy, custom files, and firmware).
- An increased number of FDU-528 controlled by CX-528 means a reduced number of ancillary equipment and batteries.
- Simplified vibrator management and maintenance using a single tablet and software applications for field operator navigation, VE564 electronics configuration, vibrator guidance, and wireless file exchange with the vibrator.
- Optimized vibrator fleet management for seamless configuration and re-configuration without productivity loss.
- Innovative productivity dashboards.
- Full integration of the Vibrator Auto-Guidance feature.
- Nomad integration for real-time reporting of the vibrator's State of Health to the observer.







SETTING THE STANDARD FOR DATA INTEGRITY AND DATA QUALITY

DATA INTEGRITY

The 528 and VE564 incorporate new features that optimize data acquisition processes, ensuring secure and reliable delivery of high-quality, processing ready datasets throughout the project lifecycle.

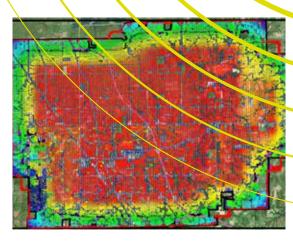
- Centralized and continuous system configuration control ensures that data is generated per project specifications.
- DSD onboard dedicated memory secures Vibrator metadata.

DATA QUALITY

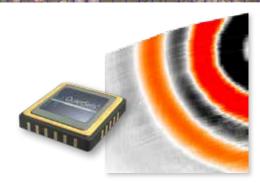


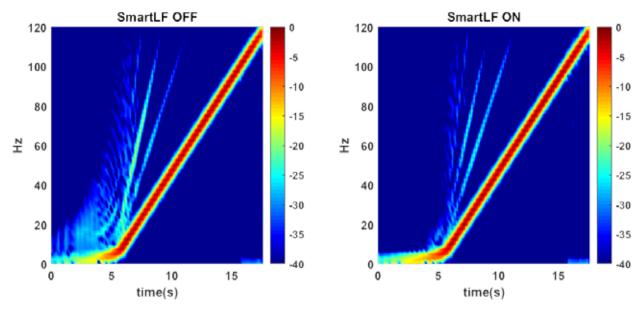
Broadband acquisition, together with long offset, full azimuth data and a high channel count are critical to meeting today's complex E&P imaging challenges. Sercel offers a range of solutions tailored to enhance data quality and facilitate TrueBroadband seismic acquisition throughout the entire production chain, from source to receiver and recording.

- VE564 with SmartLF is the optimal solution for mitigating harmonics.
- The 528's inherent design eradicates any risk of the crosstalk and static effects that competing systems are susceptible to.
- Seamless, continuous recording improves data flow efficiency and seismic data quality.
 - \bullet Hardware and software integration for source management and acquisition.
 - · Adapted QC flows for blended acquisition.
- xDSS enhances dataset quality by delivering deblending-friendly datasets that adhere to the deblending "golden rules".
- The QuietSeis® 3rd generation MEMS sensor is a vital part of Sercel's land solutions suite, known for its unrivaled broadband signal performance and resilience to data jitter.









SUSTAINABILITY

Balancing operational needs with responsible environmental and safety practices presents a key challenge in every land seismic acquisition project. The 528 and VE564 are the market's most lightweight solutions, offering the lowest power consumption with 120 times fewer batteries than a nodal system for high-density surveys and 13% fewer batteries than the competing cable system.

Robust, durable, and reliable, with an enhanced built-in fault architecture, the system helps to ensure the long-term sustainability of a project.

ECO-CONSCIOUS TECHNOLOGIES

- · Solar powered with battery backup.
- Fewer batteries mean reduced disposal and recycling, plus easier transportation, storage, and handling.
- A global network of repair centers and in-field repair capabilities reduce equipment return's carbon footprint.

IMPROVED SAFETY

- Wireless, remote access to the vibrator for setup modification, file exchange, and monitoring.
- Advanced diagnostic and troubleshooting tools that efficiently guide operators to their designated locations, minimizing unnecessary field exposure.

UNIQUE LAND SERVICES

Train and Launch

Access Sercel's comprehensive expertise and support to ensure a safe and efficient project launch.

Asset Optimization

Ensure the success of your next project with Sercel's comprehensive asset optimization program for vibrators. Our advanced vibrator health monitoring capability takes a proactive, real-time approach, allowing you to focus on the project quality rather than equipment challenges.

Operational Excellence

Streamline operations management with Sercel's personalized support and specialized tools to boost productivity, enable data-driven decisions, and enhance risk management.



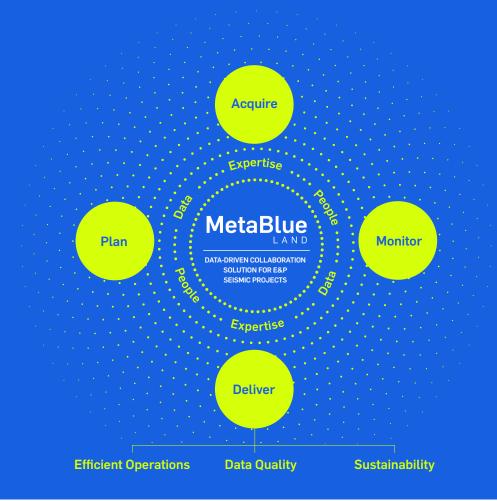






MetaBlue™ Land

Sercel's MetaBlue Land is the only digital collaboration solution in the industry that connects every stage of a land seismic acquisition project, from planning to acquisition and data delivery, while monitoring survey progress in real-time. MetaBlue Land enables the early involvement of all project stakeholders, resulting in increased productivity, better decision-making, superior data quality, and ultimately a more successful and cost-effective land or transition zone seismic acquisition project.



INNOVATION THAT CONNECTS FROM SILOS TO A DATA-DRIVEN ECOSYSTEM

MetaBlue Land unifies land acquisition data through industry-leading software, unrivaled MEMS-based node technology, innovative source solutions, and cutting-edge acquisition services, enabling holistic decision-making throughout the survey, from planning to execution.

PLAN

- MESA®
- Train and Launch Services

ACQUIRE

- 528, WiNG^{NT}, VE564
- Vibrator Auto-Guidance
- Nomad 65 Neo & 90 Neo

MONITOR

- Asset Optimization Services
- Operational Excellence Services
- Train and Launch Services

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