

CVC700 SW

Efficient vehicle control and navigation

The CVC700 software is the heart of the AGV. The software functions supervise everything from vehicle navigation to communication with the AGV system controller and the interfacing sensors and actuators.

During operation, the vehicle is in continuous contact with the AGV system controller, receiving and transmitting information such as work orders and traffic information.

Features

- Free-ranging navigation techniques:
 - Natural
 - Laser
 - Range
 - Combined laser and natural
- Floor-based navigation techniques:
 - Inductive wire
 - Magnetic tape
 - Spot
 - Combined inductive wire and spot
 - Combined inductive wire and magnetic tape
 - Barcode
- Multinavigation techniques
 - Combined free-ranging and floor-based
- Support for many vehicle types:
 - SD
 - Quad
 - Multiwheeler
- Integrated IEC 61131-3 Soft PLC
- On vehicle commanding with or without system control
- Support for Kollmorgen products such as drives, displays, and auxiliary products
- Connectivity
 - Easy to integrate standard CANopen products in your vehicle
 - PLC support for serial, TCP/IP and UDP/IP communication
- U-Zone: Develop and run customized applications
- Obstacle avoidance: Drive around obstacles that are blocking the drive path of the vehicle.
- Support for vehicle licensing
- Support for VDA 5050



Order information		
CVC700 software	46164	WLAN encryption WEP (64/128), WPA-PSK (TKIP & AES/CCMP), WPA2-PSK (TKIP & AES/CCMP)

Order information		
Base packages (one is required)		For more information, see the related datasheets.
Base package – Floor-based	N8 27017-10 including the options: <ul style="list-style-type: none"> Spot N8 42120-04 Magnetic tape N8 42120-05 Inductive wire N8 42120-21 	Spot (1.2 m/s) Magnetic tape (1.2 m/s) Inductive wire (1.2 m/s)
Base package – Free-ranging	N8 27017-09 including the options: <ul style="list-style-type: none"> Laser N8 42120-03 Range N8 42120-20 Natural N8 42120-20 	Laser (1.7 m/s) Range (1.2 m/s) Natural (1.7 m/s)
Base package - Free-ranging third-party navigation sensor	N8 27017-13 including the options: <ul style="list-style-type: none"> Laser N8 42120-03 Range N8 42120-20 Natural N8 42120-20 Third-party navigation sensor N8 42120-73 	Laser (1.7 m/s) Range (1.2 m/s) Natural (1.7 m/s)
Base package – Barcode	N8 27017-12	Barcode (1.5 m/s)
<p>For multination combine packages needed. For example: Laser and spot: N8 27017-10 and N8 27017-09 Laser and range: N8 27017-09 Wire navigation and spot: N8 27017-10</p>		
Vehicle types (SD vehicle is included in the base program)		
Quad vehicle	N8 42120-06	Two independently steered wheels
Multiwheeler S/D	N8 42120-49	More than one steered wheel
Multiwheeler quad 4	N8 42120-50	Maximum 4 steered wheels

Order information		
Multiwheeler quad 8	N8 42120-51	Maximum 8 steered wheels
Multiwheeler quad 16	N8 42120-52	Maximum 16 steered wheels
Multiwheeler quad 20	N8 42120-53	Maximum 20 steered wheels
Connectivity		
Support for dual CAN buses	N8 42120-48	
PLC support for TCP/IP and UDP/IP	N8 42120-65	
Application types		
Automatic trailer loading (ATL)	N8 27020-01	<i>Automatic trailer loading datasheet</i>
ATL add-on package	N8 27020-02	<i>Automatic trailer loading datasheet</i>
Guidance options		
External travel path access	N8 42120-26	<i>Automatic trailer loading datasheet</i>
IMU support	N8 27017-11 ¹	Increase navigation performance by adding angular rate feedback.
Radio communication		
Support for radio communication	N8 42120-08 ²	
Maximum speed ³		
Maximum speed 2.0 m/s	N8 42120-02 2.0	
Maximum speed 2.5 m/s	N8 42120-02 2.5	
Maximum speed 3.0 m/s	N8 42120-02 3.0	
U-Zone		
Support for U-Zone	N8 42120-75	
Obstacle avoidance		
Support for Obstacle avoidance	N8 42120-78	

¹N8 27017-11 includes N8 42120-48, support for dual CAN buses.

²Radio communication is only supported when using the legacy system of *System Manager 41728* or *System Manager NG 46110 5.0* or earlier versions.

³Supported for laser navigation depending on vehicle design and characteristics.

Vehicle type examples

