Wabtec
CORPORATION

LOCOTROL®
RCL

Remote Control Locomotive
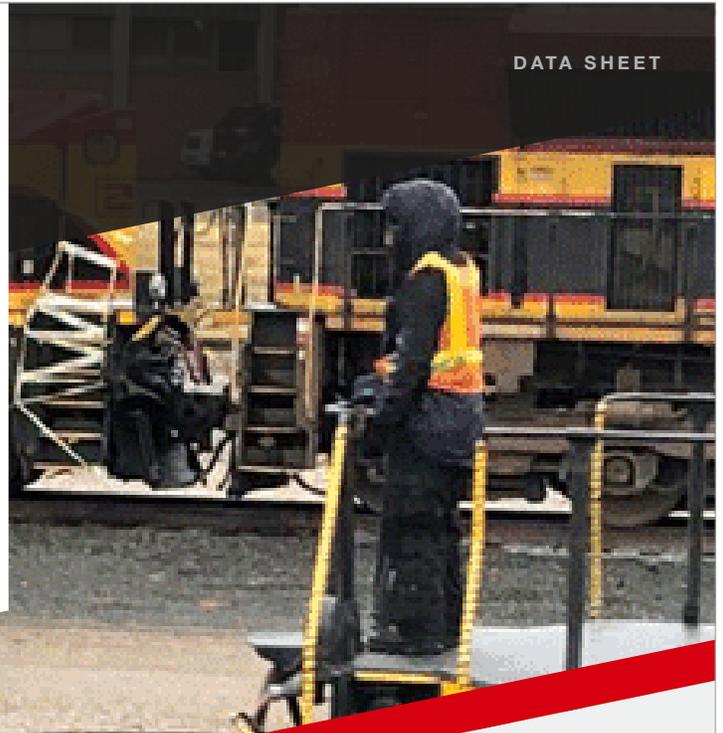
ENABLE SAFER & MORE EFFICIENT RAILROAD OPERATIONS

LOCOTROL® Remote Control Locomotive (RCL) is a groundbreaking technology that enables an operator on the mainline track or in a yard to remotely control a train via a handheld Operator Control Unit (OCU). The system provides two-way communications through text messages, LEDs, and audible alarms, ensuring that the operator always knows the current state of the locomotive.

Enabled by the LOCOTROL Expanded Architecture platform, RCL results in crew optimization, increased automation, and efficient train operations.

20+

Years of Operating Experienc

APPLICATIONS

A yard-crew member can hostel locomotives, conduct switching operations for classification of rail cars, and build a train for departure.

A single operator can conduct local pick-ups and drop-offs between origin and destination as well as set-out bad order cars.

A single operator can bring stranded trains into congested yards if the mainline crews' time expires.

Utilize in hump operations to eliminate the need for a locomotive engineer.

Utilize in slow-speed loading and unloading operations, reducing crew workloads and leading to more efficient operations.

Speed Control

The RCL system has several modes of speed control to enable safe, efficient, and customer specific control of the locomotive.

Drone Control

Allows a remote operator to control the movement of the locomotive using speed control. This enables a remote attendant to support train movements outside of the yard environment and allows utility member to control train movements in the yard.

Communications

Bi-directional communications between RCL on board systems Dual Processor Module (DPM) and the off board Operator Control Unit (OCU) allows locomotive status to be displayed on the OCU screen, including air brake pressures and actual movement speed. With the DPM's ability to leverage Ethernet, the communication opportunities expand significantly. Additionally, RCL can be commanded utilizing WIFI/Bluetooth near field communication, LTE communication, or 220 MHz.

Safety Features

- Redundant processors within the DPM to monitor safe operating conditions

- Redundant emergency commands processed within radio messages to the locomotive

- Redundant tilt sensors in the OCU to detect an "Operator Down" condition

- Constantly monitors status; declares faults when safe operating parameters are exceeded

- RCL On/Off Switch

- Two button requirements for movement

Improves crew productivity and optimizes mainline crew utilization.

Reduces car dwell time in yards.

Reduces manpower for switching operations, hauler jobs, and local jobs.

Increases auto miles with the integration to Trip Optimizer™.

Paves the way for automation on mainlines and yards.