KEEP SNOW AND ICE REMOVAL FLEETS



Snow and ice control systems can be complex. Choose a system with real-time, Wi-Fi support, providing an extra level of support for you – making your job, setting up the system and tweaking system settings easier than ever before.



THE REALITY — **HYDRAULIC SYSTEMS BREAK DOWN**

t's the middle of winter and your truck's hydraulic system has just broken down, but your truck's needed out on the road...

You've installed your snow and ice control system, but you aren't sure it's performing as efficient as it could and wonder if you need to adjust the settings...

Today's technology is intimidating and you just don't know where to begin with your snow and ice control system...

Sound like you?

Snow and ice control systems equipped with remote system diagnostic capabilities - via a secured, Wi-Fi support link - make all the difference when it comes to scenarios just like these. Systems equipped with this feature allow you, the user, to connect with system-trained technicians as if the technicians are there onsite.

These technicians are able to troubleshoot the system to help get your truck back on the road when the problem is beyond your mechanic's capabilities, as well as assist you in setting up your system and adjusting settings to ensure peak efficiency. And if the technology or hydraulics seem intimidating, that's ok, there's help readily available thanks to the system's capabilities.

When public safety and keeping roadways clear depends on you, it's important to have support you can count on and the assurance that you can depend on your system.



THE VALUE OF INTEGRATING **GPS DATA LOGGING**



Systems like Muncie Power Products' Advantage+ snow and ice control system combine this type of real-time, Wi-Fi support with advanced GPS data logging. The data-log report software provides organized reports with filtering capabilities for reviewing information such as truck routes, spreader rates, totals and more. This ability to review system operation allows the supervisor to ensure the truck is operating at peak efficiency.

In addition to this software, the Advantage+ system has the ability to interface with third-party AVL systems, which allows for real-time fleet tracking. All of this data collected can be critical to optimizing truck routes and salt utilization – saving you money.

Together these technologies have the ability to revolutionize the way in which your snow and ice fleet is maintained and operated.



REDUCE DOWNTIME, INCREASE PERFORMANCE



Muncie Power Products' Advantage+ snow and ice control system is just one of the systems currently available within the marketplace encompassing remote diagnostic capabilities and GPS data logging. In the case of the Advantage+, the real-time, Wi-Fi support link connects operators to technicians at Muncie Power. These technicians are specifically trained on the Advantage+ system and available to assist with setup, diagnostics and troubleshooting.

Available for Android devices, supervisors can use the Advantage+ system's app to also access system parameters, adjust settings, view remote operations and more through its data-logging software. When getting onsite technicians could take days, having the ability to check the truck's efficiency and connect with system-trained technicians to provide help instantaneously is critical for any fleet that needs to either get its truck back on the road or operating at peak efficiency.

ADVANTAGE+ FEATURES YOU WANT TO KNOW



Real-time Support – Encompassing Wi-Fi and an app located on its touch screen, the Advantage+ allows for your truck to be connected to Muncie Power technicians for assistance via a dedicated web server.

Cost Savings — The system's spreader controller can be operated in both manual and auto mode. In auto mode, the spreader controller operates with ground-speed control.

This means that the system electronically measures the speed of the truck and adjusts the salt output proportionately. Ground-speed control conserves salt by eliminating waste through this automation and as a result, saves money.



Note: The Advantage+ controller can also be used for anti-icing by simply toggling a button on one of the operating screens.

Better Technology — With its app, sensors, switches and status indication, the Advantage+ offers better technology to best support the user. The system's app is available for Android devices – both smart phone and tablet. Supervisors can use the app to access and change system settings, view remote operations and more. This app is beneficial for setting up the system setup, troubleshooting and data logging.

The controller is compatible with a variety of switches and sensors that can be used as system inputs. These include body-up switches, hot oil, low oil, cold oil, filter bypass and air and road temperature sensors. Via the status bar, status indication – including critical system information – is reported to the operator. The system automatically detects and reports faults such as hot oil, low oil, cold oil, body up, open circuits and more.

Data Logging — For compiling information, the system's fleet manager data-log report software provides organized reports with filtering capabilities.

ADVANTAGE+ FEATURES YOU WANT TO KNOW

Ergonomic Controls - With settings that are easy to understand and adjust from the touch screen, the system's controls are designed to be intuitive for the operator on easy-to-read displays. The backlighting of the touch screen and buttons are adjustable to the operator. This ensures the controls are nonintrusive at night and easy to view during extreme sunlight.

The system's ergonomic mounting solution also occupies very little space within the cab; therefore, you can position the controls accordingly and still have room to shift and access controls located on the dash. In addition, the controls are mounted to the seat as opposed to the floor. This allows the controls to ride with you when traveling over rough terrain.

Including a multi-function joystick, the system provides proportional feathering of cylinder operations. The joystick can be configured to control a plow, hoist, scraper, wings and more. To prevent unintended activation, the joystick has an integrated safety trigger.

Rugged Design - The Advantage+ features a rugged design with its electrical connectors, tank enclosures and compact design. Using Deutsch and Weather Pack connectors, the system's electrical terminators are completely sealed. This prevents electrical failures due to corroded wires.



Sturdy and durable stainless or powder-coated enclosures come standard as part of the system's rugged design. Last - but not least - one, centralized location on the truck houses the hydraulic valves, return line filter, clean out, electrical modules and more. This one, centralized location makes servicing the system simple and easy.

Manifold and Cartridge Valve Design -

A manifold and cartridge valve design sets the Advantage+ apart from other systems currently on the market. The benefit of this type of design manifolds reduce hose connections, which coupled with cartridge valve options, can greatly reduce operational issues due to contamination. Cartridge valves can also be serviced in a matter of minutes and are a fraction of the cost to service and replace compared to stack valves.

System Control Operation



HYDRAULIC APPLICATIONS

The Advantage+ snow and ice control system can be used to control a wide variety of applications including those featured below and more.

