

SmartRider™



Intelligent leveling technology. An industry-first in fully accessible, easy access level boarding from curb to aisle.

New Flyer developed SmartRider™ to create an unmatched accessibility experience for all passengers - enabling buses to kneel to variable heights, minimizing the slope difference between a low-floor ramp and bus floor.

SmartRider™ is available on all Xcelsior® models, in one of two configurations, SmartRider™ and SmartRider™ Plus. SmartRider™ includes basic features on the front axle. SmartRider™ Plus applies to all axle systems, lending additional features such as curb-side kneeling, high ride/low ride and platform-level boarding.

Why SmartRider™?

The SmartRider™ system is a breakthrough in public transit accessibility, offering:

Unmatched accessibility.

Increased stability and improved sway control.

Reduced energy consumption and upgraded components for increased reliability and lower maintenance.

Integrated suspension kneeling operation with SmartRider™ ramp to facilitate single operation for accessible boarding to a defined ramp angle.

Actively maintained ride height on uneven road surfaces.

Benefits of SmartRider™ + SmartRider™ Plus



Optimized Boarding

Optimized boarding and unmatched line accessibility for all passengers. SmartRider™ and SmartRider™ Plus can achieve a 1:6 slope ratio.



Active Monitoring

Intelligent, independent monitoring of controlled wheel positions for enhanced stability.



Enhanced Safety

Obstruction detection enables ramp to detect an obstruction. Ramp will stop and reverse to a vertical position within the doorway.



Intelligent Kneeling

Intelligent technology that eliminates driver decision on when and how far to kneel.



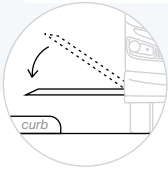
Enhanced Reliability

Easy diagnostics and fewer parts and maintenance with reduced air spring wear, no external linkage, and easily replaceable linear sensors.

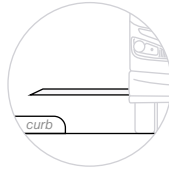


How it works.

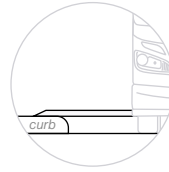
At a single touch of a button, a driver can deploy the ramp to enable the following:



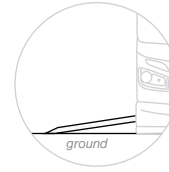
- 1** Ramp platform deploys to position parallel with entranceway floor, providing a constant slope to the interior bus aisle.



- 2** System holds platform in the constant slope position, then starts kneeling the bus via SmartRider™ suspension system.



- 3** Kneeling stops automatically when the ramp contacts the curb.



- 4** If full kneel does not achieve ground contact, then platform continues lowering until ground is reached.



SmartRider™ vs SmartRider™ Plus

Some customization of features available.

✓ Included ✓ Optional

Feature	SmartRider™	SmartRider™ Plus
Front Kneel	✓	✓
Curb-Side Kneel		✓
Enhanced Roll Stiffness	✓	✓
Over-Raise	✓	✓
Diagnostics	✓	✓
Platform Level		✓
High Ride/Low Ride		✓
Self-Leveling Auto Ramp Deploy	Available with SmartRider™ ramp	