



## System Manager NG

# Complete control of your system and vehicles

*System Manager NG* controls the whole vehicle system (NDC8) and its traffic flow. It handles transport orders, allocates vehicles, and selects routes for different transport assignments.

Use **Multi Agent Path Planning algorithm (MAPP)** to focus on the whole fleet rather than treating each vehicle individually. With MAPP, individual vehicles move out of the way to improve the performance of the whole vehicle system. This smart algorithm doesn't need clusters or route dependent rules to achieve a deadlock free system.

Use **Single Agent Path Planning algorithm (SAPP)** to let each vehicle to find the shortest path to its goal. Each vehicle makes its own plan towards its goal without considering other vehicles in the layout. The user defines AckPoint and Occupied clusters with help from the *Deadlock detect* function in *Layout Designer*. SAPP uses the clusters to handle complex scenarios and avoid traffic deadlocks.



## Features

- Simple layout design for fast commissioning time
- Order management - Execute orders
- Vehicle management
  - Optimize the traffic work flow
  - Allocate optimal vehicles for the different transport assignments
  - Vehicle capacity
    - MAPP: Up to 20 vehicles
    - SAPP: Up to 120 vehicles
- Traffic management
  - Execute orders
  - Control the traffic flow in the vehicle system
  - Prevent vehicle collisions by means of blockings
- Handle digital I/O (such as push button and open door)
  - *System Manager* is an OPC client
- Handle vehicle, host and operator interface communication
- Vehicle Simulator to simulate the whole vehicle system
- Optional encrypted communication with vehicles

Order information	
<b>System Manager NG (online licensing)</b> Includes 1 main (perpetual) and 1 emergency (time limited) license	46110-CO
<b>System options included in product</b>	
MAPP algorithm support	N8 42120-63
SAPP algorithm support	N8 42120-77
NDC8 vehicle controller support	N8 42120-11
Vehicle Simulator	N8 42120-14
OPC I/O support, use OPC equipment for digital I/O. <i>System Manager</i> is an OPC client.	N8 42120-17
Host interface – ACI, see when communication with a host is required.	N8 42120-18
Physical Position Blocking Possible to use manual blocking	N8 42120-56
Event log in database, store system errors, system events, and user events in a SQL server database	N8 42120-30
Linux platform support See the price list for details regarding Linux platform support usage.	N8 42120-76
<b>System vehicle addition</b>	
Required to access each vehicle in a system. Limited compared to <i>System Manager</i> (41728). See the product specification for further details regarding limitations. A maximum of 20 vehicles is allowed.	N8 42120-09
<b>System operator interface</b>	
<i>CWay</i> license addition	27031-01

System requirements	
Operating System and hardware	See the product specification.

System designers program customer-specific functionality of *System Manager NG* with *System Application Designer*. Transport orders are generated through digital I/O or via *CWay*, or received from a host system (such as ERP, MES, WMS).

*System Manager NG* prevents collisions between vehicles and objects (such as doors and machines) by using blockings added to the system layout.

With a digital I/O interface *System Manager NG* handles sensors, push buttons, and doors to name a few. *System Manager NG* communicates with the vehicles by WLAN or radio.

Note that Kollmorgen does not supply the stationary WLAN access points.