

## PowerRampNxG



**Cavotec is a leading cleantech company that designs and delivers connection and electrification solutions to enable the decarbonization of ports and industrial applications.**

**Cavotec pioneered ShorePower technology in the 80s. We design, manufacture and deliver innovative turnkey ShorePower solutions that allow our customers to take charge of their own futures.**

### Overview

**PowerRampNxG** is a ramp-based solution providing fast connection and disconnection for e-ferris to maximize the charging capacity during off- and on-loading the ferry.

**PowerRampNxG** is featured by latest Cavotec APS (Automatic Plug-in System) technology, an evolved, modern and innovative aesthetic that has been developed with public environments and urban contexts in mind.

The system is composed by two main sub-systems, one installed on ship side, the other on shore side.

The vessel installation is featured by a fix funnel for power connection and its shipboard control equipment. The shore installation, designed to be placed on car ramp, is featured by a fix structure, holding cabling, control equipment and by a mobile unit: the APS Box.

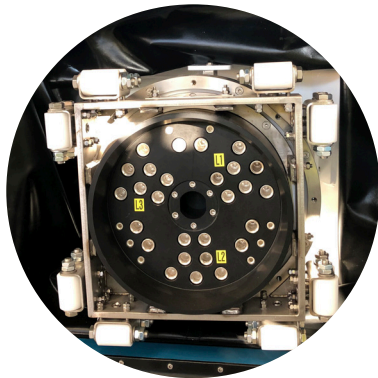
The APS Box rotates and includes the APS Arm which extends horizontally to establish the connection with the on-board funnel.

### High precision

**PowerRampNxG** uses ultrasonic/radio, laser, RFID, inclination sensor technologies to provide redundant positioning systems for locating, following and connecting to the charging point on the vessel. Once connected the system continues to compensate vessel movements to avoid interruption due to weather or other external disturbances.

### Benefits

- Quick and reliable connection with the vessel
- Automatic and safe charging
- Zero-Emission operations
- Maximized charging time
- Compatibility with MoorMaster™ automated mooring solution



## Features

- AC and DC options
- Up to 11kV supply voltage
- Designed for linkspan installation
- High precision
- Fast connection and disconnection cycle in less than 60s
- Cavotec touch panel or remote control available
- Up to +/-8° ramp rotation compensation
- Status LED lighting that illustrates machine status
- Camera to see the connection in real time from vessel HMI
- Remote access for maintenance / service
- Cavotec Connect

## Technical features

### Operations

APS Box rotation compensation	+/-8°
APS Box active sideways compensation	±200mm
APS Box - Funnel connection distance	200 – 900mm
APS Arm radial compensation	±150mm

### Dimensions

Length	±4650mm
Width	±1900mm to ±2300mm (depending of offset)
Height	±4300mm
Height pedestrian walkway	±2100mm

### Performance

Max charge in LV both DC and AC	5MW
Max charge at 11kV	12MW
For higher charging power during intermittent duty, please contact Cavotec Sales department.	

Please contact your local Cavotec Sales Office for further information at [cavotec.com](http://cavotec.com). Disclaimer: specifications are subject to change without notice.